



Diamond Springs Parkway Project Draft Environmental Impact Report

State Clearinghouse No. 2007122033



El Dorado County Department of Transportation

June 23, 2010



Michael Brandman Associates

2000 "O" Street, Suite 200
Sacramento, CA 95811

Draft
Environmental Impact Report
Diamond Springs Parkway Project
County of El Dorado, California

State Clearinghouse No. 2007122033

Prepared for:



El Dorado County Department of Transportation
2850 Fairlane Court
Placerville, CA 95667
530.621.5900

Contact: Ms. Janet Postlewait, Principal Planner

Prepared by:

Michael Brandman Associates
2000 "O" Street, Suite 200
Sacramento, CA 95811
916.447.1100

Contact: Trevor Macenski, R.E.A., Project Manager



June 23, 2010

Table of Contents

Acronyms and Abbreviations	ix
Section 1: Executive Summary	1-1
1.1 - Purpose	1-1
1.2 - Project Summary	1-1
1.3 - Summary of Project Alternatives	1-4
1.4 - Scoping Process and Areas of Controversy	1-7
1.5 - Project Review and CEQA Process	1-8
1.6 - Summary of Environmental Impacts and Mitigation Measures	1-9
Section 2: Introduction	2-1
2.1 - Overview, Purpose, and Authority of the EIR	2-1
2.2 - Scope of the EIR	2-2
2.3 - Definitions and EIR Organization	2-5
2.4 - Documents Incorporated by Reference	2-8
2.5 - Review of the Draft EIR	2-9
Section 3: Project Description	3-1
3.1 - Introduction	3-1
3.2 - Project Location	3-1
3.3 - Purpose, Need, and Objectives of the Proposed Project	3-11
3.4 - Project Characteristics	3-12
3.5 - Preliminary Construction Schedule	3-30
3.6 - Project Environmental Commitments	3-30
3.7 - Intended Uses of This EIR and Agency Approvals	3-40
Section 4: Environmental Impact Analysis	4.1-1
4.1 - Introduction	4.1-1
4.2 - Aesthetics, Light, and Glare	4.2-1
4.3 - Air Quality	4.3-1
4.4 - Biological Resources	4.4-1
4.5 - Cultural and Historical Resources	4.5-1
4.6 - Geology and Soils	4.6-1
4.7 - Hazards and Hazardous Materials	4.7-1
4.8 - Hydrology and Water Quality	4.8-1
4.9 - Land Use and Planning	4.9-1
4.10 - Noise	4.10-1
4.11 - Public Services	4.11-1
4.12 - Traffic and Transportation	4.12-1
4.13 - Utilities and Service Systems	4.13-1
Section 5: Alternatives to the Proposed Project	5-1
5.1 - Introduction	5-1
5.2 - Project Objectives	5-1
5.3 - Previously Considered and Rejected Alternatives	5-2
5.4 - Alternatives to the Proposed Project	5-7
5.5 - No Project Alternative	5-9
5.6 - Alternative A (MC&FP Proposed Project)	5-14
5.7 - Alternative B (MC&FP Alternative 4)	5-18
5.8 - Alternative C (Lower Vertical Profile)	5-22
5.9 - Environmentally Superior Alternative	5-25

Table of Contents

Section 6: CEQA Required Conclusions	6-1
6.1 - Significant Unavoidable Impacts of the Project	6-1
6.2 - Growth-Inducing Impacts.....	6-1
6.3 - Cumulative Effects of the Project.....	6-2
Section 7: List of Preparers	7-1
7.1 - EIR Preparation Personnel	7-1
Section 8: Persons and Organizations Consulted.....	8-1
8.1 - Public Agencies	8-1
8.2 - Private Parties and Organizations	8-1
Section 9: References	9-1

Appendix A: Notice of Preparation

Appendix B: Comments on the Notice of Preparation

Appendix C: Air Quality Analysis Technical Reports

- C.1 - Air Quality Impact Analysis Report - Parkway, Michael Brandman Associates, November 23, 2009
- C.2 - Air Quality Impact Analysis Report - Highway 49 Intertie, Michael Brandman Associates, February 20, 2009

Appendix D: Biological Resource Assessments

- D.1 - Biological Resources Assessment - Parkway, Michael Brandman Associates, October 31, 2008
- D.2 - California Red Legged Frog Protocol Survey Report - Parkway, Michael Brandman Associates, August 12, 2009
- D.3 - California Red Legged Frog Protocol Survey Concurrence US Fish and Wildlife Service, September 11, 2009
- D.4 - Biological Resources Assessment - Highway 49 Intertie, Michael Brandman Associates, November 20, 2008

Appendix E: Delineation of Jurisdictional Waters and Wetlands

- E.1 - Wetland Delineation Revisions, Michael Brandman Associates, March 24, 2009
- E.2 - Delineation of Jurisdictional Waters and Wetlands, Michael Brandman Associates, October 31, 2008

Appendix F: Section 106 Cultural Resources Assessment and Memorandum

- F.1 - Section 106 Cultural Resources Assessment - Parkway, Michael Brandman Associates, October 31, 2008
- F.2 - Cultural Resources Memorandum - Highway 49 Intertie, Michael Brandman Associates, November 18, 2008

Appendix G: Preliminary Geotechnical Engineering Study

Appendix H: Phase I Environmental Site Assessment

Appendix I: Preliminary Drainage Study

Appendix J: General Plan Policies and Project Consistency Evaluation

Appendix K: Environmental Noise Assessment

Appendix L: Public Services Response Letters

Appendix M: Traffic Impact Analysis

- M.1 - Traffic Impact Analysis, October 28, 2009
- M.2 - Supplemental Consolidated LOS and Delay Data, May 18, 2010

The digital version of the Draft Environmental Impact Report
and all its Appendices are available on the CD affixed to the back cover.

List of Tables

Table 1-1: Executive Summary Matrix	1-11
Table 2-1: Definitions	2-6
Table 3-1: Preliminary Construction Schedule.....	3-30
Table 4.3-1: El Dorado County Almanac Emissions Projection Data	4.3-2
Table 4.3-2: Air Quality Monitoring Summary	4.3-3
Table 4.3-3: Greenhouse Gases.....	4.3-9
Table 4.3-4: Ambient Air Quality Standards.....	4.3-11
Table 4.3-5: AB 32 Necessary Reductions	4.3-13
Table 4.3-6: Attainment Status	4.3-19
Table 4.3-7: Ozone Precursor Significance Thresholds	4.3-27
Table 4.3-8: Phase 1 Construction Emissions - Unmitigated (maximum lbs per day).....	4.3-29
Table 4.3-9: Phase 2 Construction Emissions - Unmitigated (maximum lbs per day).....	4.3-30
Table 4.3-10: EID Intertie Improvements Construction Emissions - Unmitigated (maximum lbs per day).....	4.3-33
Table 4.3-11: Phase 1 and EID Intertie Construction Emissions - Unmitigated (maximum lbs per day).....	4.3-33
Table 4.3-12: Carbon Monoxide Concentration and Significance Determination.....	4.3-35
Table 4.3-13: CO Concentrations	4.3-37
Table 4.3-14: Construction Exhaust CO ₂ Emissions (Unmitigated).....	4.3-42
Table 4.3-15: Post-Mitigation Project Consistency and Feasibility Analysis with Applicable Attorney General, OPR, and CARB GHG Reduction Measures.....	4.3-44
Table 4.3-16: EID Intertie Improvements Construction Exhaust CO ₂ Emissions (Unmitigated).....	4.3-45
Table 4.4-1: Federally Jurisdictional Wetland Features in the Project Study Area.....	4.4-8
Table 4.4-2: Non-federal Jurisdictional Wetland Features in the Project Study Area.....	4.4-10
Table 4.4-3: Special-Status Wildlife Species with Potential to Occur Within the Study Area	4.4-17
Table 4.6-1: Modified Mercalli Intensity Scale	4.6-4
Table 4.7-1: Project Study Area Record Search Summary	4.7-3
Table 4.7-2: Surrounding Land Uses Record Search Summary	4.7-4
Table 4.7-3: SR-49 Parcels - Aerial Photograph Summary	4.7-8
Table 4.7-4: Diamond Springs Parkway Parcels - Aerial Photograph Summary.....	4.7-9
Table 4.8-1: Diamond Springs Meteorological Summary	4.8-2
Table 4.8-2: Construction Related Pollutants	4.8-11
Table 4.8-3: Typical Pollutants in Highway Runoff	4.8-12
Table 4.9-1: Project Land Use and Zoning Designations	4.9-7
Table 4.10-1: Construction Noise Exposure Limits - Community Regions and Adopted Plan Areas.....	4.10-3

Table 4.10-2: Significance of Changes in Cumulative Noise Exposure	4.10-4
Table 4.10-3: Predicted Traffic Noise Exposure Levels at 100 Feet from Roadway Centerlines Diamond Springs Parkway EIR - El Dorado County, California	4.10-6
Table 4.10-4: Summary of Noise Level Calculations Diamond Springs Parkway EIR - El Dorado County, California	4.10-10
Table 4.10-5: Construction Equipment Noise Levels at 50 Feet.....	4.10-11
Table 4.12-1: Intersection Level of Service Criteria	4.12-4
Table 4.12-2: Roadway Segment Level of Service Criteria	4.12-4
Table 4.12-3: Existing (2010) Roadway Segment Levels of Service	4.12-8
Table 4.12-4: Existing (2010) and Existing (2010) plus Project Intersection Level of Service	4.12-19
Table 4.12-5: Existing (2010) and Existing (2010) plus Project Roadway Level of Service	4.12-21
Table 4.12-6: Cumulative (2030) and Cumulative (2030) plus Project Intersection Level of Service	4.12-23
Table 4.12-7: Cumulative (2030) and Cumulative (2030) plus Project Roadway Level of Service	4.12-29
Table 4.12-8: Cumulative (2030) Plus Project Intersection Queuing Evaluation	4.12-31
Table 4.13-1: EID Water Supply Reliability Summary.....	4.13-3
Table 4.13-2: EID Normal Year Water Supply and Demand Comparison	4.13-4
Table 4.13-3: EID Single-Dry Year Water Supply and Demand Comparison.....	4.13-4
Table 4.13-4: EID Wastewater Low and High Flow Projections Summary	4.13-6
Table 4.13-5: Lockwood Landfill Summary	4.13-7
Table 5-1: Alternatives Impact Comparison Summary.....	5-25
Table 6-1: Residential Projects in the Parkway Cumulative Study Area.....	6-10
Table 6-2: Commercial Projects in the Parkway Cumulative Study Area	6-11
Table 6-3: West Slope of El Dorado County Population Projections to Year 2025.....	6-13

List of Exhibits

Exhibit 3-1: Regional Location Map	3-3
Exhibit 3-2: Project Study Area - Aerial Overview	3-5
Exhibit 3-3: Project Study Area - USGS Topographic Map	3-7
Exhibit 3-4: Affected Properties	3-9
Exhibit 3-5a: Two-Lane Proposed Project Improvements	3-15
Exhibit 3-5b: Four-Lane Proposed Project Improvements	3-17
Exhibit 3-5c: Trail Parking Lot - Detail.....	3-19
Exhibit 3-6: Missouri Flat Area Master Circulation and Funding Plan Study Area.....	3-21
Exhibit 3-7a: Missouri Flat Road Proposed Overhead Utilities	3-31
Exhibit 3-7b: Missouri Flat Road Proposed Underground Utility District	3-33
Exhibit 3-7c: State Route 49 Proposed Overhead Utilities	3-35
Exhibit 3-7d: State Route 49 Proposed Underground Utility District.....	3-37
Exhibit 4.2-1: Project Study Area - Aerial Overview	4.2-3
Exhibit 4.2-2a: Western Section Missouri Flat Road to Diamond Springs Parkway Intersection	4.2-5
Exhibit 4.2-2b: Site Photographs - Western Section.....	4.2-7
Exhibit 4.2-3a: Central Section Diamond Springs Parkway.....	4.2-9
Exhibit 4.2-3b: Site Photographs - Central Section	4.2-11
Exhibit 4.2-4a: Eastern Section Diamond Road (State Route 49)	4.2-15
Exhibit 4.2-4b: Site Photographs - Eastern Section.....	4.2-17
Exhibit 4.2-5: Site Photographs - Views of SR 49 and Surrounding Residences.....	4.2-29
Exhibit 4.3-1: Sacramento Federal Ozone Nonattainment Area.....	4.3-17
Exhibit 4.4-1: Plant Communities Map	4.4-3
Exhibit 4.4-2: Delineation of Jurisdictional Waters and Wetlands.....	4.4-5
Exhibit 4.4-3: CNDDDB-Recorded Occurrences of Special-Status Species Within Five Miles of the Project Study Area	4.4-15
Exhibit 4.4-4: Oak Woodland Canopy Map	4.4-43
Exhibit 4.9-1: Land Use.....	4.9-3
Exhibit 4.9-2: Zoning	4.9-5
Exhibit 4.12-1: Project Location, Study Intersections, and Existing Lane Geometry.....	4.12-5
Exhibit 4.12-2: Existing (2010) Peak-Hour Traffic Volumes.....	4.12-9
Exhibit 4.12-3: Existing (2010) Plus Proposed Project Peak-Hour Traffic Volumes.....	4.12-11
Exhibit 4.12-4: Cumulative (2030) Peak-Hour Traffic Volumes	4.12-25
Exhibit 4.12-5: Cumulative (2030) Plus Project Peak-Hour Traffic Volumes.....	4.12-27
Exhibit 5-1: MC&FP EIR Alternatives.....	5-3
Exhibit 6-1a: Cumulative Study Area - Development Projects.....	6-5
Exhibit 6-1b: Cumulative Study Area - Transportation Projects.....	6-7

ACRONYMS AND ABBREVIATIONS

°F	Fahrenheit
µg	micrograms
AAI	All Appropriate Inquires
AASHTO	American Association of State Highway and Transportation Officials
AB	Assembly Bill
ACM	Asbestos Containing Material
ADL	aerially deposited lead
ADT	average daily trips
ADWF	average dry weather flow
APE	Area of Potential Effect
APN	assessor's parcel number
AQMD	Air Quality Management District
AQMP	Air Quality Management Plan
AQP	air quality attainment plan
ARB	California Air Resources Board
AST	aboveground storage tanks
BAU	business as usual
Bcf	billion cubic feet
BTEX	benzene, toluene, ethylbenzene, xylenes
BMP	best management practice
BO	Biological Opinion
C	Commercial
CAA	Federal Clean Air Act
CAAQS	California Ambient Air Quality Standards
CABY	Cosumnes, American, Bear and Yuba Watersheds
Cal-EPA	California Environmental Protection Agency
CalOSHA	California Occupational Safety and Health Administration
Caltrans	California Department of Transportation
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CAT	Climate Action Team

Acronyms and Abbreviations

CCAA	California Clean Air Act
CCTS	Central California Taxonomic System
CDF	California Department of Forestry and Fire Protection
CDFG	California Department of Fish and Game
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CH ₄	methane
CHL	California Historical Landmarks
CHP	California Highway Patrol
CIP	Capital Improvement Plan
CLG	Certified Local Government
CNPS	California Native Plant Society
CO	carbon monoxide
CO ₂	carbon dioxide
CPHI	California Points of Historical Interest
CPUC	California Public Utilities Commission
CR	California Register of Historical Resources
CRA	Cultural Resources Assessment
CRM	Cultural Resources Memorandum
CWA	Clean Water Act
CWHR	California Wildlife Habitat Relationship System
dB	decibel
dBA	A-weighted decibel
dbh	diameter at breast height
DMG	Department of Conservation, Division of Mines and Geology
DOC	California Department of Conservation
DOSH	Division of Occupational Safety and Health
DOT	El Dorado County Department of Transportation
DPM	diesel particulate matter
DPR	Department of Parks and Recreation

EAC	Early Action Compact
EDAQMD	El Dorado Air Quality Management District
EDCEMD	El Dorado County Environmental Management Department
EDCTA	El Dorado County Transit Authority
EDCWA	El Dorado County Water Agency
EDMUT	El Dorado Multi-Use Trail
EDR	Environmental Data Resources, Inc.
EDSO	El Dorado County Sheriff's Office
EDU	equivalent dwelling units
EID	El Dorado Irrigation District
EIR	Environmental Impact Report
EMS	Emergency Medical Service
EPA	U.S. Environmental Protection Agency
ESA	Federal Endangered Species Act
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FICON	Federal Interagency Committee on Noise
FIRM	Flood Insurance Rate Map
GHG	Greenhouse Gases
GHI	Gold Hill Intertie
H ₂ S	hydrogen sulfide
HABS	Historic American Building Survey
HAP	Hazardous Air Pollutant
HD CD	Historic Design Control Districts
HDR	High-Density Residential
HRI	California State Historic Resources Inventory
I	Industrial
INRMP	Integrated Natural Resources Management Plan
IPCC	Intergovernmental Panel on Climate Change
ISA	Initial Site Assessment
ISMND	Initial Study/Mitigated Negative Declaration
ISO	Insurance Service Organization

Acronyms and Abbreviations

KHA	Kimley Horn and Associates, Inc.
kV	kilovolt
L _{dn}	day-night average noise level
LEA	Lead Enforcement Agency
LOS	level of service
MBA	Michael Brandman Associates
MBTA	Migratory Bird Treaty Act
MC&FP	Missouri Flat Corridor and Funding Plan
MCAB	Mountain Counties Air Basin
MFR	Multifamily Residential
mgd	million gallons per day
MMI	Modified Mercalli Intensity Scale
MMTCO ₂ e	million metric tons of carbon dioxide equivalent
mph	miles per hour
MRF	Materials Recovery Facility
msl	mean sea level
MSW	municipal solid waste
MW	monitoring wells
NAAQS	National Ambient Air Quality Standards
NCIC	North Central Information Center
NESHAP	National Emission Standards for Hazardous Air Pollutants
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act of 1966
NOA	naturally occurring asbestos
NOC	Notice of Completion
NOI	Notice of Intent
NOP	Notice of Preparation
NO _x	oxides of nitrogen
NO ₂	nitrogen dioxide
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resource Conservation Service
NRHP	National Register of Historic Places

NRPW	Non-relatively permanent waters
O ₃	Ozone
OHWM	ordinary high water mark
OPR	California Governor's Office of Planning and Research
OSHA	Occupational Safety and Health Administration
OWMP	Oak Woodland Management Plan
PCB	Polychlorinated biphenyls
PEER	Permit Engineering Evaluation Report
PG&E	Pacific Gas & Electric
pCi/L	picocuries-per liter of air
PM	particulate matter
PM _{2.5}	fine particulate matter
PM ₁₀	inhalable particulate matter
ppm	parts per million
RCRA	Federal Resource Conservation and Recovery Act
REC	recognized environmental conditions
RFP	Reasonable Further Progress Plan
RMP	Risk Management Plan
ROG	reactive organic gases
ROW	right-of-way
RPW	relatively permanent water
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SACOG	Sacramento Area Council of Governments
SB	Senate Bill
SFHA	Special Flood Hazard Area
SFONA	Sacramento Federal Ozone Nonattainment Area
SFWO	Sacramento Fish and Wildlife Office
SHPO	State Office of Historic Preservation
SIP	State Implementation Plans
SMUD	Sacramento Municipal Utility District
SPRR	Southern Pacific Railroad

Acronyms and Abbreviations

SPTC	Sacramento Placerville Transportation Corridor
SRA	State Responsibility Area
SRRE	Source Reduction and Recycling Elements
STAR	Sheriff's Team of Active Retirees
SWMP	Storm Water Management Plan
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminant
TCR	Caltrans Transportation Concept Report
TIM	Traffic Impact Mitigation
TIS	traffic impact study
TNW	traditionally navigable water
TPH	total petroleum hydrocarbons
TTLC	Total Threshold Limit Concentration
UBC	Uniform Building Code
UCMP	University of California Museum of Paleontology
USACE	United States Army Corps of Engineers
USBR	Bureau of Reclamation
USBR	Bureau of Reclamation
USFS	United States Forest Service
USGS	United States Geological Survey
UST	underground storage tanks
UUD	Underground Utility Districts
VMT	vehicle miles traveled
VOC	volatile organic compounds
vpd	vehicle per day
WEDRS	Western El Dorado Recycling Service
WDR(s)	Waste Discharge Requirement(s)
WWTP	Wastewater Treatment Plant

SECTION 1: EXECUTIVE SUMMARY

1.1 - Purpose

The El Dorado County Department of Transportation (DOT) has prepared this Draft Environmental Impact Report (Draft EIR) to evaluate the potential significant environmental impacts associated with the implementation of the proposed Diamond Springs Parkway Project (State Clearinghouse No. 2007122033). This document is prepared in conformance with the California Environmental Quality Act (CEQA) (California Public Resources Code, Section 21000, et seq.) and the CEQA Guidelines (California Code of Regulations, Title 14, Section 15000, et seq.).

The purpose of this Draft EIR is to inform decision makers, representatives of affected and responsible agencies, the public, and other interested parties of the potential significant environmental effects that may result from the proposed construction and implementation of the Diamond Springs Parkway Project (proposed project), which would connect Missouri Flat Road with State Route 49 (SR-49)/Diamond Road and construct associated roadway improvements. This Draft EIR also evaluates the El Dorado Irrigation District's (EID's) Highway 49 Intertie Improvements Project, which would provide a new 18-inch waterline in Diamond Springs Parkway and upgrade existing 6-inch and 8-inch waterlines with a new 12-inch waterline in SR-49/Diamond Road from Pleasant Valley Road to Finch Road concurrently with construction of the Parkway. This Draft EIR describes potential impacts relating to a wide variety of environmental issues, methods by which these impacts can be mitigated or avoided, and reasonable alternatives to the proposed project.

1.2 - Project Summary

1.2.1 - Project Location

The proposed project is located within unincorporated El Dorado County, California, south of the Missouri Flat Road/U.S. Route 50 (US-50) Interchange, west of the City of Placerville, and north of the town of Diamond Springs (Exhibit 3-1). As illustrated in Exhibit 3-2, the principal roadway network in the vicinity of the project includes Missouri Flat Road, Pleasant Valley Road (SR-49), Diamond Road (SR-49), Lime Kiln Road, and China Garden Road.

The project footprint crosses portions of 83 lots. Exhibit 3-4 illustrates the specific parcels crossed by the project footprint and the relative location of the alignment in relation to the subject parcels. The specific assessor's parcel numbers (APNs) include:

- 051-250-04, -06, -07, -08 -11, -12, -13, -18, -19, -20, -21, -22, -23, -30, -31, -33, -37, -39, -42, -46, -48, -51, -54, and -55
- 051-461-02, -04, -05, -10, -11, -12, -37, -46, and -54
- 051-550-47

Executive Summary

- 054-341-04 and -06
- 054-342-15, -20, -21, -22, -23, -24, -25, -26, and -27
- 054-351-02, -33, and -35
- 054-391-26
- 054-411-13, -46, and -47
- 054-422-01
- 097-010-01
- 327-010-02, -03, -04, -05, and -06
- 327-240-19 and -22
- 327-260-05, -06, -25, -28, and -39
- 327-270-02, -03, -04, -08, -18, -26, -27, -43, -46, -48, -49, and -50
- 327-300-08
- 990-610-28
- 990-630-66
- 990-645-79
- 990-659-49

1.2.2 - Project Description

The Diamond Springs Parkway is identified in the County's General Plan Circulation Element, Table TC-1, and Circulation Map, as a future four-lane, divided roadway connecting Missouri Flat Road to SR-49. It is also included in the County's 2009 CIP and TIM Fee Program. The proposed Parkway would extend eastward from Missouri Flat Road near its intersection with the Sacramento-Placerville Transportation Corridor, north of China Garden Road, and would connect to Diamond Road (SR-49). Construction of the Parkway would also require minor improvements and/or realignment of China Garden Road, Throwita Way, Truck Street, Bradley Street and Old Depot Road. A new Truck Street/Bradley Drive Connector would be constructed west of Diamond Road (SR-49) to enhance circulation within the project area.

The Parkway would provide fully signalized access at three new intersections and allow only limited private property access. The Parkway would have a design speed of 50 miles per hour (mph), and the proposed lane configurations would reflect the ultimate roadway design contemplated in the County's General Plan.

Concurrent with the construction of the proposed project, a connection from the El Dorado Multi Use Trail (EDMUT) to the signalized intersection of Diamond Springs Parkway and Missouri Flat Road would be constructed. The proposed project would also construct an 8-foot-wide, Class I bike path along the western side of Missouri Flat Road, providing EDMUT users the opportunity to cross the Missouri Flat Road/Diamond Springs Parkway intersection, utilize the Class I bike path, and connect to the future western extension of the EDMUT within the Sacramento-Placerville Transportation Corridor (SPTC). For added multi-modal accessibility, the proposed project would also construct a

parking lot for trail users (refer to Exhibits 3-5a, 3-5b, and 3-5c). The paved parking lot would consist of up to 40 parking spaces.

The General Plan also includes SR-49, from the Parkway to Pleasant Valley Road, as an ultimate four-lane major highway. Under the proposed project, SR-49 would be improved to a major four-lane highway by adding travel lanes, providing standard shoulders and eliminating nearly all existing driveway encroachments. The improvements would be accomplished by creating a new frontage road along the existing roadway and widening the roadway to the west. A new median would be included to provide sufficient separation between the frontage road and SR-49. The SR-49 improvements would require minor improvements and/or realignment of Black Rice Road, Happy Lane, and Lime Kiln Road.

Concurrent with the construction of improvements along the Parkway and SR-49, EID would construct the Highway 49 Intertie Improvements Project. A new 12-inch waterline would replace the existing 6-inch and 8-inch waterlines from the intersection of SR-49 and Finch Road, south to the existing 12-inch waterline within SR-49 near Pleasant Valley Road (Exhibit 3-5). Installation of the replacement waterline would occur within EID's permanent easement along SR-49. EID would also construct a new 18-inch waterline within the Parkway that would extend from the Parkway/SR-49 intersection and ultimately connect to the existing 18-inch line within Missouri Flat Road.

1.2.3 - Project Objectives

The specific objectives for constructing the proposed project include the following:

Objective 1a. Improve traffic safety and operations on portions of Pleasant Valley Road (SR-49) in the vicinity of Diamond Springs as provided in the County's 2004 General Plan (Policy 10.2.7.3) including:

- Provide parallel capacity for SR-49 between Missouri Flat Road and Diamond Road (SR-49) and alternate access to US-50 via Missouri Flat Road to relieve traffic congestion and provide an acceptable level of service through the historic town of Diamond Springs to meet the General Plan Policy TC-1.
- Provide a safe, efficient, and convenient roadway that meets the travel needs of people and goods
- Improve safety by reducing residential driveway access to Diamond Road (SR-49) between Pleasant Valley Road (SR-49) and Black Rice Lane by provision of a frontage road.

Objective 1b. Implement the Parkway as included in the County's 2004 General Plan (Policy 10.2.7.3) and the County's CIP in the most cost effective manner.

Executive Summary

- Objective 1c.** Improve roadway and intersection capacities along Missouri Flat Road, south of US-50, to support the anticipated commercial/retail square footage development identified and planned for in the 1998 MC&FP and the 2004 El Dorado General Plan
- Objective 1d.** Provide opportunities for improved bicycle, pedestrian and transit facilities consistent with the 2004 El Dorado County General Plan and coordinate the construction of the Parkway with the El Dorado Multi-Use Trail.
- Objective 1e.** Protect natural resources, including local wetlands, riparian features, and oak woodlands by aligning the project to avoid these features, to the extent feasible, by providing transportation services facilities that cause the least amount of environmental damage and yield environmental benefits wherever feasible.

1.3 - Summary of Project Alternatives

Section 15126.6 of the CEQA Guidelines, states that an EIR “shall include a range of reasonable alternatives to the project, or the location of the project, which would feasibly attain most of 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.” In addition, CEQA Guidelines Section 15126.6(e) indicates that if other future uses of the land are predictable, such uses should be discussed as possible no-project conditions and the proposed project should be compared to them. Section 5, Alternatives to the Proposed Project, of this Draft EIR provides descriptions and analysis of each alternative in adequate detail to allow the decision-maker to decide whether an alternative should be adopted in lieu of the proposed project. The following provides a summary of project alternatives.

1.3.1 - Previously Considered and Rejected Alternatives

The existing SR-49 presents significant design constraints to increasing capacity for heavy commute traffic between southeastern El Dorado County and US-50 at an acceptable level of service. The historic significance of the area precludes widening the existing roadway, specifically within the Diamond Springs Community, where buildings of historical importance are located directly adjacent to the roadway. In 1997, a Technical Memorandum was prepared by the El Dorado County Department of Transportation (DOT) that identified six potential connector alignments between Missouri Flat and Pleasant Valley roads (Exhibit 5-1), four that were considered “viable” and two that were considered “nonviable” (Board of Supervisors Agenda June 17, 1997). In 1998, EDAW, under contract to DOT, prepared the Missouri Flat Area Master Circulation and Funding Plan (MC&FP) Program EIR (EDAW 1998) which included Alternative 3 from the Technical Memorandum as the proposed project. After review of Alternative 3, Caltrans requested that DOT evaluate alternatives that did not segment SR-49. Alternative 4 from the 1997 Technical Memorandum satisfied Caltrans requirements as well as the traffic circulation, congestion reduction, and improved safety needs.

Ultimately, a slightly different version of Alternative 4 was selected and analyzed as the proposed project in this Draft EIR. Therefore, this EIR includes the previously proposed Alternative 3 and Alternative 4 as alternatives to the proposed project and renames them Alternative A, and Alternative B, respectively. In addition, this EIR analyzes Alternative C, which includes a lower vertical alignment, and a No Project Alternative. A summary of the remaining four other alternatives previously considered by the Board of Supervisors in the 1997 Technical Memorandum, including the reasons for rejecting those alternatives, is included below. Further discussion is provided in Section 5, Alternatives.

Interconnector Alternative 1 (China Garden Road)

Alternative 1 (China Garden Road) would use a portion of Missouri Flat Road (south of the Sacramento Placerville-Transportation Corridor [SPTC], recently developed as the EDMUT) to China Garden Road, then would route traffic along China Garden Road to just north of Lime Kiln Road. The route would then parallel Lime Kiln Road in an easterly direction to and across Odd Fellows Road, along the Odd Fellows Cemetery, to the Pleasant Valley Road/SR-49 intersection. The main reason that the County DOT rejected this alternative is that it was not among the alignments favored by the local residents because the Alternative proposed a roadway that was closer to existing residences increasing impacts from noise and traffic.

Interconnector Alternative 2 (Chuck Wagon Way)

Alternative 2 (Chuck Wagon Way) was a proposed alignment from Missouri Flat Road extending in a southeasterly direction across Old Depot Road, then using an approximately 500 feet portion of the SPRR corridor before traveling to and cross Stage Court to Chuck Wagon Way. The alignment would make use of Chuck Wagon Way to just before the China Garden Road intersection, then would parallel Lime Kiln Road easterly to and across Odd Fellows Road, then along the Odd Fellows Cemetery to the Pleasant Valley Road and SR-49 intersection. This alternative was rejected because it had a greater impact on existing industrially developed areas, would require relocation of the Fowler Lane access, and had high costs related to acquiring the ROW for the alignment.

Interconnector Alternative 5

Alternative 5 would have been located generally along Pleasant Valley Road, through the historic downtown area of the unincorporated Diamond Springs community (Main Street). This alternative was not considered viable because it would require the relocation of many existing business and historic structures resulting in an unacceptable level of impacts to historical and community resources.

Interconnector Alternative 6

Alternative 6 would have been located north of the SPTC (EDMUT) corridor, with linkages to Missouri Flat Road and China Garden Road. This alternative was not considered viable because it would have required two overcrossing structures for the SPRR (EDMUT) corridor making the

alternative financially infeasible. In addition, it would interfere with future plan for Bray Reservoir as outlined in EID's master planning documents.

1.3.2 - Alternatives Analyzed in This EIR

The following alternatives to the proposed project are fully analyzed in this Draft EIR:

No Project Alternative

Under the No Project Alternative, the project site would remain in its existing condition, and the proposed parkway and associated roadway improvements would not be constructed.

Alternative A

Under Alternative A (previously considered in the MC&FP EIR as the preferred alignment and in the 1997 Technical Memorandum as Alternative 3), the proposed Parkway would be constructed according to the third conceptual alignment presented to the Board of Supervisors in the April 9, 1997 Technical Memorandum. Alternative A would extend east from Missouri Flat Road, south of the EDMUT corridor and cross Old Depot Road. The alignment would then use a portion of the EDMUT corridor for approximately 1,500 feet, after which it would curve in an east-southeasterly direction (south of Bradley Drive) to continue parallel to Diamond Road (SR-49), ending at the Fowler Lane and Pleasant Valley Road (SR-49) intersection. This alignment would require substantial realignment of Diamond Road (SR-49) between Bradley Drive and Pleasant Valley Road (SR-49) thereby bisecting/fragmenting several properties and requiring DOT to secure a greater amount of right-of-way. This alternative creates a new intersection of the Parkway and SR-49, requiring cars traveling on SR-49 to make a left turn to continue south or a right turn to continue north, further segmenting SR-49. Significant right-of-way acquisitions for Diamond Road (SR-49) would be required under this alternative.

Alternative B

Under Alternative B (previously considered in the MC&FP EIR as Alternative 4), the proposed Parkway would be constructed according to the fourth conceptual alignment presented to the Board of Supervisors in the April 9, 1997 Technical Memorandum. Similar to Alternative A, Alternative B would extend east from Missouri Flat Road, south of the EDMUT corridor and cross Old Depot Road. The alignment would then use a portion of the EDMUT corridor for approximately 1,500 feet, after which it would continue east, intersecting with Diamond Road (SR-49) south of Bradley Drive. Alternative B would continue south, utilizing a portion of the existing Diamond Road (SR-49) ROW, and then diverge slightly to the west after Lime Kiln Road. Alternative B would then continue south, parallel to and west of Diamond Road (SR-49), finally intersecting with Pleasant Valley Road (SR-49) at the Fowler Lane intersection. EID Intertie and overhead utility undergrounding or relocations would occur. Alternative B's alignment is very similar to the alignment proposed in this Draft EIR with the exception of the EDMUT corridor usage and realignment of Diamond Road (SR-49) between Lime Kiln Road and Diamond Road (SR-49).

Alternative C

Under Alternative C (also known as the Lower Vertical Profile Alternative), the proposed Parkway and all associated roadway improvements would be constructed at a lower topographic elevation, up to five feet lower, than the proposed project. Accordingly, this alternative's vertical profile would more closely mimic the existing topography of the project site and reduce required soil grading. The lower vertical profile would slightly reduce the size of the required roadway prism thereby resulting in a fractionally smaller footprint than the proposed project. All other features of the proposed project would be constructed similar to the proposed project.

Additional information on these alternatives can be found in Section 5.0, Alternatives, of this Draft EIR.

1.3.3 - Environmentally Superior Alternative

CEQA Guidelines Section 15126(e)(2) requires an EIR to identify an "environmentally superior alternative." To quantitatively identify an environmentally superior alternative a numeric value has been applied to each qualitative environmental effect: +1 for greater impacts, 0 for similar impacts, and -1 for fewer impacts. Accordingly, the alternative with the lowest score is the environmentally superior alternative. The No Project Alternative, with a score of -2, is the environmentally superior alternative because it would result in seven fewer impacts than the proposed project, which would outweigh the No Project Alternative's five greater impacts. However, the No Project Alternative would not meet any of the project objectives and would not provide the opportunity for existing LOS deficiencies to be mitigated or for new utilities to be constructed.

Section 15126(d)(2) of the CEQA Guidelines states, "if the environmentally superior alternative is the 'no project' alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives." Among the other alternatives, Alternatives A and B both resulted in a score of 4, while Alternative C resulted in a score of -1 (refer to Table 5-1). Accordingly, Alternative C would be the environmentally superior alternative among the other alternatives because it would result in similar impacts to the proposed project with the exception of a reduction in air quality impacts. In addition, Alternative C would meet all of the project objects, including increasing circulation and constructing updated utility infrastructure (EID interties and utility lines).

1.4 - Scoping Process and Areas of Controversy

Pursuant to CEQA Guidelines Section 15123(b), a summary section must address areas of controversy known to the lead agency, including issues raised by agencies and the public, and it must also address issues to be resolved, including the choice among alternatives and whether or how to mitigate the significant effects.

A Notice of Preparation (NOP) for the proposed project was issued on December 12, 2007. The NOP describing the original concept for the proposed project and issues to be addressed in the EIR was

Executive Summary

distributed to the State Clearinghouse, responsible agencies, and other interested parties for a public review period of more than 30-days, extending from December 12, 2007, through January 18, 2008. Appendix A includes the Notice of Preparation.

Two EIR scoping meetings, advertised in the NOP, were held on January 9, 2008, at the Firefighters Memorial Hall located at 501 Pleasant Valley Road in Diamond Springs, California. Each scoping meeting included an introductory presentation by DOT staff and consultant team and provided time for public comment, questions, and discussion.

1.4.1 - Issues Raised During Scoping

All written comments received during the scoping period or during the January 9, 2008, public meeting are provided in Appendix A. Issues raised during the scoping period included (but are not limited to): future development along the proposed Parkway; impacts and access to the El Dorado Multi-Use Trail (EDMUT); provision of alternative transportation infrastructure (e.g., sidewalks); adjacent existing industrial facilities and potential effects; and, realignment of SR-49 to include a frontage road between Pleasant Valley Road and Black Rice Road. DOT considered all scoping comments received and has addressed the issues raised, as appropriate, in this Draft EIR.

1.5 - Project Review and CEQA Process

This Draft EIR will be circulated and made available for public and agency review for a minimum period of 45 days, and will be available for review at the following locations:

County of El Dorado
Department of Transportation
2850 Fairlane Court
Placerville, CA 95667
Phone: 530.621.5900

El Dorado County Main Library
345 Fair Lane
Placerville, CA 95667
Phone: 530.621.540

DOT Engineering Division Office
4505 Golden Foothill Parkway
El Dorado Hills, CA 95762
Phone 530.621.5900

Internet
<http://co.el-dorado.ca.us/DOT/>

The Draft EIR public comment period will end no sooner than 45 calendar days from the date on the cover of this document. The comment period end date is identified in the Notice of Availability for this Draft EIR. Written comments should be sent to:

El Dorado County DOT
Attn: Ms. Janet Postlewait
2850 Fairlane Court
Placerville, CA 95667
Email: janet.postlewait@edcgov.us

Written comments submitted via electronic mail must either be included in the body of the text of the email message or as an attached file in Microsoft® Word or Adobe® PDF format. Please include the following phrase in the email subject line “Diamond Springs Parkway Draft EIR Comments.” Copies of all written comments will be included in the Final EIR and will become a part of the publicly accessible administrative record.

The public will have the opportunity to provide oral comments on the Draft EIR at a public hearing. The date, time and location of the public hearing is identified in the Notice of Availability for this Draft EIR.

Following receipt of public comments on the Draft EIR, the County will prepare a Final EIR that includes all responses to comments and any necessary revisions to the text of the Draft EIR. The County must certify the Final EIR prior to project approval.

1.6 - Summary of Environmental Impacts and Mitigation Measures

Table 1-1, below, summarizes the impacts, mitigation measures, and resulting level of significance after mitigation for the relevant environmental issue areas evaluated for the proposed project. No unavoidable impacts were identified. The table is intended to provide an overview; narrative discussions for the issue areas are included in the corresponding section of this EIR. Table 1-1 is included in the EIR as required by CEQA Guidelines Section 15123(b)(1).

1.6.1 - Summary of Additional CEQA-Required Analysis

Cumulative Impacts

This Draft Environmental Impact Report (DEIR) provides an analysis of the overall cumulative impacts of the proposed Diamond Springs Parkway Project taken together with other past, present, and probable future projects producing related impacts, as required by Section 15130 of the California Environmental Quality Act Guidelines (CEQA Guidelines).

The cumulative effects analysis is included in Section 6.0 of this Draft EIR. Conclusions regarding contribution to cumulative impacts by roadways (including the Parkway) within the MC&FP area were programmatically analyzed in the MC&FP EIR (EDAW 1998). Accordingly, the MC&FP EIR cumulative conclusions have been taken into consideration during the analysis of the proposed project’s cumulative contributions. While impacts to visual character, peak stormwater run-off volumes, and changes in land use are considered individually less than significant for the proposed project, the MC&FP EIR (EDAW 1998) concluded that roadways construction within the MC&FP area would contribute to cumulative considerable impacts in these areas. Accordingly, the proposed project would also contribute to cumulative impacts to visual character, peak stormwater run-off volumes, and changes in land use. Refer to Section 6.0 of this Draft EIR for further discussion.

Growth Inducing Impacts

The proposed project would improve circulation and relieve congestion in the Diamond Springs area and has been designed to accommodate future growth included in the 2004 El Dorado County General Plan. The proposed project is consistent with the El Dorado County General Plan, MC&FP, and 2009 CIP. Furthermore, the Parkway is identified on Figure TC-1 of the General Plan as a future 4-lane, divided road. As such, the El Dorado County General Plan EIR (EDAW 2003) included consideration of the proposed project and future development that could occur on parcels adjacent to the new roadway and in the project's general vicinity. As such, the proposed Parkway and associated roadway improvements would allow for future growth as included in the El Dorado County General Plan.

The EID Intertie Improvements would update existing water supply infrastructure and provide new water infrastructure beneath the Parkway right-of-way. Existing development surrounding the Parkway is already served by EID; therefore, the proposed project would not extend water supply services to an area previously not served. However, the upgraded and new EID Intertie Improvements would increase existing water supply reliability and provide water for future growth that has been planned for in the El Dorado County General Plan and analyzed in the General Plan EIR (EDAW 2003). As such, the EID Intertie Improvements would allow for future growth as included in the El Dorado County General Plan.

Table 1-1: Executive Summary Matrix

Environmental Impact	Level of Significance Before Mitigation	Mitigation Findings	Level of Significance After Mitigation
Section 4.2 - Aesthetics, Light, and Glare			
Would the project have the potential to result in a substantial adverse effect on a scenic vista?	Less than significant.	The proposed project's addition of signage and lighted intersection signals would be visually consistent and would not degrade scenic vistas. The potential removal of existing utility poles and aboveground utility lines would benefit visual quality. No mitigation is required.	Less than significant.
Would the project have the potential to substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	No impact.	No roadways within the proposed project's vicinity are officially designated as Scenic Highways or as "county scenic roads." No mitigation is required.	No impact.
Would the project have the potential to substantially degrade the existing visual character or quality of the site and its surroundings?	Less than significant.	The proposed project's construction would temporary degrade existing visual character. The proposed project would change the visual character of the project site from that of an industrial area to a modern roadway. No mitigation is required.	Less than significant.
Would the project have the potential to adversely affect day or nighttime views in the area?	Less than significant.	Any required street lighting would be directionally shielded to avoid unwanted spillover onto adjacent parcels. The project area currently experiences light and glare exposure that is anticipated to continue after the proposed project's implementation. No mitigation is required.	Less than significant.
Section 4.3 - Air Quality			
Would the project have the potential to conflict with or obstruct implementation of the applicable air quality plan?	Less than significant.	The proposed project is consistent with the AQMP. No mitigation is required.	Less than significant.
Would the project have the potential to violate an air quality standard or contribute substantially to an existing or projected air quality violation from construction impacts?	Less than significant.	The MC&FP Mitigation Measure 4.5-1 remains applicable to the proposed project. Therefore, it has been included and renumbered to match that of other required mitigation measures.	Less than significant.

Environmental Impact	Level of Significance Before Mitigation	Mitigation Findings	Level of Significance After Mitigation
		<p>MM 4.3-1a. Comply with El Dorado County APCD Rule 223 (Fugitive Dust), as required by the Air Pollution Control Officer. Compliance may include, but is not limited to, implementation of the following measures:</p> <ul style="list-style-type: none"> • Application of water or suitable chemicals or other specified covering on material stockpiles, wrecking activity, excavation, grading, sweeping, clearing of land, solid waste disposal operations, or construction or demolition of buildings or structures (all exposed soil shall be kept visibly moist during grading); • Installation and use of hoods, fans and filters to enclose, collect, and clean the emissions of dusty materials; • Covering or wetting at all times when in motion of open-bodied trucks, trailers or other vehicles transporting materials, which create a nuisance by generating particulate matter in areas where the general public has access. • Application of asphalt, oil, water or suitable chemicals on dirt roads; • Paving of public or commercial parking surfaces; • Removal from paved streets and parking surfaces of earth or other material which has a tendency to become airborne; • Alternate means of control as approved by the Air Pollution Control Officer. <p>MM 4.3-1b. Use only low-emission mobile construction equipment (e.g., tractor, scraper, dozer, etc.).</p> <p>MM 4.3-1c. Maintain construction equipment engines in proper operating condition.</p> <p>MM 4.3-1d. Develop and implement construction activity management techniques, such as extending construction period, reducing number of pieces used simultaneously, increasing distance between emission sources, reducing or changing hours of construction, and scheduling activity during off-peak hours.</p>	

Environmental Impact	Level of Significance Before Mitigation	Mitigation Findings	Level of Significance After Mitigation
		<p>MM 4.3-1e. Comply with El Dorado County APCD Rule 224 (Cutback and Emulsified Asphalt Paving Materials).</p> <p>MM 4.3-1f. Comply with El Dorado County APCD Rule 215 pertaining to architectural coatings.</p> <p>MM 4.3-1g. Obtain permission from the APCD and/or the local fire agency prior to burning of wastes from land development clearing, depending upon the time of year the burning is to take place. Only vegetative waste materials may be disposed of using an outdoor fire.</p>	
Would the project have the potential to violate ambient carbon monoxide (CO) standards or contribute substantially to an existing or projected air quality violation of CO standards as a result of construction?	Less than significant.	CO concentration would not exceed California ambient air quality standards. No mitigation is required.	Less than significant.
Would the project have the potential to result in a cumulatively considerable net increase of PM ₁₀ and ozone during construction?	Less than significant.	The proposed project would not result in operational emissions. Construction generated PM ₁₀ would be mitigated by standard construction fugitive dust control measures. ROG, and NO _x emissions would not exceed EDAQMND thresholds. No mitigation is required.	Less than significant.
Would the project have the potential to violate ambient carbon monoxide (CO) standards or contribute substantially to an existing or projected air quality violation of CO standards as a result of the realignment of roadways?	Less than significant.	The estimated 1-hour and 8-hour average CO concentrations for the most congested project intersections in the near-term 2010 with project traffic, and cumulative 2030 project traffic impacts in combination with background concentrations are below the state and federal ambient air quality standards. No mitigation is required.	Less than significant.
Would the project have the potential to expose sensitive receptors to substantial pollution concentrations of naturally occurring asbestos or diesel particulate matter?	Less than significant.	The proposed project would not expose sensitive receptors to naturally occurring asbestos. Exposure to diesel particulate matter would be short-term. No mitigation is required.	Less than significant.

Environmental Impact	Level of Significance Before Mitigation	Mitigation Findings	Level of Significance After Mitigation
Would the project have the potential to create objectionable odors affecting a substantial number of people?	Less than significant.	Objectionable odors resulting from diesel exhaust and ROG emissions would disperse rapidly and, therefore, would be unlikely to occur in levels that would induce a negative response. No mitigation is required.	Less than significant.
Would the project have the potential to result in an increase in greenhouse gas emissions that would significantly hinder or delay the State's ability to meet the reduction targets contained in AB 32?	Potentially significant.	<p>MM 4.3-8a. Any traffic lights installed or replaced as part of this project shall use Light Emitting Diodes (LEDs) or the most energy-efficient technology available, unless technical feasibility or safety concerns take precedent.</p> <p>MM 4.3-8b. Prior to commencement of construction, the project construction contractor(s) shall have in place a County-approved Solid Waste Diversion and Recycling Plan (or such other documentation to the satisfaction of the County) that demonstrates the diversion and recycling of salvageable and re-useable wood, metal, plastic, and paper products during project construction. The Solid Waste Diversion and Recycling Plan shall comply with County Ordinance Chapter 8.43—Construction and Demolition Debris Recycling Within the County of El Dorado. This requirement shall be included in the construction/specification bid documents for the project.</p>	Less than significant.
Section 4.4 - Biological Resources			
Would the project have the potential to result in a substantial adverse effect, either directly or through habitat modifications, on a species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?	Potentially significant	<p>MM 4.4-1a. A qualified biologist shall conduct a California red-legged frog (CRLF) survey of the project site 48 hours before the onset of work activities. If any life stage of CRLF is found, and these individuals are likely to be killed or injured by work activities, the approved biologist shall be allowed sufficient time to move them from the site before work activities begin. The biologist shall relocate CRLF(s) the shortest distance possible to a location that contains suitable habitat and that will not be affected by activities associated with the proposed project.</p> <p>Exclusion fencing shall be installed to prevent frogs from entering the project site during construction. The exclusion fence shall be made of a fine mesh material with openings small enough to prevent passage of CRLF. The exclusion fence shall be a minimum of 18 inches tall above ground, and buried a minimum of six inches</p>	Less than significant.

Environmental Impact	Level of Significance Before Mitigation	Mitigation Findings	Level of Significance After Mitigation
		<p>below ground. Prior to initiation of construction activities, the fencing shall be placed to the north of construction activities to prevent frogs that may disperse from Weber Creek from entering the project site. The fence shall extend no less than 100 feet beyond the limits of active construction, including any staging areas. The exclusion fencing shall be regularly monitored and repaired as needed. As construction progresses, fencing may be removed and re-installed in areas of active construction; however, fencing shall not be removed from those areas with active construction until all construction-related activities are completed.</p> <p>During project activities, all trash that may attract predators shall be properly contained, removed from the work site, and disposed of regularly. Following construction, all trash and construction debris shall be removed from work areas.</p> <p>MM 4.4-1b. Nesting Bird and Bat Surveys Associated with Vegetation Clearing and Other construction Activities: Removal of any trees and shrubs (multi-stemmed woody plants ≥ 6 feet in height) shall be conducted outside of the breeding season (typically March 1 through October 1). If no tree and shrub removal will occur during the breeding season, no further mitigation will be necessary.</p> <p>If removal of trees and shrubs must occur during the breeding season, nesting bird surveys shall be conducted by a qualified biologist within 250 of where removal would occur, no more than 14 days prior to removal. Concurrently, the biologist shall also survey for trees capable of supporting a sizeable bat maternity roost. If no active nests or roost trees are identified, then no additional mitigation is necessary.</p> <p>If an active nest or potential maternity roost is identified, the nest shall be mapped and photographed. No tree removal shall occur within 250 feet of the active nest/roost unless approved by CDFG. For trees removed that are located more than 250 feet but less than 500 feet from an active nest, a biological monitor shall be present to observe the nest/roost during tree removal.</p>	

Environmental Impact	Level of Significance Before Mitigation	Mitigation Findings	Level of Significance After Mitigation
		MM 4.4-1c. Nesting Bird Surveys Associated with Project Construction: During the breeding season (February through August), a nesting bird and bat survey shall be conducted in suitable habitat within 250 feet of construction activities prior to construction initiation. The survey shall be conducted no more than 14 days prior to initiation of construction activities. If an active nest/roost is observed in this area, all construction activities shall be halted, and CDFG shall be consulted to determine the appropriate mitigation measure. Nest/roost disturbance is dependent on a number of site-specific and activity-specific factors, including the sensitivity of the species, proximity to work activity, amount of noise or frequency of the work activity, and intervening topography, vegetation, structures, etc. Mitigation may be required to minimize disturbance nests/roosts, such as allowing nesting activity to conclude before continuing construction in an area, restricting certain types of construction practices/activities, creating screening devices to shield nest sites from construction activity, and establishing buffer areas around active nest/roost sites.	
Would the project have the potential to result in a substantial adverse effect on riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?	Potentially significant.	MM 4.4-2. Riparian habitat would be avoided to the maximum extent feasible. Prior to initiation of any ground clearing or other construction activities, a CDFG Section 1602 Lake and Streambed Alteration Agreement shall be prepared and approved by CDFG. Mitigation required for direct and indirect impacts to all riparian habitat under CDFG jurisdiction will be carried out in accordance with the conditions of the Lake and Streambed Alteration Agreement. Mitigation for impacts to riparian habitat shall include the following: 1) Prior to project construction, a riparian habitat restoration and enhancement mitigation and monitoring plan for shall be prepared and submitted to CDFG for approval. The plan shall include the following: a) The plan shall identify those portions of the onsite drainage (ED3) and other riparian habitats within the project study	Less than significant.

Environmental Impact	Level of Significance Before Mitigation	Mitigation Findings	Level of Significance After Mitigation
		<p>area that would benefit most from riparian restoration and enhancement activities. This includes removal of trash, removal of noxious weed species, identification of areas requiring bank stabilization, and identification of areas most suitable for revegetation and a list of plants suitable for those areas.</p> <p>b) The plan shall stipulate a vegetated setback along drainages, where feasible, of not less than 50 feet from the bank, in accordance with General Plan policies. The plan shall stipulate that, where vegetation is not present within the 50-foot buffer, suitable native plants shall be installed in order to create a vegetated buffer that will improve water quality and create wildlife habitat.</p> <p>c) Restoration: Immediately following completion of construction, trash within the drainage shall be removed and suppression of noxious weed species shall be implemented. This shall be completed prior to planting of any additional plants.</p> <p>d) Replacement: Replacement of all permanently affected riparian habitat (including that along ED3 and the three riparian inclusions) shall occur at a minimum ratio of 1:1 per woody riparian species removed. Species suitable for areas outside of but adjacent to the drainage include, but are not limited to, valley oak, coyote brush, and California sycamore. Species suitable for wetter portion of the channel and bank include, but are not limited to, Fremont cottonwood, California blackberry, black willow, arroyo willow, and California pipevine.</p> <p>e) The plan shall include a timeline that identifies when activities shall occur and completion dates.</p> <p>f) The plan shall include detailed monitoring that identifies quantifiable success criteria. Monitoring shall occur for a minimum of 5 years following completion of restoration and enhancement activities.</p>	

Environmental Impact	Level of Significance Before Mitigation	Mitigation Findings	Level of Significance After Mitigation
Would the project have the potential to result in a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	Potentially significant.	<p>MM 4.4-3a. The jurisdictional delineation prepared by MBA shall be used in preparation of USACE Section 404 permit applications. Mitigation required for direct and indirect impacts to all features will be carried out in accordance with permit requirements prior to initiation of project construction.</p> <p>a) As part of the permitting process, mitigation measures addressing impacts to jurisdictional Waters of the United States, including wetlands, will be defined and implemented. The acreage will be replaced or rehabilitated on a “no-net-loss” basis in accordance with USACE regulations. Habitat restoration, rehabilitation, and/or replacement shall be at a location and by methods agreeable to USACE.</p> <p>b) All grading plans will include adequate setback for preserved seasonal and perennial drainages in accordance with General Plan Policy 7.3.3.4. Measures to minimize erosion and runoff into seasonal and perennial drainages that are preserved will also be included in all grading plans. Appropriate runoff controls such as berms, storm gates, detention basins, overflow collection areas, filtration systems, and sediment traps shall be implemented to control siltation and the potential discharge of pollutants into preserved drainages.</p> <p>MM 4.4-3b. Standard BMPs to protect water quality shall be implemented prior to project construction and maintained until construction, including any revegetation, is completed. These include standard erosion control BMPs that are outlined in Section 4.8, Hydrology and Water Quality.</p>	Less than significant.
Would the project have the potential to interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?	Less than significant.	The unnamed drainage and associated habitat, which may function as a movement corridor for mammal and bird species, is considered marginal and connects to fragmented, marginal habitat to the south. No mitigation is required.	Less than significant.

Environmental Impact	Level of Significance Before Mitigation	Mitigation Findings	Level of Significance After Mitigation
Would the project have the potential to conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Potentially significant.	MM 4.4-5. The County shall comply with the Oak Woodland Management Plan (OWMP) by mitigating for oak woodland canopy removed in accordance with either Option A (On-Site Mitigation, Replanting and Replacement), Option B (Conservation Fund In-Lieu Fee), or a combination of these. As outlined in the OWMP, a 1:1 mitigation ratio shall be applied to the oak canopy removed that falls below the threshold in Table 1, while a 2:1 mitigation ratio shall be applied to the remaining oak canopy removed.	Less than significant.
Would the project have the potential to conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	Less than significant.	El Dorado County is in the process of completing an Integrated Natural Resources Management Plan (INRMP), of which the Oak Woodland Management Plan will be a part. The INRMP is not yet approved. Mitigation Measure 4.4-5 would ensure compliance with the established Oak Woodland Management Plan. No additional mitigation is required.	Less than significant.
Section 4.5 - Cultural and Historical Resources			
Would the project have the potential to cause a substantial adverse change in the significance of a known historical resource as defined in Section 15064.5 of the CEQA Guidelines? Would subsurface construction activities associated with the project have the potential to damage or destroy previously undiscovered historic resources?	Potentially significant.	MM 4.5-1. If a potentially significant cultural resource is encountered during subsurface earthwork activities for the project, standard County practice will be implemented and all construction activities within a 100-foot radius of the find will be stopped until a qualified archaeologist determines whether the resource requires further study. Potentially significant cultural resources consist of but are not limited to stone, bone, glass, ceramic, wood, or shell artifacts; fossils; or features including hearths, structural remains, or historic dumpsites. Furthermore, El Dorado County DOT will include a standard inadvertent discovery clause in every construction contract. Any previously undiscovered resources found during construction will be recorded on appropriate Department of Parks and Recreation (DPR) forms and evaluated for significance in terms of CEQA and Section 106 of the NHPA criteria by a qualified archeologist. If the resource is determined significant under CEQA or the NHPA, the archaeologist will prepare and implement a research design and archaeological data recovery plan that captures those categories of data for which the	Less than significant.

Environmental Impact	Level of Significance Before Mitigation	Mitigation Findings	Level of Significance After Mitigation
		site is significant. The archaeologist will also perform appropriate technical analyses, prepare a comprehensive report and file it with the appropriate Information Center, and provide for the permanent curation of the recovered materials. Construction activities within the 100-foot radius may continue once all appropriate recovery measures have been completed.	
Would the project have the potential to cause a substantial adverse change in the significance of a known archaeological resource pursuant to Section 15064.5? Would subsurface construction activities associated with the project have the potential to damage or destroy previously undiscovered archaeological resources?	Potentially significant.	Refer to Mitigation Measure 4.5-1.	Less than significant.
Would the project have the potential to directly destroy a unique paleontological resource or site or unique geologic feature?	Potentially significant.	MM 4.5-3. El Dorado County shall require that a standard inadvertent discovery clause be included in every construction contract. In the event a fossil is discovered during any earthwork activities for the proposed project (including those occurring at depths of less than 10 feet), all excavations within 100 feet of the find shall be temporarily halted or delayed until the discovery is examined by a qualified paleontologist, in accordance with Society of Vertebrate Paleontology standards. The paleontologist shall determine the procedures to be followed before construction is allowed to resume at the location of the find. If the find is determined to be significant and DOT determines that avoidance is not feasible, the paleontologist shall design and carry out a data recovery plan consistent with the Society of Vertebrate Paleontology standards. The plan shall be incorporated into the project.	Less than significant.
Would the project have the potential to disturb human remains, including those interred outside of formal cemeteries?	Potentially significant.	MM 4.5-4. If human remains are encountered during earth-disturbing activities for the project, all work in the adjacent area shall stop immediately and the El Dorado County Coroner's office shall be notified. If the remains are determined to be Native	Less than significant.

Environmental Impact	Level of Significance Before Mitigation	Mitigation Findings	Level of Significance After Mitigation
		American in origin, the Native American Heritage Commission shall be notified and will identify the Most Likely Descendent, who will be consulted for recommendations for treatment of the discovered remains.	
Section 4.6 - Geology and Soils			
<p>Would the project have the potential to expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:</p> <ul style="list-style-type: none"> i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? ii. Strong seismic ground shaking? iii. Seismic-related ground failure, including liquefaction? iv. Landslides? 	Less than significant.	<p>The occurrence of fault rupture through the project area is not anticipated.</p> <p>The project site may be exposed to strong ground shaking during an earthquake. However, proper roadway design would reduce potential damages to less than significant</p> <p>Relatively low seismicity and shallow depth to bedrock within the project study area indicates the potential for site liquefaction and ground failure is negligible.</p> <p>The project study area consists of gentle sloping areas, the steepest of which would be smoothed through engineered earthwork performed during grading of the site. Final manufactured slopes would be between 0 and 12 percent, with the majority of slopes between 0 and 5 percent. As such, the potential for substantial adverse effects resulting from landslides is less than significant. No mitigation is required.</p>	Less than significant.
Would the project have the potential to result in substantial soil erosion or the loss of topsoil?	Less than significant.	Erosion from water would be controlled by the implementation of a SWPPP and associated BMPs. Erosion from wind would be minimal as determined by the existing soil's wind erodibility rating. No mitigation is required.	Less than significant.
Would the project have the potential to be located on a geologic unit or soil that could become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	Potentially significant.	MM 4.6-3. Prior to project construction a final geotechnical report will be prepared in order to assess, among other things, the location and depth of expansive materials, undocumented fills, and tailings, including those located within the parcel to be used as a borrow, staging and storage site. Recommended soil stabilization procedures provided in the report (i.e., excavation, engineered fill replacement, moisture barrier, drainage improvements) will be incorporated into the project design.	Less than significant.

Environmental Impact	Level of Significance Before Mitigation	Mitigation Findings	Level of Significance After Mitigation
Would the project have the potential to be located on expansive soils, as defined in Table 18-1-B of the Uniform Building Code (1994), and therefore potentially create substantial risks to life or property?	Potentially significant.	Refer to Mitigation Measure 4.6-3.	Less than significant.
Would the project have the potential to include soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	No impact.	The proposed project does not include the installation of septic tanks or alternative wastewater disposal systems. No mitigation is required.	No impact.
Section 4.7 - Hazards and Hazardous Materials			
Would the project have the potential to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Less than significant.	Hazardous materials would only be used during construction of the proposed project, and any hazardous material users would be required to comply with all applicable local, State and federal standards associated with the handling and storage of hazardous materials. No mitigation is required.	Less than significant.
Would the project have the potential to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	Less than significant.	Trucks traveling along the proposed Parkway and surrounding roadways could transport hazardous materials and wastes. All trucks transporting hazardous wastes and materials are required to comply with applicable state and federal laws. Due to the reduction of congestion on SR-49 the probability and severity of an accident involving hazardous materials would be reduced. No mitigation is required.	Less than significant.
Would the project have the potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	No impact.	The proposed project is not located within one-quarter mile of an existing or proposed school. No mitigation is required.	No impact.

Environmental Impact	Level of Significance Before Mitigation	Mitigation Findings	Level of Significance After Mitigation
Would the project have the potential to be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, potentially create a significant hazard to the public or the environment?	Potentially significant.	<p>MM 4.7-4a. El Dorado County Department of Transportation will work with the EDCEMD to create an approved work plan that would evaluate the lateral and vertical extent of contamination associated with oil-impacted soil on the Bahlman Parcel, APN 327-270-04. The work plan will include the removal of the upper 2 to 3 feet of soil for later use as on-site backfill and the excavation, transportation, and proper disposal of the lower 3 to 4 feet of on-site soil, or other remedial actions as agreed upon by the El Dorado County Department of Transportation and the EDCEMD. The work plan will be implemented prior to the commencement of the Diamond Springs Parkway construction activities.</p> <p>MM 4.7-4b. El Dorado County Department of Transportation will conduct a soil vapor survey and/or groundwater testing within the Sierra Door property, APN 327-300-08, where construction activities related to the proposed project would occur. If the survey and tests indicate that contaminated soil and/or groundwater are present, El Dorado County Department of Transportation will coordinate with the EDCEMD and implement agreed upon remediation measures in areas disturbed by the proposed project prior to the commencement of the Diamond Springs Parkway construction activities.</p>	Less than significant.
Would the proposed project have the potential to result in the exposure of persons or the environment to hazardous materials associated with past and current uses of the project site?	Potentially significant.	<p>MM 4.7-5a. If lead is found during construction, El Dorado County Department of Transportation shall either abate the lead or provide special construction worker health and safety procedures during demolition activities. A lead-based paint survey shall be performed for all structures constructed prior to 1980 that will be demolished during project construction activities. Caltrans standard special provisions for removal of the existing yellow thermoplastic and yellow paint used for pavement markings throughout the project area shall be implemented. Disposal of any lead containing materials will occur at a Class 1 disposal facility in accordance with DTSC hazardous materials laws and regulations. All work shall be conducted in accordance with applicable construction worker health and safety requirements, including CalOSHA Construction Safety</p>	Less than significant.

Environmental Impact	Level of Significance Before Mitigation	Mitigation Findings	Level of Significance After Mitigation
		<p>Orders for lead (Title 8 CCR Section 1532.1). These requirements may include air monitoring during construction, worker training, and preparation of a Lead Compliance Plan prior to construction.</p> <p>MM 4.7-5b. A preliminary site investigation will be conducted prior to construction to identify levels of aerally deposited lead (ADL) in soils within 30 feet of SR-49 that are to be disturbed during project construction. Soil samples shall be tested prior to construction for total and/or soluble lead to properly classify the soils and ensure that all necessary soil management and disposal procedures are followed for the following APNs: 051-250-04, 051-250-06, 051-250-11, 051-250-12, 051-250-13, 051-250-31, 051-461-11, 051-461-12, 051-461-37, 051-461-51, 051-550-47, 054-342-15, 051-342-20, 051-342-23, 054-342-35, 054-342-36, 054-342-27, and 054-351-19.</p> <p>If ADL is encountered, earthwork involving materials containing ADL shall conform to the provisions in Section 19, "Earthwork," of Caltrans Standard Specifications and of Special Provisions for "Aerally Deposited Lead." According to Caltrans requirements, the El Dorado County Department of Transportation or its contractor will prepare and implement a project-specific Lead Compliance Plan to prevent or minimize worker exposure to ADL while handling material containing ADL. The Lead Compliance Plan will be prepared in compliance with Title 8, California Code of Regulations, Section 1532.1 "Lead." The Plan will include monitoring, and average ADL concentrations shall not exceed 1.5 microgram per cubic meter of air per day. If concentrations exceed this level, the contractor shall stop work and modify the work to prevent release of ADL. The Plan will also include safety training for construction personnel. Excavation, reuse, and disposal of material with ADL shall be in conformance with all rules and regulations of responsible state and federal agencies.</p> <p>MM 4.7-5c. If asbestos is found during construction, the asbestos shall be abated or DOT or EID shall provide special construction work health and safety procedures during demolition activities. An asbestos survey shall be performed for all structures constructed</p>	

Environmental Impact	Level of Significance Before Mitigation	Mitigation Findings	Level of Significance After Mitigation
		<p>prior to 1980 that will be demolished or disturbed during project construction activities. If asbestos-containing materials are determined to be present, the materials shall be abated by a certified asbestos abatement contractor. All work shall be conducted in accordance with applicable construction worker health and safety requirements, including CalOSHA Construction Safety Orders for asbestos (Title 8 CCR Section 1529). These requirements may include air monitoring during construction, worker training, and preparation of an Asbestos Compliance Plan prior to construction. Furthermore, demolition and disposal shall be conducted in accordance with the El Dorado Air Quality Management District requirements.</p> <p>MM 4.7-5d. Department of Transportation will provide on-site monitoring, by a qualified environmental professional, of construction activities for parcels formerly part of the Diamond & Caldor Railway depot and engine house on APNs 327-300-08, 327-270-03, 327-270-26, 327-270-27, 327-270-46, 327-270-48, and 327-270-49, and the Diamond Lime Mineral Plant (051-250-46 and 051-250-54) to observe for the potential indication of any hazardous materials releases, disposal areas or contaminated soils. If suspected or recognized environmental conditions are identified during project construction activities, the Department of Transportation will stop construction and consult with a qualified environmental remediation consultant to determine the appropriate course of action</p> <p>MM 4.7-5e. Department of Transportation will conduct preconstruction sampling for all agricultural chemicals and hydrocarbons where soil is to be disturbed as a result of project activities. If contaminated soils are determined to be present, Department of Transportation will consult with a qualified environmental remediation consultant to determine the appropriate course of action according. Recommend remediation actions shall be approved by the EDCEMD and implemented prior to the start of construction.</p>	

Environmental Impact	Level of Significance Before Mitigation	Mitigation Findings	Level of Significance After Mitigation
		MM 4.7-5f. Department of Transportation, in coordination with the El Dorado County Fire District shall conduct a risk management program (according to 40 CRF Part 68) specific to risks resulting from the proximity of vehicle traffic to existing large-volume propane tanks located near Bradley Drive. Should protection from vehicle traffic for the propane tanks be required the Department of Transportation will construct protection barriers in compliance with the Uniform Fire Code, the National Fire Protection Association's Liquefied Petroleum Gas Code 58 and any other applicable regulations.	
Would the project have the potential to be located within an airport land use plan or within two miles of a public airport, public use airport or private airstrip and therefore potentially result in a safety hazard for people residing or working in the project area?	No impact.	The project site is not within an airport land use plan or within two miles of a public airport. No mitigation is required.	No impact.
Would the project have the potential to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Less than significant.	The Operational Area Multi-Hazard Functional Emergency Operations Plan for El Dorado County identifies SR-49 as a major emergency response route within the County. Implementation of a construction traffic mitigation plan and coordination with local emergency service providers will ensure SR-49 remains accessible. No mitigation is required.	Less than significant.
Would the project have the potential to expose people or structures to a significant risk of loss, injury or death involving wildland fires?	No impact.	The project site would consist primarily of asphalt concrete paving, which is not associated with the generation or spread of wildland fire. No mitigation is required.	No impact.
Section 4.8 - Hydrology and Water Quality			
Would the project have the potential to violate a water quality standards or waste discharge requirement?	Less than significant,	To minimize erosion and foreign materials transport in stormwater during construction, the County's contractor would be required to prepare a Stormwater Pollution Prevention Plan (SWPPP) in accordance with a NPDES permit for County approval and would implement best management practices (BMPs) for controlling the	Less than significant.

Environmental Impact	Level of Significance Before Mitigation	Mitigation Findings	Level of Significance After Mitigation
		introduction of materials to stormwater and the flow of stormwater from within the construction area to off-site areas. No mitigation is required.	
Would the project have the potential to substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	No impact.	Construction activities associated with the proposed project may use water for dust control and other purposes. Water would be provided by a contracted service and would not deplete any groundwater supplies. Upon completion, the proposed project would not require the use of water and, therefore, would not have the potential deplete groundwater supplies. No mitigation is required.	No impact.
Would the project have the potential to substantially alter the existing drainage pattern of the area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion, siltation or flooding on- or off-site?	Less than significant	Completion of a Final Drainage Plan will be implemented and incorporated into the proposed project design in order to ensure that the project's existing drainage would be maintained and would not result in on- or off-site erosions, siltation or flooding. No mitigation is required.	Less than significant.
Would the project have the potential to create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	Less than significant.	Planned and existing storm drain systems have adequate capacity for the increase in peak stormwater flows. Construction activities would adhere to the County's Grading Ordinance and Storm Water Management Plan for Western El Dorado County, regarding erosion, ground instability, and water quality. No mitigation is required.	Less than significant.
Would the project have the potential to substantially degrade water quality?	Less than significant.	To minimize erosion and foreign materials transport in stormwater, the County's contractor would be required to prepare a Stormwater Pollution Prevention Plan (SWPPP) in accordance with a NPDES permit for County approval and would implement best management practices (BMPs) for controlling the introduction of materials to stormwater and the flow of stormwater from within the construction area to off-site areas. The proposed project would also adhere to El	Less than significant.

Environmental Impact	Level of Significance Before Mitigation	Mitigation Findings	Level of Significance After Mitigation
		Dorado County's Grading Ordinance and Storm Water Management Plan for Western EL Dorado County. No mitigation is required.	
Would the project place housing within a 100-year flood hazard area mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	No impact.	No housing will be constructed. No mitigation is required.	No impact.
Would the project place within a 100-year flood hazard area structures which would impede or redirect flood flows?	No impact.	The project site is not located within a 100-year flood hazard area. No mitigation is required.	No impact.
Would the project have the potential to expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of a failure of a levee or dam?	No impact.	The project site is not located in an area of flooding or in the vicinity of a levee or dam. No mitigation is required.	No impact.
Would the project have the potential to be subjected to inundation by seiche, tsunami, or mudflow?	No impact.	The project site is not located in an area susceptible to inundation by seiche, tsunami, or mudflow. No mitigation is required.	No impact.
Section 4.9 - Land Use and Planning			
Would the project have the potential to physically divide an established community?	Less than significant.	The proposed project would divide an exiting industrial/commercial area; however, the land uses and structures are non-residential and non-dependent on one another. The proposed project would not block or impede existing roadway linkages in the project area. No mitigation is required.	Less than significant.
Would the project have the potential to conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan, local coastal program, or	No impact.	The proposed project is consistent with all applicable goals and policies of the General Plan. No mitigation is required.	No impact.

Environmental Impact	Level of Significance Before Mitigation	Mitigation Findings	Level of Significance After Mitigation
zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?			
Would the project have the potential to conflict with an applicable habitat conservation plan or natural communities conservation plan?	Less than significant.	El Dorado County is in the process of completing an Integrated Natural Resources Management Plan (INRMP), of which the Oak Woodland Management Plan will be a part. The INRMP is not yet approved. Mitigation Measure 4.4-5 would ensure compliance with the established Oak Woodland Management Plan. No additional mitigation is required.	Less than significant.
Section 4.10 - Noise			
Would the project have the potential to result in the exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Potentially significant.	<p>MM 4.10-1a. Noise-reducing pavement shall be installed at SR-49/Diamond Road between the north end of the Bradley Drive intersection and the south end of the future Parkway intersection. If noise-reducing pavement is not installed, alternative noise reduction methods shall be agreed upon by the El Dorado County Department of Transportation and Caltrans and implemented in such a way to offer the same or greater noise reduction levels as the noise-reducing pavement.</p> <p>MM 4.10-1b. The County shall require that construction contractors comply with all applicable local regulations regarding noise suppression and attenuation and shall require that engine-driven equipment be fitted with mufflers according to manufacturers' specifications. The following requirements shall be included in the construction specifications:</p> <ul style="list-style-type: none"> a) Limit construction activities to the hours of 7:00 a.m. to 7:00 p.m. on weekdays and the hours of 8:00 a.m. to 5:00 p.m. on weekends and federally recognized holidays except as required to alleviate traffic congestion or safety hazards; b) Locate fixed construction equipment such as compressors and generators at distances no less than 250 feet from sensitive receptors (including occupied residential property boundaries); c) Shroud or shield impact tools, and muffle or shield intake and exhaust ports on power construction equipment; and 	Less than significant.

Environmental Impact	Level of Significance Before Mitigation	Mitigation Findings	Level of Significance After Mitigation
		d) Construction equipment using internal combustion engines shall be in proper tune.	
Would the project have the potential to result in the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	Less than significant.	Construction activities associated with the proposed project, such as operation of large pieces of equipment (i.e., heavy trucks), may result in the periodic temporary generation of groundborne vibration. Given the nature of any potential groundborne vibration and given that any impacts would be temporary and periodic. No mitigation is required.	Less than significant.
Would the project have the potential to result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	Potentially significant.	Implementation of Mitigation Measure 4.10-1a, above.	Less than significant.
Would the project have the potential to result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	Potentially significant.	Implementation of Mitigation Measure 4.10-1b, above.	Less than significant.
For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project have the potential to expose people residing or working in the project area to excessive noise levels?	No impact.	The project site is not located within an airport land use plan or within two miles of a public airport. No mitigation is required.	No impact.
For a project within the vicinity of a private airstrip, would the project have the potential to expose people residing or working in the project area to excessive noise levels?	No impact.	There are no private airstrips in the project vicinity. No mitigation is required.	No impact.

Environmental Impact	Level of Significance Before Mitigation	Mitigation Findings	Level of Significance After Mitigation
Section 4.11 - Public Services			
Would the project have the potential to adversely impact fire protection services?	Less than significant.	Implementation of a traffic management plan would ensure impacts to emergency services would not occur. Furthermore, DOT or its construction contractors will conduct early coordination with emergency service providers to ensure minimal disruption to service during construction. Upon completion, the proposed project will improve emergency vehicle access and connectivity. No mitigation is required.	Less than significant.
Would the project have the potential to adversely impact police protection services?	Less than significant.	Implementation of a traffic management plan would ensure impacts to emergency services would not occur. Furthermore, DOT or its construction contractors will conduct early coordination with emergency service providers to ensure minimal disruption to service during construction. Upon completion, the proposed project will improve emergency vehicle access and connectivity. No mitigation is required.	Less than significant.
Would the project have the potential to adversely impact school services?	Less than significant.	Temporary and less than significant delays to school-bus travel may occur during project construction. An increase in demand for schools would not occur. No mitigation is required.	Less than significant.
Would the project have the potential to adversely impact park facilities?	No impact.	The proposed project would not result in an increase in demand for parks and recreation facilities because it would not result in an increase in population. No mitigation is required.	No impact.
Would the project have the potential to adversely impact public facilities?	No impact.	The proposed project would not result in increased demand for, or impacts on, other public facilities such as library services. No mitigation is required.	No impact.
Section 4.12 - Traffic and Transportation			
Would the project have the potential to result in an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial	Less than significant.	The proposed project does not result in a LOS deficiency at any of the studied intersections. The proposed project does not cause any study roadway segments that operate at LOS E or better without the project to operate at LOS F, or worsen any roadway operating at	Less than significant.

Environmental Impact	Level of Significance Before Mitigation	Mitigation Findings	Level of Significance After Mitigation
increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?		LOS F without the proposed project. In addition, the proposed project improves operations on at a number of intersections and roadway segments. No mitigation is required.	
Would the project have the potential to exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	Less than significant.	The proposed project does not result in a LOS deficiency at any of the studied intersections. The proposed project does not cause any study roadway segments that operate at LOS E or better without the project to operate at LOS F, or worsen any roadway operating at LOS F without the proposed project. In addition, the proposed project improves operations on at a number of intersections and roadway segments. No mitigation is required.	Less than significant.
Would the project have the potential to contribute unacceptable queue lengths?	Less than significant.	Intersection design that has been incorporated into the proposed project would ensure appropriate queuing lengths are provided. No mitigation is required.	Less than significant.
Would construction activities associated with the project adversely affect circulation and parking on nearby roadways?	Less than significant.	Implementation of DOT's traffic management plan, would minimize effects to surrounding roadways and ensure impacts resulting from construction traffic, staging and parking. No mitigation is required.	Less than significant.
Would the project have the potential to change air traffic patterns?	No impact.	This type of project proposed and its distance from any airport precludes the possibility of changes to air traffic patterns. No mitigation is required.	No impact.
Would the project have the potential to substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Less than significant.	Standard roadway safety design procedures and planned safety improvements are incorporated into the proposed project's design. No mitigation is required.	Less than significant.
Would the project have the potential to result in inadequate emergency access?	Less than significant.	The proposed project construction activities would be coordinated with local law enforcement and emergency service providers. As a result of this coordination, law enforcement and emergency service providers would be aware of project construction and the potential for any emergency vehicle movement or access delays within the	Less than significant.

Environmental Impact	Level of Significance Before Mitigation	Mitigation Findings	Level of Significance After Mitigation
		project area and measures to avoid such delays would be determined. Upon completion, the Diamond Springs Parkway would improve emergency access to the project area by creating a more direct route to surrounding land uses and reducing traffic congestion in downtown Diamond Springs. No mitigation is required.	
Would the project have the potential to conflict with adopted policies, plans or programs supporting alternative transportation (e.g. bus turnouts, bicycle racks)?	Less than significant.	The proposed project is consistent with the El Dorado County Bicycle Transportation Plan and would include bus turnouts. No mitigation is required.	Less than significant.
Would the project result in inadequate parking supply or loading facilities?	Less than significant.	A 30- to 40-space parking lot for EDMUT trail users would be constructed. No mitigation is required.	Less than significant.
Would the construction of recreational facilities have the potential to create an adverse physical effect on the environment?	Less than significant.	Construction of the EDMUT parking lot would be required to comply with applicable mitigations in this Draft EIR. Temporary detours for the EDMUT may be required and would be properly marked. No mitigation is required.	Less than significant.
Would the project increase the use of the El Dorado Multi-Use Trail such that substantial physical deterioration of the facility would occur or be accelerated?	Less than significant.	The EDMUT was recently constructed and designed for increased use. No mitigation is required.	Less than significant.
Section 4.13 - Utilities and Service Systems			
Would the project have the potential to exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board or wastewater treatment capacity?	Less than significant.	The proposed project does not include any residential, industrial, or commercial development and would not generate any wastewater. No mitigation is required.	Less than significant.

Environmental Impact	Level of Significance Before Mitigation	Mitigation Findings	Level of Significance After Mitigation
Would the project have the potential to require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	Less than significant.	The proposed project would not require the construction of new water or wastewater treatment facilities or expansion of existing facilities other than what is included in the EID Intertie Improvements and considered in this Draft EIR, which would be required to comply with applicable mitigation included in this Draft EIR. No additional mitigation is necessary.	Less than significant.
Would the project have the potential to require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	Less than significant.	Adequate stormwater conveyance facilities would be implemented as a part of the proposed project and would comply with all applicable mitigation measures in this Draft EIR. No additional mitigation is necessary.	Less than significant.
Would the project have the potential to require new or expanded entitlements to ensure sufficient water supplies available to serve the project?	Less than significant.	Construction of the proposed project would require water for dust control. Such water use would be minimal and temporary in nature. Upon completion, the proposed project would not require potable water services. No mitigation is required.	Less than significant.
Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	Less than significant.	Sufficient landfill capacity would be available at Lockwood Landfill to meet the demand during construction of the proposed project. Upon completion, no solid waste services would be required. No mitigation is required.	Less than significant.
Would the project comply with federal, state, and local statutes and regulations related to solid waste?	No impact.	No inconsistencies with relevant waste provisions are anticipated. No mitigation is required.	No impact.
Would the project have the potential to result in temporary disruption of electrical, cable, telephone, and water service?	Less than significant.	Those affected by temporary service disruptions as result of the proposed project would be notified by DOT, the utility company or its contractors approximately one week prior to the service interruption. No mitigation is required.	Less than significant.

Environmental Impact	Level of Significance Before Mitigation	Mitigation Findings	Level of Significance After Mitigation
<p>Would the project demonstrate the wise and efficient use of energy by such means as:</p> <ul style="list-style-type: none"> i) decreasing overall per capita energy consumptions? ii) decreasing reliance on natural gas and oil? iii) increasing reliance on renewable energy resources. 	No impact.	The proposed project would not increase the amount of traffic but would redirect existing traffic to ease congestion. Decreasing the amount of time automobiles spend idling would result in higher efficiency of gasoline use, thereby decreasing overall energy consumption. No mitigation is required.	No impact.
<p>Would the project have the potential to result in the inefficient, unnecessary, or wasteful consumption of energy?</p>	Less than significant.	The proposed project would require the use of diesel and gas in construction equipment during construction. Section 4.3, Air Quality, contains mitigation that would contribute to efficient equipment operation thereby reducing the chance of wasteful, inefficient or unnecessary consumption of diesel/gas.	Less than significant.
<p>Would the project have the potential to preempt future energy development or future energy conservation?</p>	Less than significant.	To ensure compliance with standards and assess potential utility facility impacts, the DOT would coordinate with appropriate utility service providers during development planning and prior to construction activities. As such, the proposed project would not preempt future energy infrastructure development or energy conservation. No mitigation is required.	Less than significant.

SECTION 2: INTRODUCTION

2.1 - Overview, Purpose, and Authority of the EIR

This Draft Environmental Impact Report (Draft EIR) has been prepared to evaluate the potential environmental impacts associated with the implementation of the proposed Diamond Springs Parkway Project (State Clearinghouse No. 2007122033) in conformance with the California Environmental Quality Act (CEQA) (California Public Resources Code, Section 21000, et seq.), the CEQA Guidelines (California Code of Regulations, Title 14, Section 15000, et seq.), and the County of El Dorado's rules and regulations. This Draft EIR is intended to serve as an informational document for the public agency decision makers and the public regarding the Diamond Springs Parkway (Parkway) and associated improvements (considered together as the proposed project). The Parkway and each associated improvement are discussed in Section 3, Project Description. Considerable effort has been expended to present to the readers a clear description of the environmental analysis conducted for the proposed project, taking into account a complex project history as well as the framework of applicable regulations.

2.1.1 - Overview

The El Dorado County Department of Transportation (DOT) proposes to improve traffic circulation along the Pleasant Valley Road and Missouri Flat Road Corridors, in the vicinity of Diamond Springs, California, by constructing the Diamond Springs Parkway (Parkway), which would connect Missouri Flat Road with State Route 49 (SR-49)/Diamond Road. The concept of a connector has been planned for and anticipated for over 15 years. The connector concept was introduced to the public at an informational meeting on September 19, 1996. Since then, the need for a connector has been included in the County's Capital Improvement Plan (CIP) and, at that time, was deemed necessary to mitigate both current and future traffic impacts in the Diamond Springs area.

Almost 15 years later, roadways in the Diamond Springs area are experiencing high levels of congestion. The proposed transportation project aims to improve traffic circulation along the Pleasant Valley Road and Missouri Flat Road corridors by providing an additional roadway connection (the Parkway) and completing associated roadway improvements. Concurrent with the proposed road construction and improvements, El Dorado Irrigation District (EID) proposes to install new and replace existing waterlines beneath the proposed Parkway and existing SR-49/Diamond Road right-of-ways as the EID Intertie Improvement project. Section 3, Project Description, provides a complete description of the Parkway, associated improvements, and EID Intertie Improvement project.

2.1.2 - Purpose and Authority

This Draft EIR provides a project-level analysis of the environmental effects of the proposed project and all its associated components. Environmental impacts associated with implementation of the proposed project are analyzed in the EIR to the degree of specificity appropriate, in accordance with

Introduction

Sections 15146 and 15180 of the CEQA Guidelines. This document addresses the potentially significant adverse environmental impacts that may be associated with the planning, construction, or operation of the project. It also identifies appropriate and feasible mitigation measures and alternatives that may be adopted to significantly reduce or avoid these impacts.

2.1.3 - Lead Agency Determination

This Draft EIR has been prepared in accordance with and in fulfillment of CEQA requirements, which require that all state and local governmental agencies consider the environmental consequences of projects over which they have discretionary authority. In that sense, approval of the Parkway constitutes a “project” under CEQA. The El Dorado County Department of Transportation (DOT) is the lead agency for the project. CEQA Guidelines Section 15367 defines the lead agency as “. . . the public agency, which has the principal responsibility for carrying out or approving a project.” Other public agencies may use this Draft EIR in the decision-making or permit process and consider the information in this Draft EIR along with other information that may be presented during the CEQA process.

The El Dorado Irrigation District (EID) has the role of a responsible agency for the purpose of this project. CEQA Guidelines Section 15381 defines a responsible agency as “a public agency which proposes to carry out or approve a project, for which a lead agency is preparing or has prepared an EIR or Negative Declaration. For the purposes of CEQA, the term “responsible agency” includes all public agencies other than the lead agency which have discretionary approval power over the project.” As a responsible agency, EID has coordinated with DOT on the preparation and content of this CEQA document and will use this EIR as the basis for making a secondary project approval of the proposed EID Intertie Improvements, which are discussed in more detail in Section 3, Project Description.

This Draft EIR was prepared by Michael Brandman Associates (MBA), a consultant under contract to the DOT. Prior to public review, it was extensively reviewed and evaluated by members of the MBA team, EID, and DOT staff. This Draft EIR reflects the independent judgment and analysis of the DOT, as required by CEQA. Lists of organizations and persons consulted and the report preparation personnel are provided in Section 7, List of Preparers, of this Draft EIR.

2.2 - Scope of the EIR

This Draft EIR addresses the potential environmental effects of the proposed project. The scope of this Draft EIR includes the areas of controversy identified by the Notice of Preparation (NOP) issued by the DOT, comments obtained during a public scoping meeting, as well as issues raised by agencies and the public in response to the NOP.

For over 15 years, El Dorado County has planned for and included the Diamond Springs Parkway as a future roadway that will provide additional circulation, reduce congestion, and improve traffic

safety on State Route 49 (SR-49) through historic Diamond Springs. While the exact location and alignment of the proposed Parkway has gone through several iterations, its intent and purpose as transportation improvement project has always remained the same, as a critical link for moving traffic between Missouri Flat Road and SR-49/Diamond Road and reduction of congestion on Pleasant Valley Road (SR-49) through the historic community of Diamond Springs.

A Technical Memorandum, prepared by DOT on April 9, 1997, discusses six alternatives studied as potential alignments for the proposed roadway, then referred to as the Missouri Flat and Pleasant Valley Connector or Interconnector. On May 29, 1997, DOT submitted the Technical Memorandum and a letter to the Board of Supervisors recommending implementation of Alternative 3. Subsequently, the El Dorado County Board of Supervisors (Board) selected Alternative 3 as the preferred alternative.

In 1998, EDAW, under contract to DOT, prepared the Missouri Flat Area Master Circulation and Funding Plan (MC&FP) Program EIR (EDAW 1998). The MC&FP was prepared and adopted by the County in order to provide a comprehensive and coordinated approach to address both existing traffic congestion in the Missouri Flat Area and the issue of providing capacity for future development under the General Plan in the Missouri Flat Area. Per Section 17.19.030, Findings of Board of Supervisors, of the County Zoning Ordinance, “[a]ttempting to address these issues on a project-by-project basis as development occurs would be uneconomic and may be infeasible.” The MC&FP has the following objectives: alleviate existing traffic congestion, create adequate capacity to meet General Plan Level of Service policy, establish a vital commercial center in El Dorado County, improve the County’s fiscal well being, establish the framework for revenues collection that will fund specific improvements identified in the Missouri Flat Area, and widen portions of Missouri Flat Road to six lanes. The intent of the MC&FP was that persons or entities seeking to develop non-residential projects in the Missouri Flat Area would derive substantial benefits from the preparation and adoption of the MC&FP in that:

1. Environmental documents prepared in connection with the MC&FP, including the Program EIR, substantially reduce the scope and cost of environmental review otherwise required in connection with subsequent development projects.
2. Preparation of the MC&FP substantially reduces the scope and cost of planning review otherwise required in connection with subsequent development projects.
3. The MC&FP provides a mechanism for addressing both existing traffic congestion and future capacity needs in a comprehensive manner not feasible in the context of individual project review.
4. The MC&FP provides a mechanism to mitigate certain traffic impacts of future non-residential development in a manner not feasible in the context of individual project review.

Introduction

5. The MC&FP may reduce or eliminate the need to consider implementation of discretionary review procedures for development to ensure that potential traffic impacts of development otherwise requiring only ministerial approvals are addressed.
6. The MC&FP will enable necessary road improvements and thereby will facilitate future economic development in El Dorado County and the Missouri Flat Area.

On December 15, 1998, the Board approved Phase I of the MC&FP, including the results of an analysis of the transportation infrastructure needs, and financial resources arising from the planned development (EPS 1998, 2000).

Pursuant to the intent of the MC&FP, the Diamond Springs Parkway, then called the Missouri Flat Road and Pleasant Valley Road Connector (Connector or Interconnector), was programmatically analyzed within the MC&FP Program EIR. The analysis focused on the potential impacts of Alternative 3, as the preferred route selected by the Board of Supervisors. However, the MC&FP Program EIR discussed the remaining five potential alignments (from DOT's Technical Memorandum) as previously considered and rejected alternatives (Exhibit 5-1, MC&FP Alternatives). The MC&FP Program EIR concluded that Alternative 4 was also viable, but would require realignment of SR-49; the potential cost and process for realignment made this alternative economically prohibitive. This conclusion was in concurrence with the Technical Memorandum's conclusions regarding Alternative 4.

On April 29, 2008, ten years after the MC&FP Program EIR, the Board amended its previous direction by directing that the DOT proceed with studies of Alternative 4 as the preferred alignment. (El Dorado County Board of Supervisors, Legislative File Number 08-0628, April 29, 2008). The Board made this determination after new studies indicated that Alternative 4 may not require significant realignment of SR-49 and would only require minor improvements to SR-49; Caltrans also indicated that the revised improvements to SR-49 would only require an encroachment permit through Caltrans's new Permit Engineering Evaluation Report (PEER) process. The Board determined that this updated information regarding Alternative 4 demonstrates that Alternative 4 has the potential to provide significant savings to the County in project costs and delivery time. The April 29, 2008, decision by the Board also renamed the roadway from the Missouri Flat Road and Pleasant Valley Road Connector to the Diamond Springs Parkway.

Alternative 4 is similar to Alternative 3; a map illustrating the difference in the alignment of Alternative 3 and 4 was included as part of the April 29, 2008 determination (Exhibit 3-6, MC&FP Study Area). However, Alternative 3 ended in a curved alignment that paralleled alignment to SR-49/Diamond Road to connect at the intersection of SR-49 and Fowler Lane, while Alternative 4 incorporates a "T" intersection with SR-49/Diamond Road and eliminates the need for the curved portion of the alignment paralleling SR-49/Diamond Road in Alternative 3 (Exhibit 5-1, MC&FP Alternatives). Therefore, the "T" intersection and minor improvements to SR-49 were not fully

evaluated in the MC&FP Program EIR. While the project analyzed in this Draft EIR, most closely resembles Alternative 4, some differences are notable including avoidance of the Sacramento-Placerville Transportation Corridor (now developed as the El Dorado Multi-Use Trail or EDMUT), and use of the existing SR-49/Diamond Road right-of-way between the proposed Parkway and the Pleasant Valley Road/Fowler Road intersection.

In addition to the fact that the proposed project was not fully evaluated in the MC&FP Program EIR, the MC&FP EIR is over 10 years old. As such, the site-specific information pertaining to some CEQA issue areas—most notably air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, noise, and traffic and circulation—require significant revisions because of new environmental regulations and/or the potential for changed environmental conditions. In addition, the MC&FP EIR was based on the previous El Dorado County General Plan (1996), and a new General Plan is now in place (El Dorado County 2004). Therefore, each of the three evaluation criteria set forth under CEQA Statutes 21166 are met, and the preparation of additional environmental documentation is required under CEQA.

This project-level EIR incorporates to the maximum extent feasible the information included in the MC&FP EIR but also relies upon the results of new technical studies, where necessary, to ensure that the project is fully and adequately evaluated for purposes of CEQA. In preparing the EIR for the project, DOT reviewed the existing certified Final EIR (State Clearinghouse No. 97092074) for the MC&FP to determine whether any of the analysis therein remained accurate and up to date. Accordingly, each section of this EIR lists the mitigation measures from the MC&FP EIR, to which DOT is required to adhere, and includes a discussion of the adequacy or inadequacy of these measures. Where these mitigation measures have been determined to be out of date, inadequate, or no longer feasible for DOT to implement, this EIR proposes new mitigation measures as necessary to avoid, minimize, or reduce the significance of potential impacts. The Mitigation Monitoring and Reporting Plan that will be prepared for the project will include a comprehensive list of all of the mitigation measures to which DOT must adhere.

2.3 - Definitions and EIR Organization

2.3.1 - Definitions

This Draft EIR contains terms referring to the proposed project, components of the proposed project, and the proposed project as it was previously considered by the MC&FP EIR. The following is a list of terms and definitions intended to clarify the scope of each item.

Table 2-1: Definitions

	Component	Definition
Proposed project and associated improvement definitions	Proposed project (project)	All components of the proposed project including the Diamond Springs Parkway, SR-49 improvements, EID Intertie Improvements, utility improvements, and other roadway improvements
	Diamond Springs Parkway (Parkway)	The newly proposed road between Missouri Flat Road and Diamond Road (SR-49) north of the community of Diamond Springs
	SR-49 Improvements	Improvements to SR-49 between Pleasant Valley Road and Bradley Drive including new frontage road between Black Rice Road and Pleasant Valley Road
	El Dorado Irrigation District (EID) Intertie Improvements	Improvements and new construction of waterlines beneath the Parkway and SR-49 included as a part of the proposed project.
	Potential Underground Utility District (UUD)	Replacement or potential undergrounding of existing overhead utility lines near Missouri Flat Road and SR-49
Other Definitions	El Dorado Multi-Use Trail (EDMUT)	A recently constructed Class I bike path, north of the proposed Parkway
	Interconnector (Connector)	The predecessor to the proposed Diamond Springs Parkway considered programmatically in the MC&FP EIR
Note: See Section 3.4.2 for a complete description of all project components. Source: MBA, 2010.		

2.3.2 - Organization

CEQA requires that an EIR contain, at a minimum, certain specific elements. These elements are contained in this Draft EIR and include:

- **Section 1: Executive Summary.** This section includes a summary of the proposed project and alternatives to be addressed in the Draft EIR. A brief description of the areas of controversy and issues to be resolved and a table that summarizes the impacts, mitigation measures, and level of significance after mitigation are also included in this section.
- **Section 2: Introduction.** This section provides an introduction and overview describing the purpose of this Draft EIR, its scope and components, and its review and certification process.
- **Section 3: Project Description.** This section includes a detailed description of the proposed project, including its location, site, and project characteristics. A discussion of the project objectives, intended uses of the Draft EIR, responsible agencies, and approvals that are needed for the proposed project are also provided.
- **Section 4.1: Environmental Impact Analysis.** This section analyzes the environmental impacts of the proposed project. Impacts are organized into major topic areas. Each topic area

includes a description of the environmental setting, methodology, significance criteria, impacts, mitigation measures from the MC&FP EIR, discussion of the adequacy of previously applied mitigation, new mitigation measures where applicable, and significance after mitigation. Additionally, this section contains analysis of topical sections for which no impacts would result from the proposed project. The specific environmental topics that are addressed within Section 4 are as follows:

- **Section 4.2 - Aesthetics, Light, and Glare:** Addresses the visual impacts of development intensification and the overall increase in illumination produced by the project.
- **Section 4.3 - Air Quality:** Addresses the local and regional air quality impacts associated with project implementation as well as consistency with the El Dorado Air Quality Management District's (EDAQMD's) 1994 Sacramento Regional Clean Air Plan.
- **Section 4.4 - Biological Resources:** Addresses the project's impacts on habitat, vegetation, and wildlife; the potential degradation or elimination of important habitat; and impacts on listed, proposed, and candidate threatened and endangered species.
- **Section 4.5 - Cultural Resources:** Addresses the impacts of project development on known historical resources and potential archaeological and paleontological resources.
- **Section 4.6 - Geology, Soils, and Seismicity:** Addresses the potential impacts the project may have on soils, and assesses the effects of project development in relation to geologic and seismic conditions.
- **Section 4.7 - Hazards and Hazardous Materials:** Addresses the likelihood of the presence of hazards and hazardous materials or conditions on the project site and in the project area that may have the potential to impact human health.
- **Section 4.8 - Hydrology and Water Quality:** Addresses the impacts of the project on local hydrological conditions, including drainage areas, and changes in the flow rates.
- **Section 4.9 - Land Use and Planning:** Addresses the related land use impacts associated with implementation of the project, including project compatibility with surrounding land uses, consistency with the El Dorado County General Plan, the El Dorado County Zoning Ordinance, and the Missouri Flat Design Guidelines.
- **Section 4.10 - Noise:** Addresses the noise impacts during construction and at project buildout from mobile and stationary sources. The section also addresses the impact of noise generation on neighboring uses.
- **Section 4.11 - Public Services:** Addresses the impacts upon service providers, including fire, police, water supply, wastewater, and solid waste providers.
- **Section 4.12 - Traffic and Transportation:** Addresses the impacts on the local and regional roadway system, public transportation, bicycle, and pedestrian access.
- **Section 4.13 - Utilities and Service Systems:** Addresses the impacts upon service providers, including water, sewer, solid waste, electricity, cable, and telephone.

- **Section 5: Alternatives to the Proposed Project.** This section compares the impacts of the proposed project with the No Project Alternative, Alternative A (previously considered under the MC&FP as the preferred alignment), Alternative B (previously considered in the MC&PF EIR as Alternative 4) and Alternative C (Lower Vertical Profile Alternative) and describes the alternatives considered but rejected from analysis, with the reasons for rejection. An environmentally superior alternative is identified.
- **Section 6: Other CEQA Statutory Considerations.** This section provides a summary of significant environmental impacts, including unavoidable and growth-inducing impacts. This section discusses the cumulative impacts associated with the proposed project, including the impacts of past, present, and probable future projects.
- **Section 7: List of Preparers.** This section lists the authors who assisted in the preparation of the Draft EIR by name and company/agency affiliation.
- **Section 8: Persons and Organizations Consulted.** This section lists persons and organizations consulted, by name and company/agency affiliation, in the preparation of the Draft EIR.
- **Section 9: References.** This section contains a full list of references that were used in the preparation of this Draft EIR.
- **Appendices:** This section includes all notices and other procedural documents pertinent to the Draft EIR, as well as all technical material prepared to support the analysis.

2.4 - Documents Incorporated by Reference

As permitted by Section 15150 of the CEQA Guidelines, this Draft EIR has referenced several technical studies, analyses, and previously certified environmental documentation. Information from the documents, which have been incorporated by reference, has been briefly summarized in the appropriate section(s). The relationship between the incorporated part of the referenced document and the Draft EIR has also been described. The documents and other sources that have been used in the preparation of this Draft EIR include, but are not limited to:

- El Dorado County General Plan
- El Dorado County General Plan Environmental Impact Report (State Clearinghouse No. 2001082030)
- El Dorado County Ordinance Code
- MC&FP Environmental Impact Report (State Clearinghouse No. 97092074)
- Air Quality Technical Reports
- Biological Resources Assessments
- Delineation of Jurisdictional Waters and Wetlands
- California Red-Legged Frog Protocol Survey Report

- Section 106 Cultural Resources Assessment and Memorandum
- Preliminary Geotechnical Engineering Study
- Phase I Environmental Site Assessment
- Preliminary Drainage Study
- Environmental Noise Assessment
- Public Services Response Letters
- Traffic Impact Analysis

These documents are specifically identified in Section 9, References of this Draft EIR. In accordance with Section 15150(b) of the CEQA Guidelines, these referenced documents and other sources used in the preparation of the Draft EIR are available for review at the DOT offices, located at 2850 Fairlane Court, Placerville, CA 95667.

2.5 - Review of the Draft EIR

Upon completion of the Draft EIR, DOT filed a Notice of Completion (NOC) with the State Office of Planning and Research to begin the public review period (Public Resources Code, Section 21161). Concurrent with the NOC, this Draft EIR was distributed to responsible and trustee agencies, other affected agencies, surrounding cities, and interested parties, as well as all parties requesting a copy of the Draft EIR in accordance with Public Resources Code 21092(b)(3). During the public review period, the Draft EIR, including the technical appendices, is available for review at the DOT offices, located at 2850 Fairlane Court, Placerville, California, 95667 or at the El Dorado County Library, located at 345 Fair Lane Court, Placerville, California, 95667. Agencies, organizations, and interested parties not previously contacted or who did not respond to the NOP currently have the opportunity to comment on the Draft EIR during the public review period on the Draft EIR.

Written comments on this Draft EIR should be addressed to:

County of El Dorado Department of Transportation
2850 Fairlane Court
Placerville, CA 95667
530.621.5900
Attn: Janet Postelwait, Principal Planner
E-mail: janet.postlewait@edcgov.us

Upon completion of the public review period, written responses to all significant environmental issues raised will be prepared and made available for review at least 10 days prior to the public hearing before the Board of Supervisors on the project, at which the certification of the Final EIR will be considered. Comments received and the responses to comments will be included as part of the record for consideration by decision makers for the project.

SECTION 3: PROJECT DESCRIPTION

3.1 - Introduction

The El Dorado County Department of Transportation (DOT) proposes to improve traffic circulation in the southwest portion of El Dorado County, specifically along the Pleasant Valley Road and Missouri Flat Road corridors, in the vicinity of Diamond Springs, California, by constructing the Diamond Springs Parkway (Parkway) and associated improvements (considered together as the project). The Parkway would connect Missouri Flat Road with State Route 49 (SR-49)/Diamond Road. The County General Plan Circulation Map (El Dorado County 2004) identifies this project as a planned roadway, indicating the need for an east-west connector in the MC&FP Area. Additionally, the need for an east-west connector has been identified by DOT's 2009 Capital Improvement Plan (CIP), which includes the County's Traffic Impact Mitigation (TIM) Fee Program. The TIM has been developed in response to the funding needs for capital improvements such as the Parkway. The project would also implement updates to SR-49/Diamond Road under the Caltrans Transportation Concept Report (TCR) (Caltrans 2000), which includes the 20-year improvement concept for SR-49. The purpose of the proposed project is to reduce current traffic congestion in the Diamond Springs area and implement a planned infrastructure improvement. Chapter 3 of this EIR describes the purpose, objectives, and characteristics of the proposed project and identifies government actions that would be required prior to constructing the project.

As discussed in detail under Section 2, Introduction, the proposed Parkway was programmatically evaluated in the Missouri Flat Corridor and Funding Plan (MC&FP) EIR (EDAW 1998), which referred to the Parkway as the "Missouri Flat Road/Pleasant Valley Connector (Interconnector)." Pursuant to Section 21166 of the CEQA Statutes, DOT has prepared this project-level Environmental Impact Report (EIR) to analyze the potential environmental effects that may result from the planning, construction, and operation of the proposed project, including the acquisition of new rights-of-way (ROW), and all related improvements (see Section 3.4.3) in accordance with the requirements of the California Environmental Quality Act (CEQA).

3.2 - Project Location

The project is located within unincorporated El Dorado County, California, south of the Missouri Flat Road/U.S. Route 50 (US-50) Interchange, west of the City of Placerville, and north of the town of Diamond Springs (Exhibit 3-1). As illustrated in Exhibit 3-2, the principle roadway network in the vicinity of the project includes Missouri Flat Road, Pleasant Valley Road (SR-49), Diamond Road (SR-49), Lime Kiln Road, and China Garden Road.

The project area roughly corresponds with the southeastern corner of Section 24 and the northeastern corner of Section 25, Township 10 North, Range 10 East; the southwestern portion of Section 19,

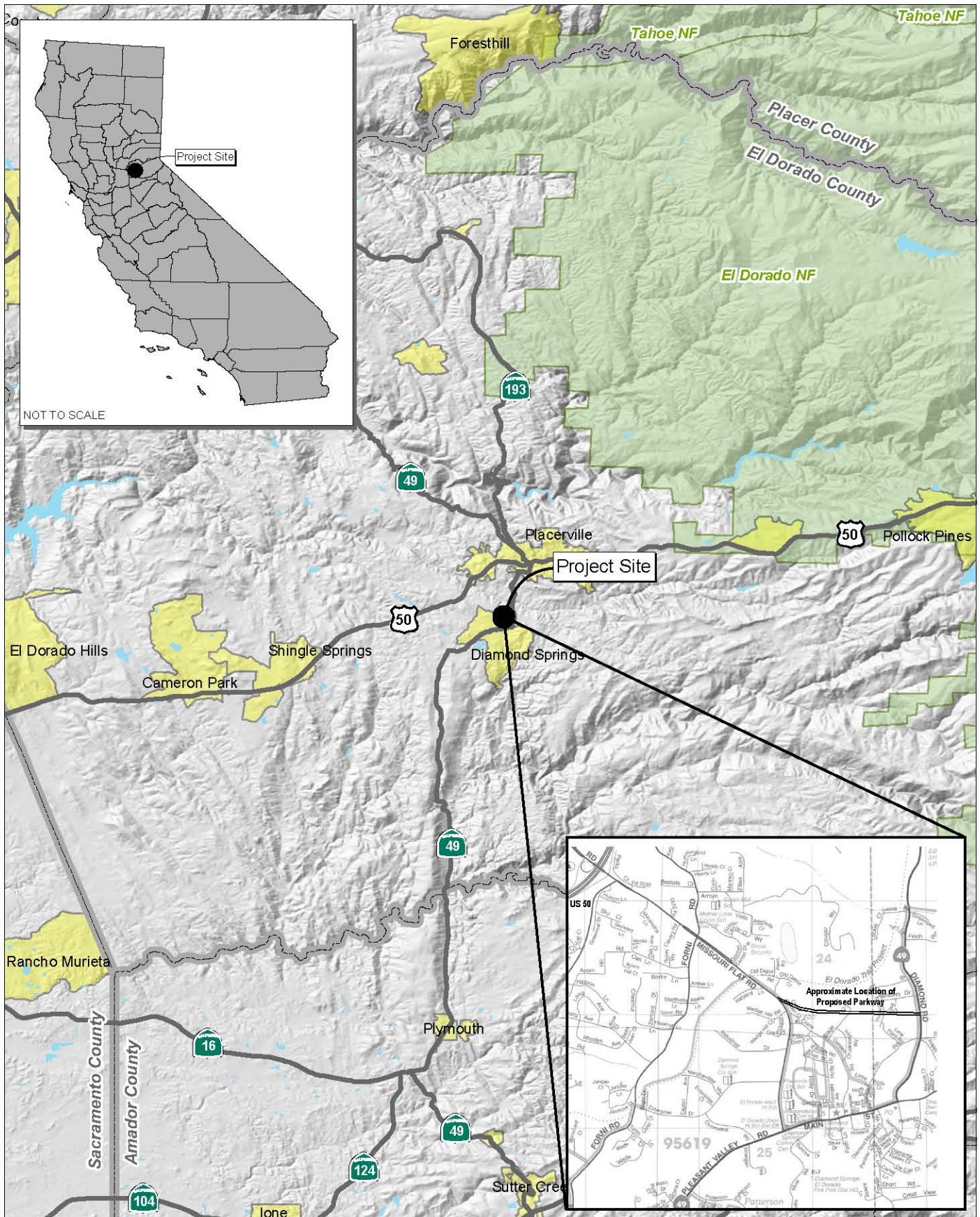
Project Description

Township 10 North, Range 11 East; and the northwestern corner of Section 30, Township 10 North, Range 11 East (Mount Diablo Baseline and Principal Meridian) on the U.S. Geological Survey (USGS) Placerville, California 7.5-minute quadrangle map (Exhibit 3-3).

Land use within the project area is controlled by the El Dorado County General Plan and is designated as industrial and commercial according to the County's General Plan Land Use Map. Actual land uses adjacent to the project corridor are more variable and include pockets of residential development, various manufacturing and materials storage areas, and vacant industrial lots (Exhibit 3-2).

The project footprint, where land disturbance will occur, (Exhibit 3-2) crosses portions of 83 Assessor's Parcel Numbers (APN). Exhibit 3-4 illustrates the specific APNs crossed by the project footprint and the relative location of the alignment in relation to the subject parcels. The specific APNs include:

- 051-250-04, -06, -07, -08 -11, -12, -13, -18, -19, -20, -21, -22, -23, -30, -31, -33, -37, -39, -42, -46, -48, -51, -54, and -55
- 051-461-02, -04, -05, -10, -11, -12, -37, -46, and -54
- 051-550-47
- 054-341-04 and -06
- 054-342-15, -20, -21, -22, -23, -24, -25, -26, and -27
- 054-351-02, -33, and -35
- 054-391-26
- 054-411-13, -46, and -47
- 054-422-01
- 097-010-01
- 327-010-02, -03, -04, -05, and -06
- 327-240-19 and -22
- 327-260-05, -06, -25, -28, and -39
- 327-270-02, -03, -04, -08, -18, -26, -27, -43, -46, -48, -49, and -50
- 327-300-08
- 990-610-28
- 990-630-66
- 990-645-79
- 990-659-49



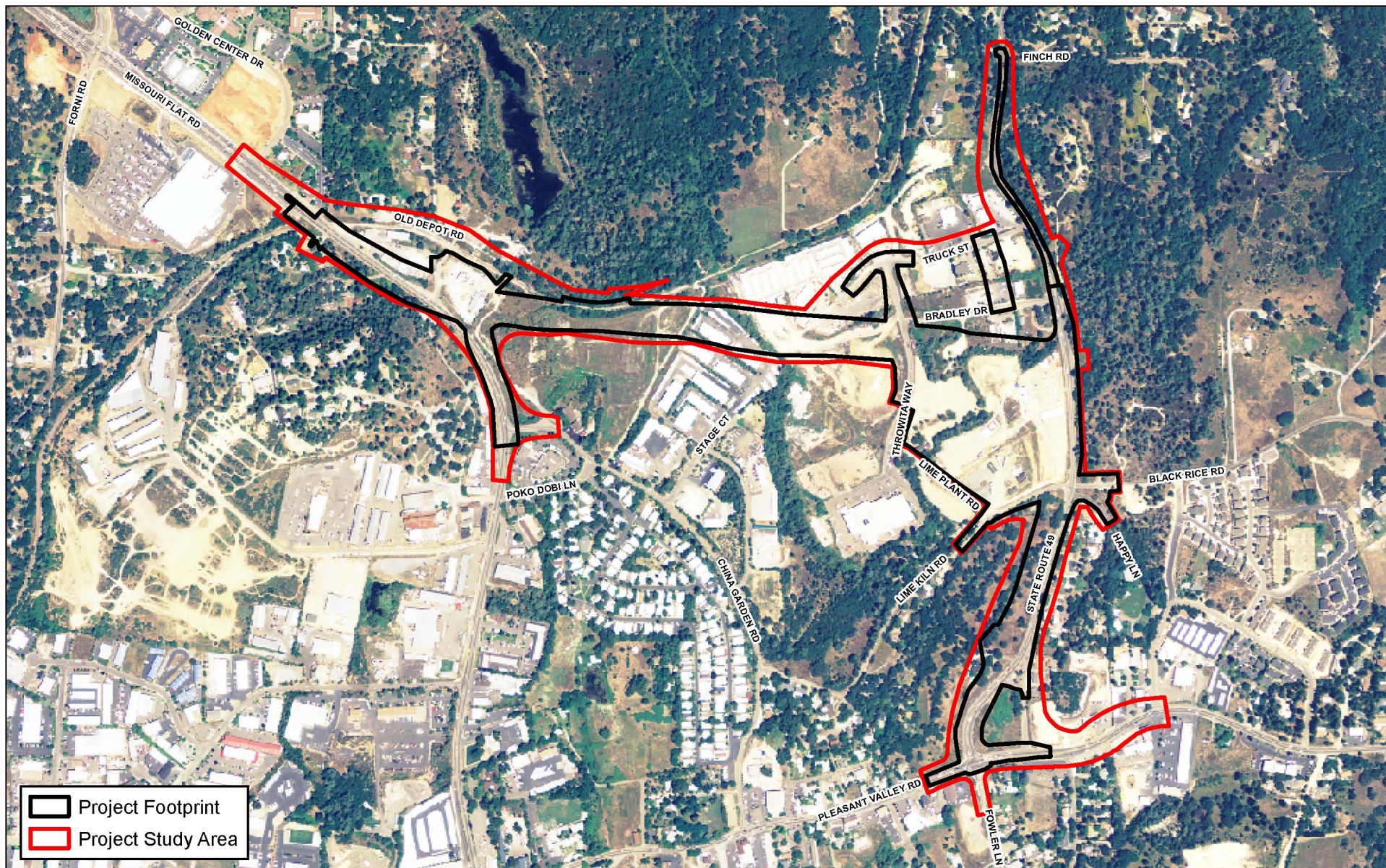
Michael Brandman Associates

11730025 • 09/2008 | 3-1_Regional.mxd

Exhibit 3-1 Regional Location Map

COUNTY OF EL DORADO DEPARTMENT OF TRANSPORTATION
DIAMOND SPRINGS PARKWAY PROJECT
ENVIRONMENTAL IMPACT REPORT

11-0448.C.65



Source: El Dorado County, 2007; CTA Engineers, 2007; MBA, 2007



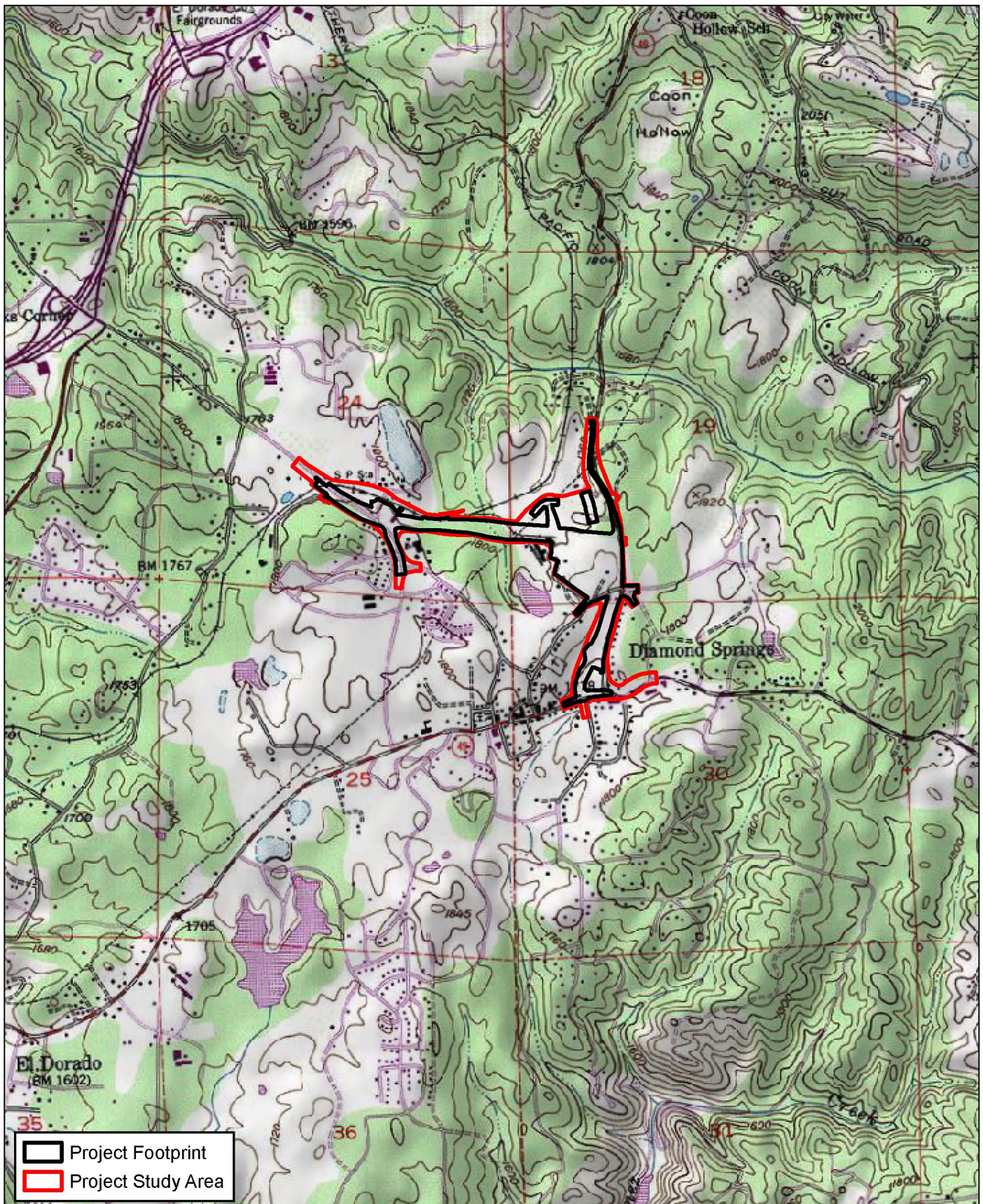
11730025 • 11/2009 | 3-2_project_aerial.mxd



Exhibit 3-2 Project Study Area - Aerial Overview

COUNTY OF EL DORADO DEPARTMENT OF TRANSPORTATION
DIAMOND SPRINGS PARKWAY PROJECT
ENVIRONMENTAL IMPACT REPORT

11-0448.C.67



Source: TOPO! USGS Placerville (1973) 7.5' DRG.

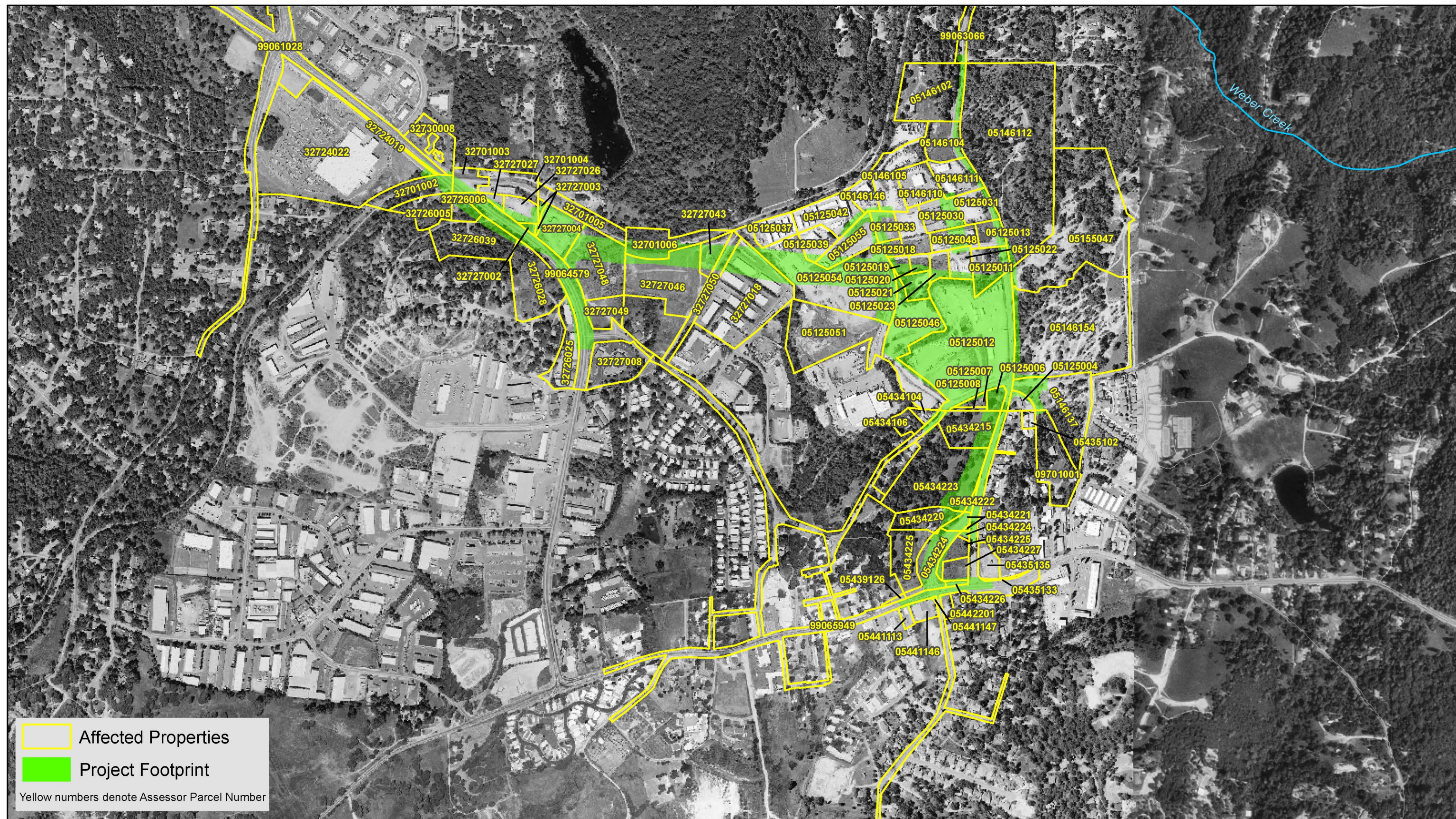


11730025 • 11/2009 | 1_Topographic_Map.mxd

Exhibit 3-3 Project Study Area USGS Topographic Map

COUNTY OF EL DORADO DEPARTMENT OF TRANSPORTATION
DIAMOND SPRINGS PARKWAY PROJECT
ENVIRONMENTAL IMPACT REPORT

11-0448.C.69



Source: El Dorado County, 2007; CTA Engineers, 2007; MBA, 2008



11730025 • 12/2009 | 3-4_Affected_Properties Updated.mxd



Exhibit 3-4 Affected Properties

COUNTY OF EL DORADO DEPARTMENT OF TRANSPORTATION
DIAMOND SPRINGS PARKWAY PROJECT
ENVIRONMENTAL IMPACT REPORT

11-0448.C.71

3.3 - Purpose, Need, and Objectives of the Proposed Project

The purpose of the project is to provide parallel capacity for SR-49 between Missouri Flat Road and Diamond Road (SR-49) and alternate access to US-50 via Missouri Flat Road to relieve traffic congestion and provide an acceptable level of service through the historic town of Diamond Springs to meet the General Plan Policy TC-1. The roadway is included in the General Plan as a regional transportation circulation need and is identified as a necessary infrastructure component of the MC&FP. With its inclusion in the MC&FP, which creates the nexus between retail development and necessary infrastructure improvements, the project must also support commercial land use as envisioned in the MC&FP and meet the needs of adjacent land use as directed by the County's General Plan. The project is included in the County's Capital Improvement Program (CIP) and, as such, shall be designed to provide safe, efficient, multi-modal transportation to meet the travel needs of people and goods, while minimizing environmental impacts, in the most cost-efficient manner.

The existing Level of Service (LOS) deficiencies on US-50 at the Missouri Flat Road Interchange, Missouri Flat Road from its intersection with US-50 south to Pleasant Valley Road (SR-49), and Pleasant Valley Road (SR-49) in the vicinity of Diamond Springs, are caused by a combination of local and regional growth. Accordingly, the proposed project consists of a new roadway and associated roadway improvement to be implemented by the DOT that would reduce the existing LOS deficiencies. The project will provide a critical link between Missouri Flat Road and Diamond Road (SR-49), thereby relieving current traffic congestion conditions on Missouri Flat Road and Pleasant Valley Road (SR-49) in the Diamond Springs area. Development of the proposed roadway improvements would fulfill significant goals for El Dorado County by implementing a project that has long been included in the County CIP.

The intent of the project is captured in General Plan Policy 10.2.7.3 for the Missouri Flat Road Corridor Area: "the County shall commit to the comprehensive development of the needed road circulation plan for this area immediately following adoption of the General Plan. This plan shall also include the identification and development of a specific funding mechanism that overcomes existing deficiencies and accommodates future traffic demands to the year 2015."

The specific objectives for constructing the project include the following:

- Objective 1a.** Improve traffic safety and operations on portions of Pleasant Valley Road (SR-49) in the vicinity of Diamond Springs as provided in the County's 2004 General Plan (Policy 10.2.7.3) including:
- Provide parallel capacity for SR-49 between Missouri Flat Road and Diamond Road (SR-49) and alternate access to US-50 via Missouri Flat Road to relieve traffic congestion and provide an acceptable level of service through the historic town of Diamond Springs to meet the General Plan Policy TC-1.

Project Description

- Provide a safe, efficient, and convenient roadway that meets the travel needs of people and goods
- Improve safety by reducing residential driveway access to Diamond Road (SR-49) between Pleasant Valley Road (SR-49) and Black Rice Lane by provision of a frontage road.

Objective 1b. Implement the Parkway as included in the County's 2004 General Plan (Policy 10.2.7.3) and the County's CIP in the most cost effective manner.

Objective 1c. Improve roadway and intersection capacities along Missouri Flat Road, south of US-50, to support the anticipated commercial/retail square footage development identified and planned for in the 1998 MC&FP and the 2004 El Dorado General Plan

Objective 1d. Provide opportunities for improved bicycle, pedestrian and transit facilities consistent with the 2004 El Dorado County General Plan and coordinate the construction of the Parkway with the El Dorado Multi-Use Trail.

Objective 1e. Protect natural resources, including local wetlands, riparian features, and oak woodlands by aligning the project to avoid these features, to the extent feasible, by providing transportation services facilities that cause the least amount of environmental damage and yield environmental benefits wherever feasible.

3.4 - Project Characteristics

3.4.1 - Project Background

As discussed in detail in Section 2, Introduction, the Parkway was originally identified in the MC&FP as the Missouri Flat Road/Pleasant Valley Connector (Interconnector) and was evaluated programmatically in the MC&FP EIR (Exhibit 3-6, MC&FP Study Area). The MC&FP EIR included a discussion of the need for roadway projects within the MC&FP area, with the Parkway representing one of the necessary components of the proposed roadway system. Since the preparation of the MC&FP EIR, the Parkway alignment has been redesigned and relocated in response to the El Dorado Multi-Use Trail (EDMUT), to avoid natural resources (e.g., wetlands) and to utilize the existing SR-49/Diamond Road right-of-way. Further, the previously envisioned Connector project did not analyze the required improvements to SR-49/Diamond Road, which are necessary to mitigate project-related impacts to traffic circulation in the study area.

The placement and orientation of the proposed Parkway are linked to the decision-making processes described in Section 7.2, Alternatives Previously Considered and Rejected, of the MC&FP EIR, which summarizes the six alternatives that DOT had considered as a result of public meetings held on October 2, 1996 and April 10, 1997. The six alternatives included Alternative 1 – China Garden Road, Alternative 2 – Chuck Wagon Way, Alternative 3 – Railroad Corridor and SR-49 Parallel,

Alternative 4 – Railroad Corridor and SR-49 Alignment, Alternative 5 – Diamond Springs’ Main Street, and Alternative 6 - North of Railroad Corridor (Exhibit 5-1).

Based on “functional, technical, and financial considerations, coupled with community support, the El Dorado County Board of Supervisors selected Alternative 3 as the "preferred alignment” for the Connector, as documented in the MC& FP EIR (EDAW 1998).

On April 29, 2008, ten years after the MC&FP Program EIR, the Board amended its previous decision by directing the DOT to proceed with studies of Alternative 4 (Railroad Corridor and SR-49 Parallel) as the preferred alignment (El Dorado County Board of Supervisors, Legislative File Number 08-0628, April 29, 2008). Since that time, DOT has conducted further engineering evaluations on several variations of Alternative 4 and identified the proposed Parkway alignment as the solution to the County’s existing LOS deficiencies. The proposed Parkway is substantially similar to Alternative 4 from the MC&FP EIR; however, adjustments to the alignment have been made to minimize impact to the EDMUT, to avoid natural resources (e.g., wetlands) and to utilize the existing SR-49/Diamond Road right-of-way. Additional discussion of alternatives to the project is provided in Section 5.

The proposed project assumes that the nearby Materials Recovery Facility (MRF) would remain on-site. MRF traffic and access needs were taken into consideration when planning the proposed project; the project would accommodate MRF-related traffic throughout construction/staging.

3.4.2 - Project Overview

The Diamond Springs Parkway is identified in the County’s General Plan Circulation Element Table TC-1 and Circulation Map from Missouri Flat Road to SR-49 as a future four-lane, divided roadway, and it is included in the County’s 2009 CIP and TIM Fee Program as described above. The proposed Parkway would extend eastward from Missouri Flat Road near its intersection with the Sacramento-Placerville Transportation Corridor, north of China Garden Road, and would connect to Diamond Road (SR-49). Construction of the Parkway would also require improvements and/or realignment to the following roadways: China Garden Road, Throwita Way, Truck Street, Bradley Street, and Old Depot Road. Additionally, a new Truck Street/Bradley Drive Connector would be constructed west of Diamond Road (SR-49) to enhance circulation within the project area. Upon completion, the Parkway would alleviate congestion along Missouri Flat Road and Pleasant Valley Road (SR-49) in the vicinity of Diamond Springs, improving the circulation of both local and regional traffic.

The Parkway would provide fully signalized access at three new intersections with limited private property access. The Parkway would have a design speed of 50 miles per hour (mph), and the proposed lane configurations would reflect the ultimate roadway design contemplated in the County’s General Plan and CIP. The General Plan also includes SR-49, from the Parkway to Pleasant Valley Road, as an ultimate four-lane major highway. Under the proposed project, SR-49 would be

Project Description

improved to a major highway by providing standard shoulders and eliminating nearly all existing driveway encroachments. The improvements would be accomplished by creating a new frontage road along the existing roadway and widening the roadway to the west. A new median would be included to provide sufficient separation between the frontage road and SR-49. The SR-49 improvements would require minor improvements and/or realignment of Black Rice Road, Happy Lane, and Lime Kiln Road. The Parkway would be constructed according to American Association of State Highway and Transportation Officials (AASHTO) Policy on Geometric Design of Highway and Streets (2004); SR-49 would be improved in accordance with Caltrans's Highway Design Manual, 6th edition.

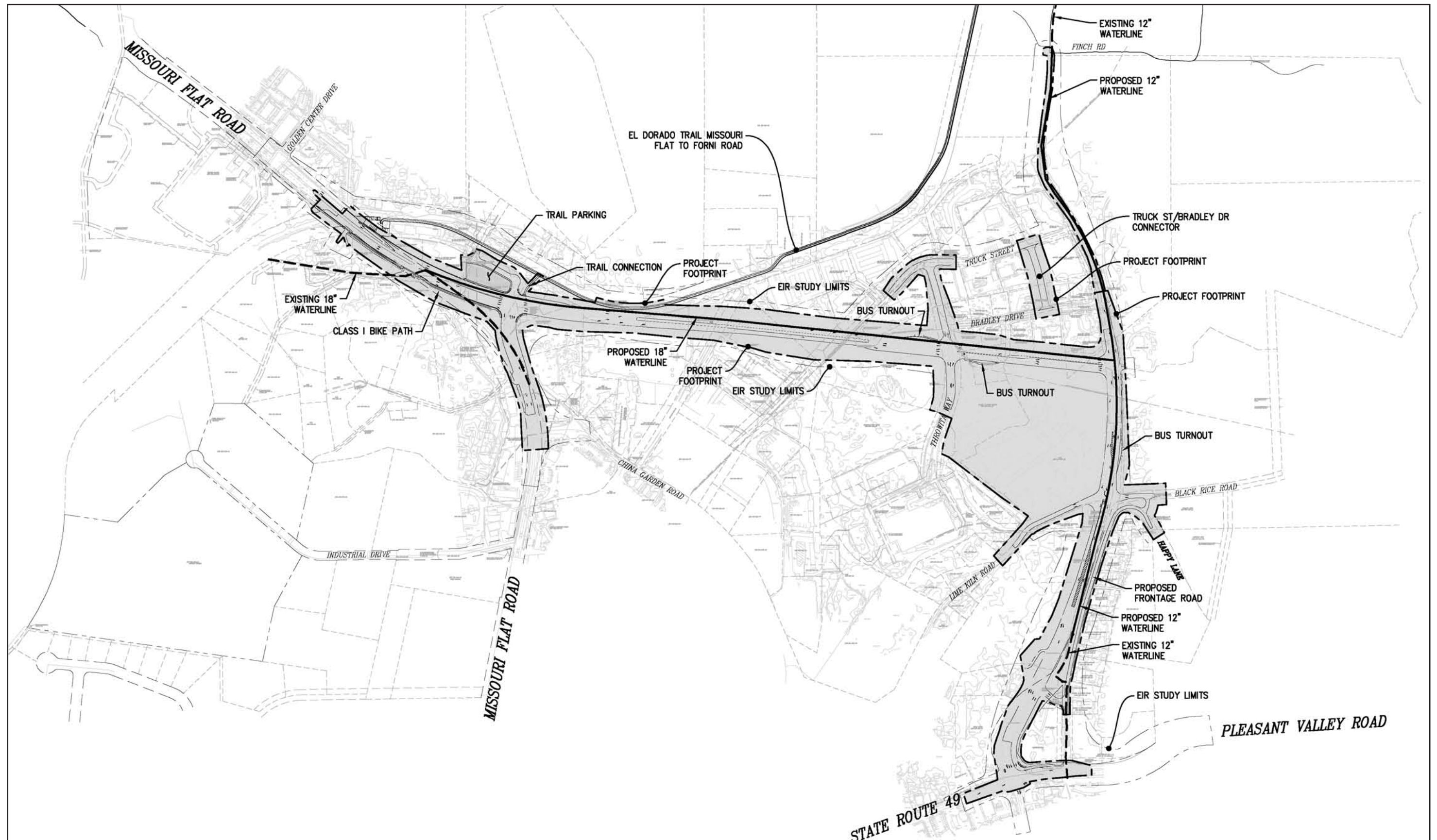
Projects that involve roadway construction, widening, or improvements often affect utilities located or potentially located within the roadway right-of-way. In accordance with El Dorado Irrigation District's (EID's) Five-year Capital Improvement Program (EID 2008), EID staff have been directed to streamline contracting procedures with the DOT for the agencies' joint projects. EID has many water, wastewater, and recycled water lines in roads maintained by the DOT. From time to time, DOT initiates a road project where the EID water, wastewater, or recycled waterlines need to be relocated or upgraded, which presents opportunities for EID to join forces with DOT by simultaneously upgrading and/or relocating facilities. As such, EID proposes, as part of the Parkway project (i.e., project, as defined under CEQA), to install a new 18-inch waterline in Diamond Springs Parkway and upgrade existing 6-inch and 8-inch waterlines with a new 12-inch waterline in SR-49/Diamond Road from Pleasant Valley Road to Finch Road. Along with the installation of the waterlines, there will be appurtenances located outside of the pavement such as vaults, blow-offs, above-ground air relief valves (ARV), manholes, and valves that may need to be installed and/or adjusted to grade.

3.4.3 - Roadway and Intersection Improvements

The roadway and intersection improvements associated with the proposed project are described in detail below, from west to east for the Parkway and associated improvements, and then from north to south for the SR-49-related improvements. For convenience, all EID associated improvements have been identified along with the roadway they would occur under.

Diamond Springs Parkway

As shown on Exhibit 3-5a and 3-5b, the Parkway is a new four-lane divided roadway between Missouri Flat Road and Diamond Road (SR-49). Project improvements would begin approximately 150 feet west of the intersection of Missouri Flat Road and the Sacramento-Placerville Transportation Corridor and extend eastward approximately 4,400 feet to SR-49 (Diamond Road). Construction of the Parkway would require the acquisition of right-of-way and easements required for the new four-lane divided roadway. The typical right-of-way is about 100 feet wide, to encompass travel lanes, center median, shoulders, bike lane/path, curb, gutter and sidewalk. Turn pocket lanes and bus turnouts would be added where appropriate.



Source: CTA 2009, EID 2008, El Dorado County DOT 2009.



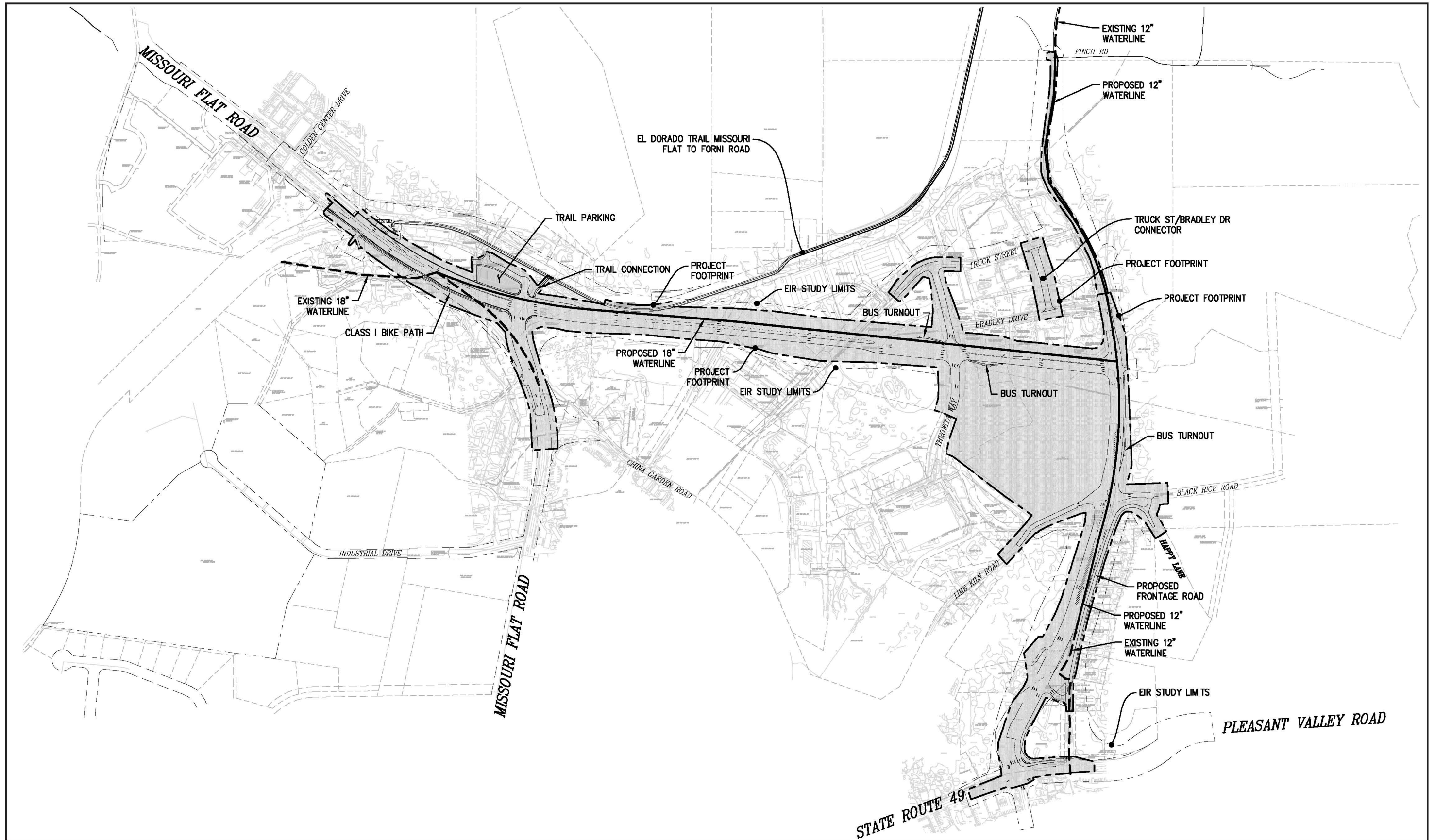
NOT TO SCALE

Michael Brandman Associates

11730025 • 11/2009 | 3-5a_Proposed_Project_Improvements.ai

Exhibit 3-5a Two Lane Proposed Project Improvements

COUNTY OF EL DORADO DEPARTMENT OF TRANSPORTATION
DIAMOND SPRINGS PARKWAY PROJECT
ENVIRONMENTAL IMPACT REPORT



Source: CTA 2009, EID 2008, El Dorado County DOT 2009.



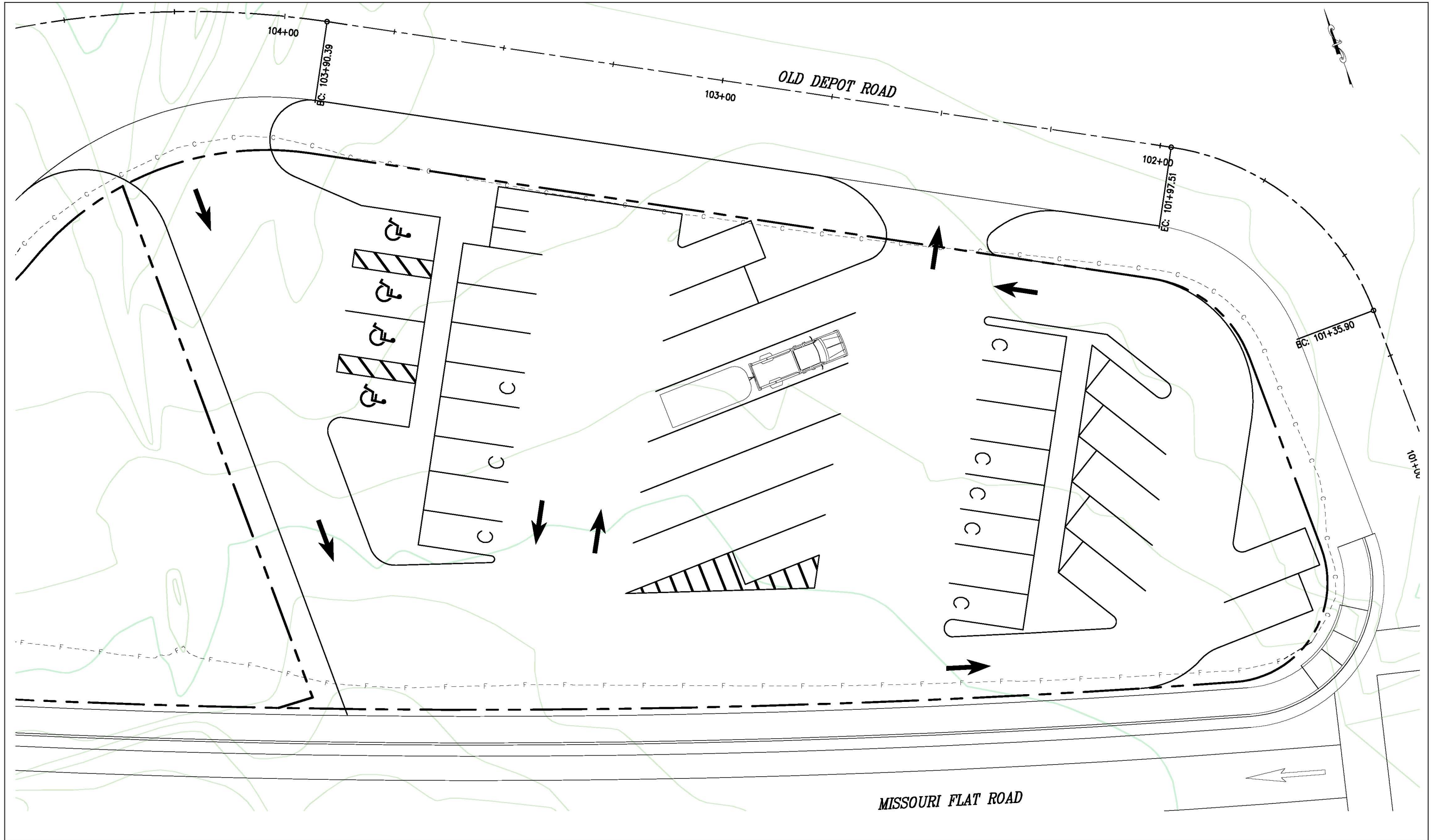
NOT TO SCALE

Michael Brandman Associates

11730025 • 11/2009 | 3-5b_Proposed_Project_Improvements.ai

Exhibit 3-5b Four Lane Proposed Project Improvements

COUNTY OF EL DORADO DEPARTMENT OF TRANSPORTATION
DIAMOND SPRINGS PARKWAY PROJECT
ENVIRONMENTAL IMPACT REPORT



Source: El Dorado County DOT 2009.



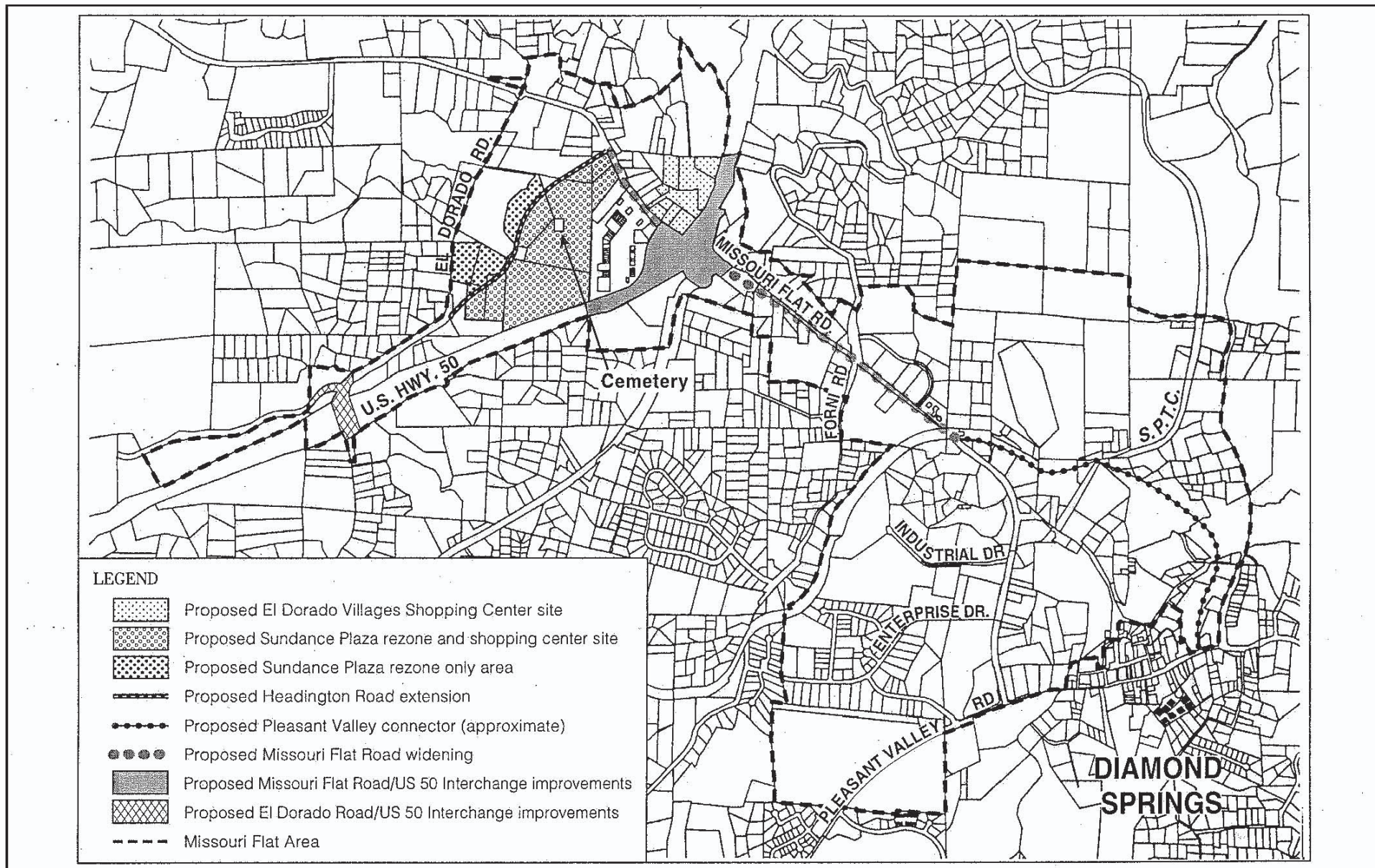
NOT TO SCALE

Michael Brandman Associates

11730025 • 11/2009 | 3-5c_Trail_Parking_Lot_Detail.ai

Exhibit 3-5c Trail Parking Lot - Detail

COUNTY OF EL DORADO DEPARTMENT OF TRANSPORTATION
DIAMOND SPRINGS PARKWAY PROJECT
ENVIRONMENTAL IMPACT REPORT



Source: El Dorado County, 1997.



NOT TO SCALE

Michael Brandman Associates

11730025 • 09/2008 | 3-6_MC&FP_Study_Area.ai

Exhibit 3-6 Missouri Flat Area Master Circulation and Funding Plan Study Area

COUNTY OF EL DORADO DEPARTMENT OF TRANSPORTATION
DIAMOND SPRINGS PARKWAY PROJECT
ENVIRONMENTAL IMPACT REPORT

Individual drainage crossings along the Parkway corridor would consist of closed conduit culverts and open bottom crossings. A public service easement would be provided adjacent to the right-of-way to accommodate utilities.

EID Intertie Improvements

Within Diamond Springs Parkway, EID would also construct a new 18-inch waterline and necessary appurtenances that would extend from the Parkway/SR-49 intersection and ultimately connect to the existing 18-inch line within Missouri Flat Road.

Missouri Flat Road/Diamond Springs Parkway/Old Depot Road Intersection

Currently, Missouri Flat Road transitions from a four-lane divided arterial road to a two-lane divided road at its intersection with the Sacramento-Placerville Transportation Corridor. The proposed project would continue the four-lane divided Missouri Flat Road to its proposed intersection with the Parkway. The existing curve in Missouri Flat Road, between the El Dorado Multi-Use Trail (EDMUT) trailhead and Golden Center Drive, would be realigned to create a four-way signalized intersection consisting of Missouri Flat Road extending to the west and south, the Parkway to the east, and Old Depot Road to the north (Exhibits 3-5a and 3-5b).

Currently, Old Depot Road extends north from Missouri Flat Road between APNs 327-270-26 and 327-270-04. As discussed above, Old Depot Road would be realigned to create a four-way intersection at Missouri Flat Road and Diamond Springs Parkway. The new two-lane road would have a 28-foot-wide paved roadway.

El Dorado Multi-Use Trail/Missouri Flat Road Intersection

The EDMUT is a Class I bike path located north of the project site within the Sacramento-Placerville Transportation Corridor, formerly the SPRR railroad right-of-way. The trail extends from the Forni and Ray Lawyer Road intersection, south to the proposed Missouri Flat Road/Diamond Springs Parkway intersection. The proposed project would construct a connection from the EDMUT to the signalized intersection of Diamond Springs Parkway and Missouri Flat Road. The proposed project would also construct an 8-foot-wide, Class I bike path along the western side of Missouri Flat Road, providing EDMUT users the opportunity to cross the Missouri Flat Road/Diamond Springs Parkway intersection, utilize the Class I bike path, and connect to the future western extension of the EDMUT within the Sacramento-Placerville Transportation Corridor (SPTC). For added multi-modal accessibility, the proposed project would also construct a parking lot for trail users (refer to Exhibits 3-5a, 3-5b, and 3-5c). The paved parking lot would consist of up to 40 parking spaces.

Construction of the Parkway would require right-of-way acquisition along the EDMUT to maintain the minimum 100-foot right-of-way for the SPTC as a potential future rail corridor under the terms of the governing Joint Powers Authority (JPA). An approximately 4-foot-tall retaining wall would be constructed where the EDMUT would be located immediately adjacent to the Parkway.

Project Description

Diamond Springs Parkway/Throwita Way Intersection

The proposed Parkway and Throwita Way signalized intersection would be located within the existing Throwita Way ROW, just south of the existing Throwita Way and Bradley Drive intersection. Throwita Way would consist of a two-lane road from both directions (north- and southbound). Two bus turnouts, one westbound and one eastbound, would be constructed on Diamond Springs Parkway after the Throwita Way intersection (Exhibit 3-5a and 3-5b).

Truck Street/Bradley Drive Improvements

The project would involve minor realignment of Truck Street at its current intersection with Throwita Way (Exhibit 3-5a and 3-5b). A new Truck Street/Bradley Drive Connector would be constructed approximately 300 feet west of Diamond Road (SR-49) to enhance circulation within the project area. In addition, the Truck Street and Throwita Way intersection would be realigned slightly to the north of the existing intersection. Bradley Drive would be closed to traffic at Throwita Way and restricted to right-turns only at Diamond Road (SR-49).

Diamond Springs Parkway/Diamond Road (SR-49) Intersection

The proposed Parkway and Diamond Road (SR-49) intersection would be located south of the current intersection of Bradley Drive and SR-49. The Parkway and SR-49 intersection would be a signalized “T” intersection, with the Parkway segment extending from the west to connect to the north/south-aligned SR-49. The three-way intersection design would accommodate a future roadway entering from the east, thereby allowing for a potential four-way intersection.

At the Parkway/SR-49 intersection, the Parkway would consist of two eastbound lanes and two westbound lanes to accommodate the two left-turn pocket lanes from northbound SR-49 (Exhibit 3-5a and 3-5b). Dual right turn lanes from eastbound on the Parkway to southbound on SR-49 are included in the project to provide enhanced traffic operations, with other turning pockets included as necessary (Exhibit 3-5b).

Proposed State Route 49 (Diamond Road) Improvements

The Caltrans Transportation Concept Report (TCR) for SR-49 proposed by Caltrans (2000) contains the 20-year improvement concept for SR-49. The route concept recognizes the historical and topographic constraints inherent to any substantial improvements within the existing roadway alignment and correspondingly identifies a concept LOS of F for sections of SR-49 south of the community of El Dorado and through the City of Placerville. The TCR calls for a two-lane conventional highway. Ultimately, the County’s General Plan forecasts the need for a Major Four-Lane Highway.

As shown in Exhibits 3-5a and 3-5b, improvements to SR-49 would begin at the intersection of SR-49 and Bradley Drive and extend southward to the SR-49/Pleasant Valley Road/Fowler intersection, for a total improved length of approximately 2,700 feet. Diamond Road (SR-49) would be widened

to four lanes to the west and constructed with 12-foot lanes and 8-foot shoulders. Improvements to Diamond Road (SR-49) would be constructed according to Caltrans's Highway Design Manual, 6th Edition (2008). The proposed improvement area would include intersections with the Parkway and Pleasant Valley Road. One bus turnout would be constructed along northbound Diamond Road (SR-49), north of the intersection with Black Rice Road.

The existing two-lane SR-49 from Black Rice Road to about 550 feet north of Pleasant Valley Road would become a frontage road (Exhibits 3-5a and 3-5b). A new median would be included to provide sufficient separation between the frontage road and SR-49. The proposed improvements would eliminate all existing driveway encroachments along the east side of SR-49/Diamond Road.

EID Intertie Improvements

Concurrent with the construction of improvements along SR-49, EID would install a new 12-inch waterline that would replace the existing undersized, 6-inch and 8-inch waterlines from the intersection of SR-49 and Finch Road, south to the existing 12-inch waterline within SR-49 near Pleasant Valley Road (Exhibits 3-5a and 3-5b).

A portion of the proposed waterline replacement along SR-49 is located outside of the Parkway project study area. As a result, EID conducted additional studies to assess potential impacts to air quality, biological, and cultural resources that would result from installation of the waterline. These studies are included in Appendix C, D, and F of this Draft EIR, respectively.

Lime Kiln Road/Diamond Road (SR-49)/Black Rice Road/Happy Lane Intersection

The existing Lime Kiln Road/Black Rice Road/SR-49 intersection is located just south of the proposed Parkway/SR-49 intersection. Currently, SR-49 is intersected by Lime Kiln Road approaching from the west and Black Rice Road approaching from the east.

The proposed project would realign Happy Lane to enter Black Rice Road from the south to allow for the connection of the new SR-49 frontage road (Exhibits 3-5a and 3-5b). This feature of the project is intended to facilitate improved access, circulation, and safety for residences located along the proposed SR-49 frontage road. The impact of the Parkway on this intersection would be mitigated with the restriction of left-turns and through movements from both Lime Kiln Road and Black Rice Road (KHA 2009). A barrier improvement would be included at the intersection of Lime Kiln/Black Rice to prevent the left-turn and through movements from the local roads.

Diamond Road (SR-49) and Pleasant Valley Road

To accommodate the queuing demand for the southbound left at this intersection, a dual southbound left-turn pocket would be added to the intersection. A dual right-turn lane from westbound Pleasant Valley Road to northbound SR-49 is included to optimize operations in the am peak hour.

3.4.4 - Project Phasing

Based on available funding and other considerations, the project may be constructed in phases. If phasing is necessary, under Phase 1, the Parkway would be constructed as a 2-Lane Arterial, with medians and turn pockets lanes where necessary to accommodate turning movements. Phase 1 may include right-of-way acquisitions and grading for a two-lane Parkway or for the full roadway prism to accommodate the four-lane improvements. Under Phase 2, the Parkway would be widened to four lanes and turn-pocket lanes would be incorporated where necessary. If the right-of-way acquisitions and grading are phased, any right-of-way acquisitions and grading required for the four-lane Parkway that were not conducted under Phase 1 would be conducted under Phase 2.

SR-49 may also be constructed in phases. If phasing is necessary, under Phase 1, Diamond Road (SR-49) would initially be constructed as a major two-lane highway with 12-foot travel ways and 8-foot shoulders, with restricted left-turn movement from Lime Kiln Road and Black Rice onto SR-49. Under Phase 2, SR-49 would be widened to a major four-lane major highway.

3.4.5 - Rights-of-Way Acquisition

Exhibits 3-4, 3-5a, and 3-5b show areas of proposed permanent right-of-way acquisition, permanent slope, drainage, traffic signal appurtenance and public service easements and temporary construction and road right-of-way easements necessary under both Phase 1 and Phase 2. Land acquisitions could include negotiated payment, condemnation through eminent domain and/or dedication in fee or easement as a condition of development approvals. Construction staging and temporary road right-of-way access for the MRF is expected to occur on APNs 051-250-12 and 051-250-46, located just south of the Parkway and just west of SR-49 (Diamond Road). DOT will enter into an agreement with these property owner(s), as needed. All construction staging would occur within the project study area.

Permanent right-of-way acquisition may require relocation of businesses located on APNs 327-270-04, -18, -26, and -27, and APN 051-250-55. El Dorado County would compensate displaced businesses in conformance with Federal and state laws including the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Public Law 91-646, as amended April 2, 1987) and the California Uniform Relocation Act (California Government Code, Chapter 16, Section 7260, et seq.) All relocations would be consistent with zoning and General Plan land use Designations. El Dorado County DOT would carry out the relocation plan to help eligible displaced individuals and businesses move with as little inconvenience as possible. All rights and services provided under the Federal Uniform Relocation Act would be strictly adhered to. Businesses displaced as a result of the project would receive fair and equitable treatment and would not suffer disproportionate injuries as a result of programs (in this case, the proposed project) designed for the benefit of the public as a whole

Installation of the replacement waterline would occur within EID's permanent easement along SR-49, which was conveyed to EID in February 2004 (pers. comm., Jim Hilton, EID Office of the General Counsel / Real Estate Services, 2009).

3.4.6 - Construction Sequencing

Avoidance Fencing. In the event that environmentally or culturally sensitive areas are identified for avoidance during construction, initial construction activities would include the installation of temporary fencing (typically an orange or other brightly colored plastic mesh material) around environmentally or culturally sensitive areas to prohibit construction activities within such areas.

Traffic Control. The majority of the activities associated with constructing the Parkway would take place in an area where motor vehicle travel does not presently occur. However, construction activities at and near the terminating ends of the Parkway (Missouri Flat Road, SR-49) and along Throwita Way and SR-49 may require traffic controls, temporary lane closures, and/or traffic lane diversions to ensure safe and efficient movement of vehicles, bicyclists and pedestrians through intersections and/or use of alternative routes during construction. Accordingly, a traffic management plan will be prepared and will include construction staging and traffic control measures (including recreational traffic control on the EDMUT) to be implemented during project construction.

Traffic on Throwita Way would be diverted during construction of a portion of the Parkway; an alternate access route to the MRF will be provided during that stage of construction. Upon completion of the Parkway, MRF traffic would resume access via Throwita Way.

DOT anticipates that during construction activities on SR-49, the construction contractor may close one lane of traffic. Traffic would be re-routed to use the portion of the right-of-way not being affected. Lane configurations would be changed as necessary to accommodate construction activity locations. Short-term closures would occur during K-rail installation and striping, during which a detour would be provided. Diversions of traffic would be signed; and traffic control devices would be used as necessary to guide traffic and delineate temporary lanes.

Project construction activities would be coordinated with local law enforcement and emergency services providers. As a result of this coordination, law enforcement and emergency service providers would be aware of project construction and the potential for any emergency vehicle movement delays within the project area and measures to avoid such delays would be determined. The proposed project construction would not affect the provision of emergency services in and adjacent to the project area or evacuation in the event of a major emergency.

Staging Area Setup. Construction activities would require the establishment of a temporary staging area for vehicle, equipment and materials storage and for other construction-related activities. All construction staging and equipment storage would occur within the project study area. The bulk of

Project Description

the staging and storage is anticipated to occur on APN 051-250-12, which is located adjacent to and south of the proposed Parkway and west of SR-49 (Exhibit 3-4).

Clearing and Grading. Survey staking would be used to define the limits of construction in advance of rough grading. Removal of vegetation and demolition of impacted buildings would be necessary in areas to be used for construction equipment operation, temporary construction activities and preparation of the roadbed and required adjacent graded areas. All vegetation and materials debris would be removed from the project area and disposed of at approved locations. Typical methods and equipment would be required for the roadwork including scrapers, excavators, and dump/haul trucks, and other heavy equipment and vehicles.

After the proposed construction areas are cleared of underbrush, small trees, and structures, grading would begin. Following rough grading, additional excavation, including cut and fill, would bring the site to final grade and prepare the soil for underground piping and the placement of roadbed material. Site work would involve installing large underground pipes (6-inch diameter or larger), manholes, structural foundations, curbs, gutters, and sidewalks. Excavation for the roadbed, retaining wall footings, water pipes, and drainage pipes would be performed with excavators and/or backhoes. Blasting may be required in areas of shallow bedrock to achieve the appropriate grade.

Existing site soils would also be reused onsite for fill construction, where feasible. Approximately 43,000 cubic yards of soil would be removed and re-compacted in place. Approximately 121,000 cubic yards of imported soil would be required as fill for the roadway. Borrow material would likely be acquired from available parcels within five miles of the project area. Construction staging and temporary road right-of-way access for the MRF is expected to occur on APNs 051-250-12 and 051-250-46, located just south of the Parkway and just west of SR-49 (Diamond Road). DOT will enter into an agreement with these property owner(s), as needed. All construction staging would occur within the project study area.

Stormwater Runoff Control. Clearing and grading would result in an increased exposure of soils and increased erosion/sedimentation potential during periods of rainfall. Additionally, equipment and materials present within the project area during construction would create a potential for petroleum or other products to be introduced to stormwater and conveyed to off-site areas. To minimize erosion and foreign materials transport in stormwater, construction activities would adhere to County policies and regulations, specifically the County's Grading Ordinance and Storm Water Management Plan for Western El Dorado County, regarding erosion and ground instability. To minimize erosion and the transport of foreign materials and topsoil during construction, the County's contractor would prepare a Stormwater Pollution Prevention Plan (SWPPP), in accordance with a NPDES permit, for County approval and would implement best management practices (BMPs) for controlling the introduction of materials to stormwater and the flow of stormwater from within the construction area to off-site areas. At a minimum, the SWPPP will evaluate and provide BMPs to minimize project-related impacts.

The SWPPP must be approved and accepted by the Regional Water Quality Control Board (RWQCB) prior to the commencement of any ground disturbing activities or any activities that have the potential to cause water pollution. The project contractor would submit a Notice of Construction (NOC) to the RWQCB, 30 days prior to the commencement of construction. During the rainy season (October 15 to April 15), temporary construction site BMPs would be implemented at all times to reduce or eliminate the potential for a non-storm water discharge to occur off of the ROW, to a surface body of water, drainage course or to a storm drainage system. The contractor will also identify, develop, implement, and maintain BMPs in accordance with a time schedule identified in the SWPPP to reduce or eliminate pollutants in storm water discharges and authorized non-storm water discharges from the project site during construction.

Utilities (Potential Underground Utility District). Existing overhead utilities along Missouri Flat Road, near China Garden Road, and along SR-49, between Bradley Drive and Pleasant Valley Road, are in conflict with the proposed project. The County proposes to pursue two Underground Utility Districts (UUD), per PUC Rules 20A and 32, to underground the existing overhead lines into a joint trench within the roadway right-of-ways or public service easement (Exhibits 3-7b and 3-7d). In addition, several underground lines, totaling approximately 3,060 feet would be extended to affected properties replacing existing overhead utility connections (Exhibit 3-7b and 3-7d). It should be noted that utilities would not be extended to areas previously not served. As a worst-case scenario trenching activities outside of the roadway rights-of-way have been taken into consideration because they will occur simultaneously with construction activities of the proposed project. However, per CEQA guidelines section 15301(b), alterations to existing facilities of both investor and publicly-owned utilities used to provide electric power are categorically exempt from CEQA. If the UUD is not formed, the project will relocate approximately 12 existing poles within the public service easements along the right-of-way (Exhibits 3-7a and 3-7c).

Water Distribution Facilities (EID Intertie Improvements). Concurrent with the construction of improvements along the Parkway and SR-49, EID would construct the Highway 49 Intertie Improvements Project. A new 12-inch waterline would replace the existing undersized, 6-inch and 8-inch waterlines from the intersection of SR-49 and Finch Road, south to the existing 12-inch waterline within SR-49 near Pleasant Valley Road (Exhibits 3-5a and 3-5b). Installation of the replacement waterline would occur within EID's permanent easement along SR-49.

As part of the Highway 49 Intertie Improvements Project, EID would also construct a new 18-inch waterline within the Parkway that would extend from the Parkway/SR-49 intersection and ultimately connect to the existing 18-inch line within Missouri Flat Road. Along with the installation of the waterline, there may be appurtenances located outside of the pavement such as vaults, blow-offs, ARVs, manholes, and valves that may need to be raised to grade once the Parkway is built. DOT and EID will coordinate on the timing, placement, and installation of such facilities.

Project Description

EID may require temporary service interruptions during tie-ins, but they will be limited to a few hours and the surrounding community will be notified in advance.

Drainage Facilities. Project roadway construction would include the installation of drainage inlets and culverts, as well as the removal of existing culverts. Individual drainage crossings along the Parkway corridor would consist of closed conduit culverts and open bottom culvert crossings.

Surfacing. Following grading and trench compaction of underground utility installation, the road base would be prepared through placement and compaction of soils and gravel. The prepared roadbed would be overlain with lifts of aggregate base and asphalt concrete. Paving would be performed incrementally along the alignment. Striping, pavement markings, and signage would be installed as necessary.

3.5 - Preliminary Construction Schedule

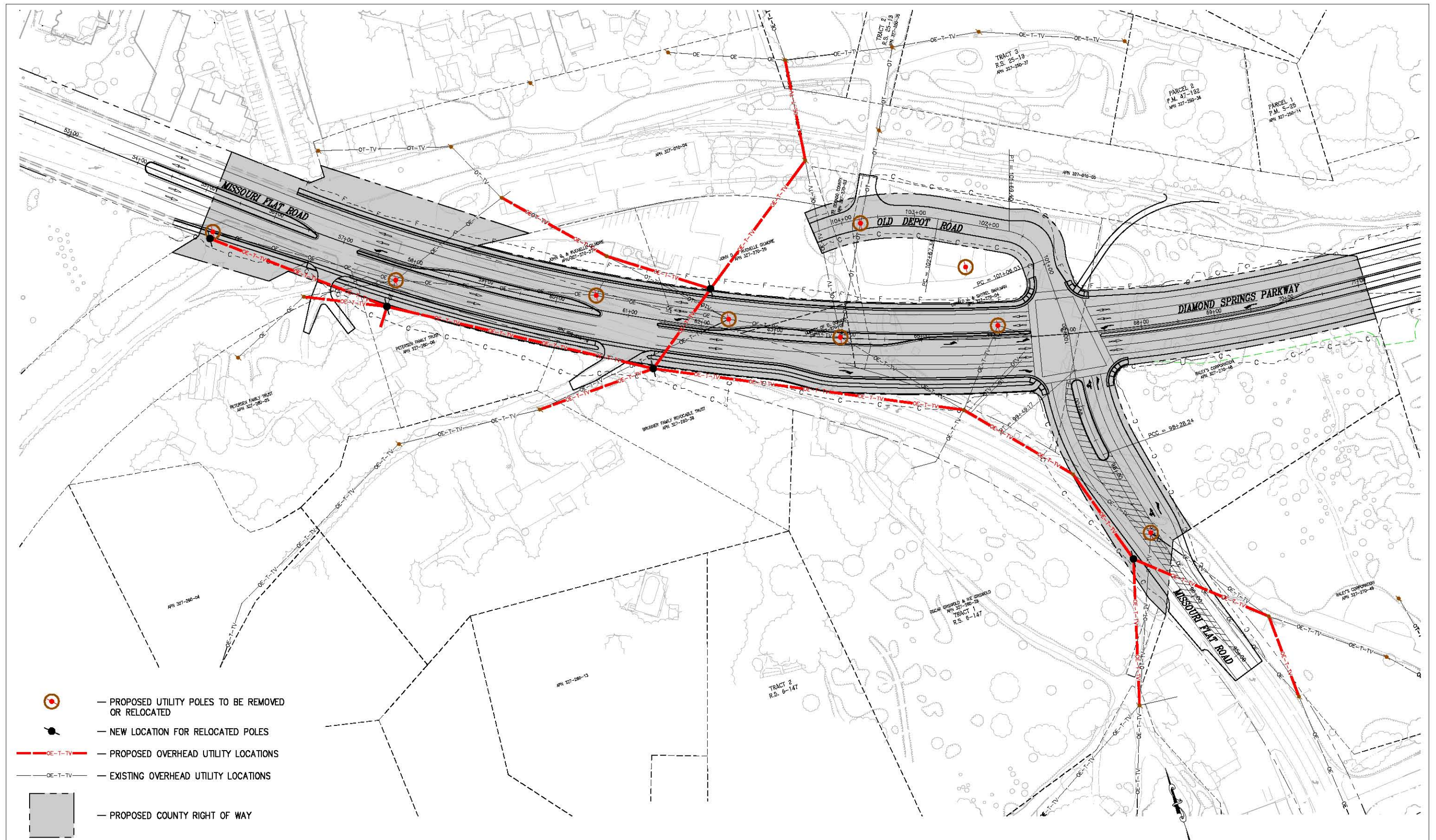
Table 3.5-1 provides the preliminary construction schedule for the proposed project. For the purposes of this environmental analysis, project construction was anticipated to begin in spring/summer 2011 and be completed by the end of 2012.

Table 3-1: Preliminary Construction Schedule

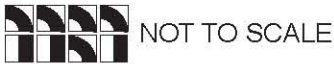
Activity	Estimated Start Date	Estimated Completion Date
CEQA Review	ongoing	Summer 2010
Phase 1 Design	2010	2011
Phase 1 Permitting	2010	2011
Phase 1 ROW Acquisition	2010	2011
Phase 1 Construction	2011	2012
Phase 2 ¹	TBD	
Notes: TBD = to be determined. ¹ The timing of Phase 2 will be determined based available funding and other considerations. Source: DOT, 2009.		

3.6 - Project Environmental Commitments

El Dorado County DOT would retain a construction contractor to construct the proposed Parkway improvements. The contractor would be responsible for compliance with all applicable rules, regulations, and ordinances associated with construction activities and for actual implementation of the construction-related mitigation measures to be adopted for the project. DOT would provide construction contractor oversight and management and would be responsible for verifying mitigation measure implementation.



Source: El Dorado County DOT 2009.

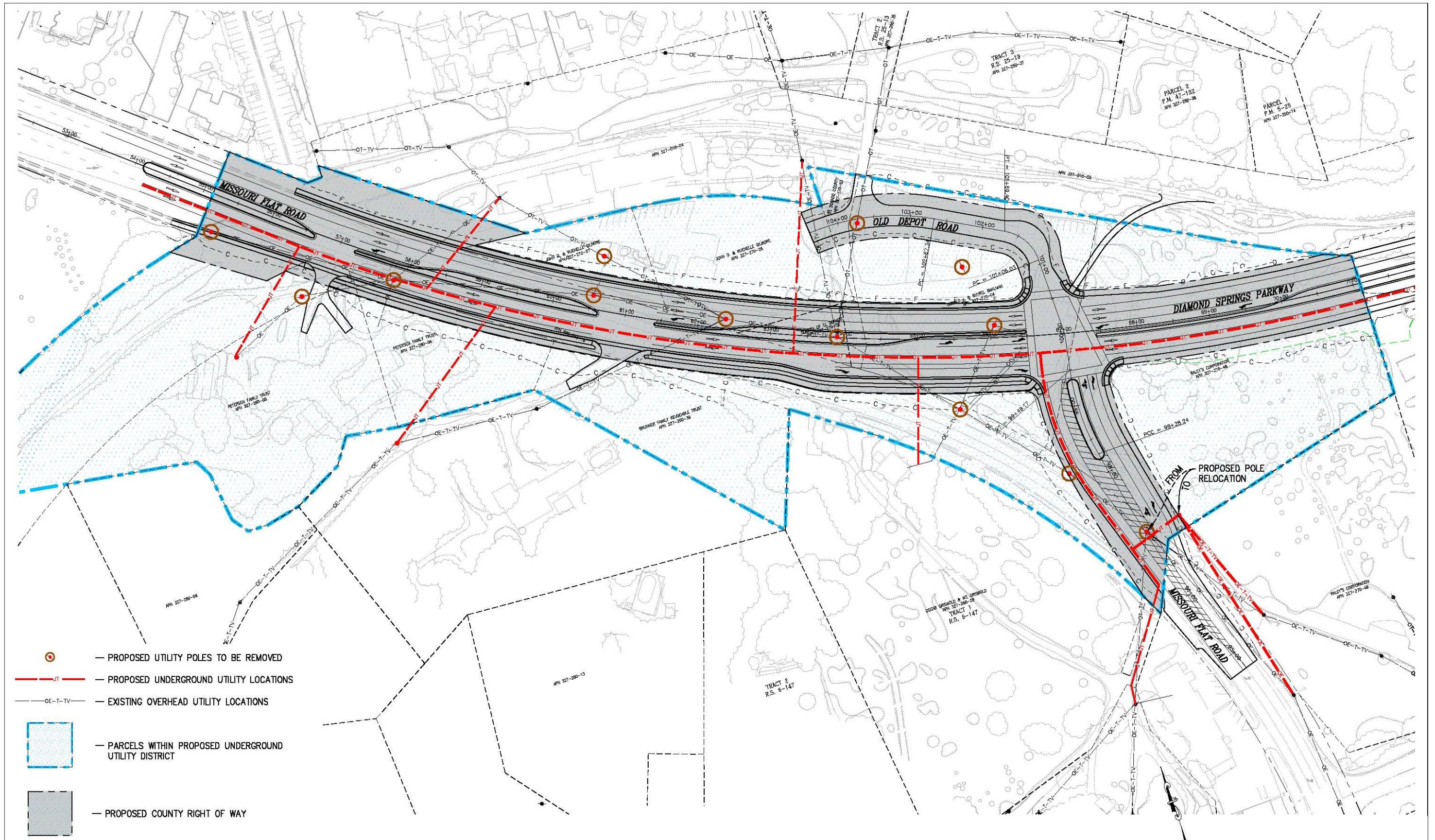


Michael Brandman Associates

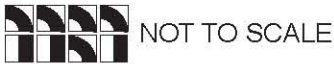
11730025 • 11/2009 | 3-8a_Missouri_Flat_Overhead_Uilities.ai

Exhibit 3-7a Missouri Flat Road Proposed Overhead Utilities

COUNTY OF EL DORADO DEPARTMENT OF TRANSPORTATION
DIAMOND SPRINGS PARKWAY PROJECT
ENVIRONMENTAL IMPACT REPORT



Source: El Dorado County DOT 2009.

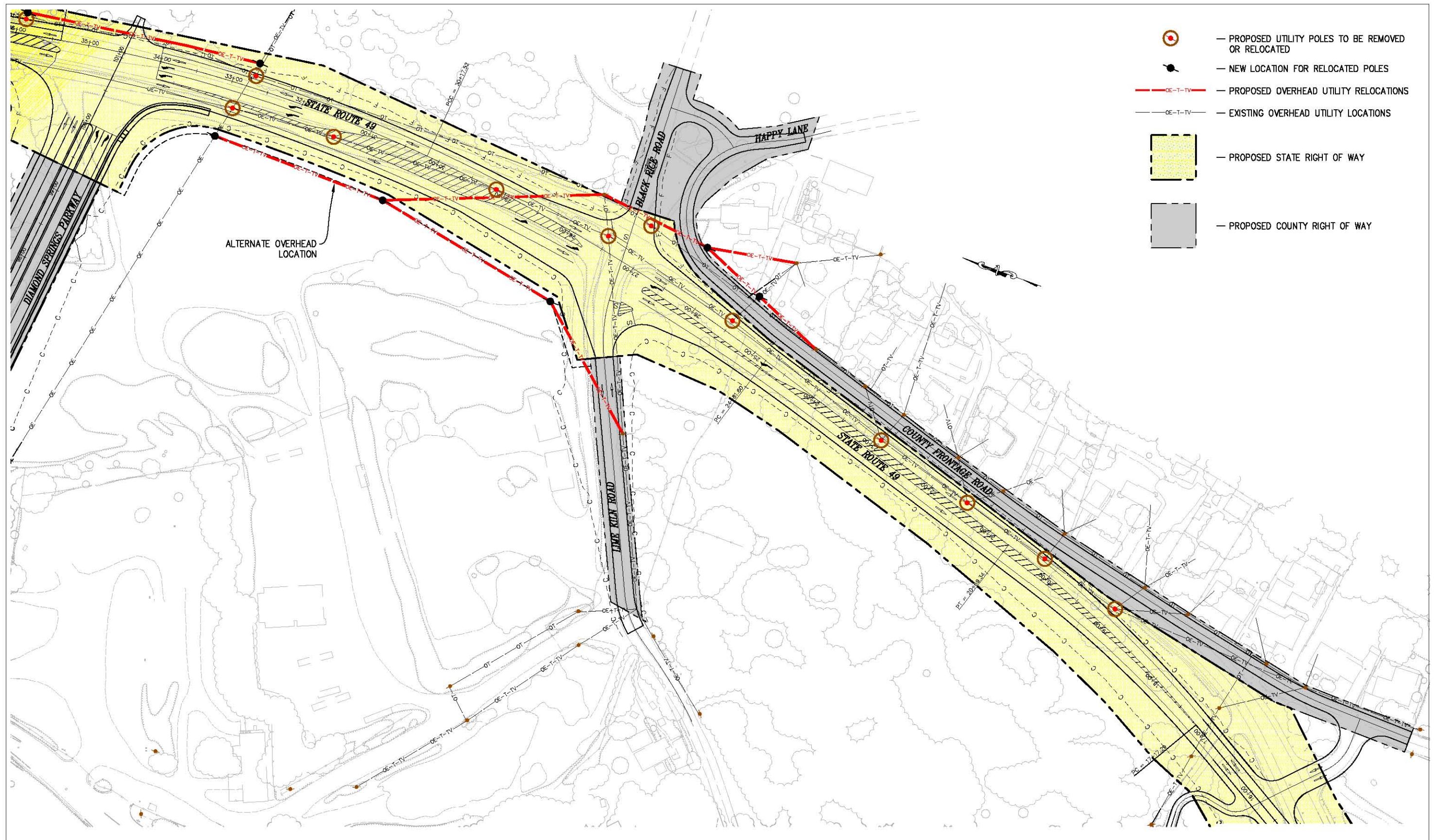


Michael Brandman Associates

11730025 • 11/2009 | 3-8b_Missouri_Flat_Underground_Utility_District.ai

Exhibit 3-7b Missouri Flat Road Proposed Underground Utility District

COUNTY OF EL DORADO DEPARTMENT OF TRANSPORTATION
DIAMOND SPRINGS PARKWAY PROJECT
ENVIRONMENTAL IMPACT REPORT



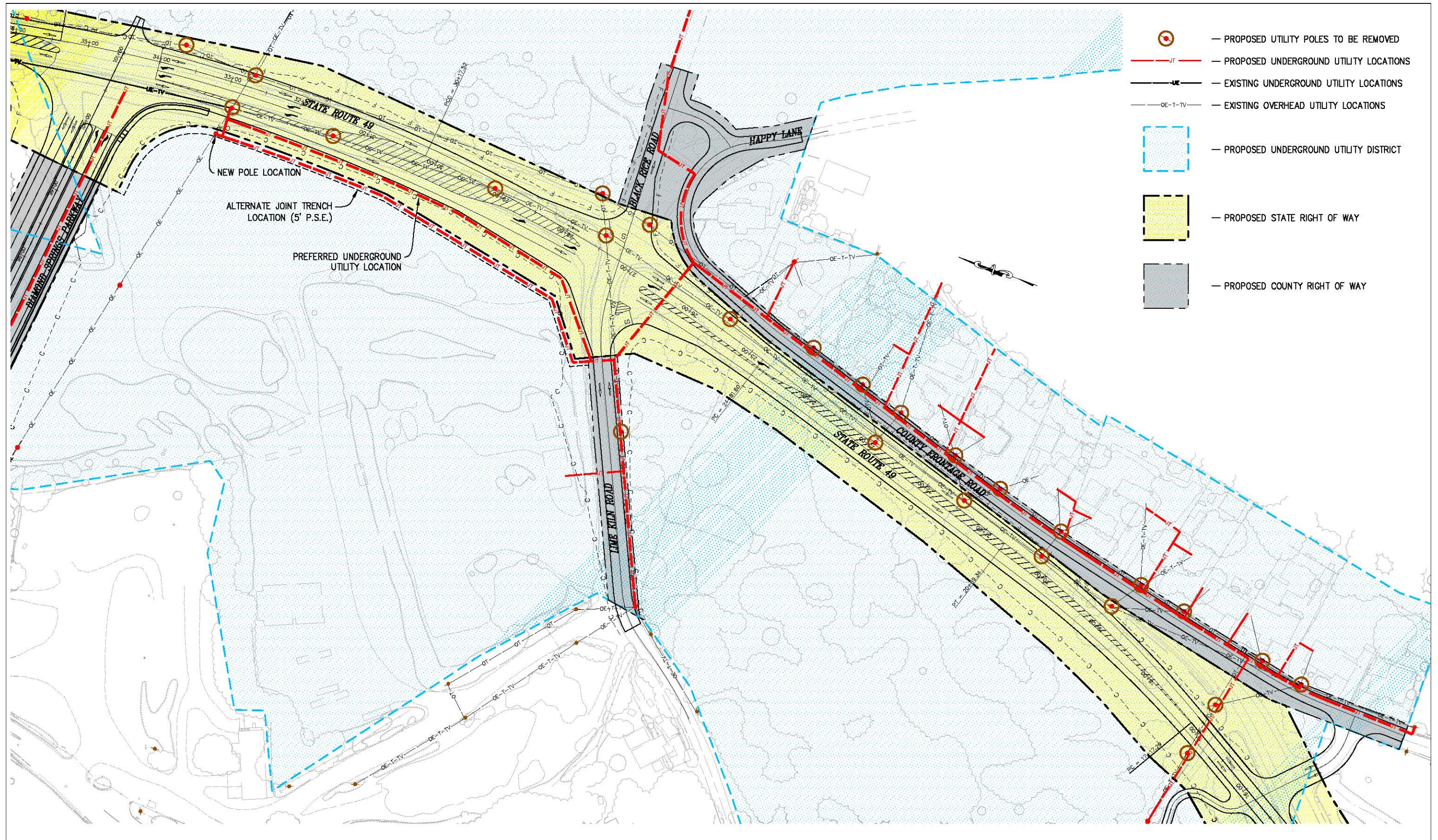
Source: El Dorado County DOT 2009.

NOT TO SCALE
Michael Brandman Associates

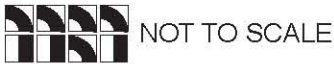
11730025 • 11/2009 | 3-8c_State Route_49_Overhead_Uilities.ai

Exhibit 3-7c State Route 49 Proposed Overhead Utilities

COUNTY OF EL DORADO DEPARTMENT OF TRANSPORTATION
DIAMOND SPRINGS PARKWAY PROJECT
ENVIRONMENTAL IMPACT REPORT



Source: El Dorado County DOT 2009.



Michael Brandman Associates

11730025 • 11/2009 | 3-8d_State Route_49_Underground_Utility_District.ai

Exhibit 3-7d State Route 49 Proposed Underground Utility District

COUNTY OF EL DORADO DEPARTMENT OF TRANSPORTATION
DIAMOND SPRINGS PARKWAY PROJECT
ENVIRONMENTAL IMPACT REPORT

The Parkway project would be constructed in accordance with the Public Contracts Code of the State of California, the State of California Department of Transportation (Caltrans) Standard Plans and Standard Specifications, and the Contract, project plans, and Project Special Provisions under development by the County DOT.

The following are combinations of standard and project-specific procedures/requirements applicable to construction of the project:

- Construction contract special provisions will require that a traffic management plan be prepared. The traffic management plan will include construction staging and traffic control measures to be implemented during construction to maintain and minimize impacts to traffic. Minor traffic stoppages or delays may be allowed if necessary during project construction. Full roadway closures will be avoided during project construction and provisions for emergency vehicle movement through the project area will be provided at all times during construction.
- Contract special provisions will require compliance with EDCAQMD Rules 223, 223-1, and 223-2 to minimize fugitive dust emissions and the potential for risk of disturbance to naturally occurring asbestos.
- Compliance with the California Air Resources Board Airborne Toxic Control Measure at Title 17 Section 93105 addressing Construction, Grading, Quarrying, and Surface Mining activities and with the Asbestos ATCM for Surfacing Applications (California Code of Regulations, Title 17, Section 93106).
- Contract provisions will require notification to DOT and compliance with California Health and Safety Code Section 7050.5 and California Public Resources Code Section 5097.94, et seq. regarding the discovery and disturbance of human remains should they be discovered during project construction.
- Contract provisions will require compliance with the El Dorado County Grading Ordinance and Storm Water Management Plan for Western El Dorado County and implementation of Best Management Practices as identified in the National Pollutant Discharge Elimination System permit and/or Storm Water Management Plan.
- DOT or its construction contractors will conduct early coordination with utility service providers, law enforcement, and emergency service providers to ensure minimal disruption to service during construction.
- DOT or its construction contractors will comply with Caltrans's current edition of "Standard Specifications."
- Access to adjacent residential properties and businesses will remain open at all times during the construction period.

Project Description

- The project would comply with General Plan Policy 6.5.1.11 pertaining to construction noise.

3.7 - Intended Uses of This EIR and Agency Approvals

The principle discretionary permits and approvals for the project will be granted by El Dorado County. Known entitlements, permits, and approvals by El Dorado County are identified below:

- Certification of a final Environmental Impact Report for the project under the requirements of CEQA, as amended
- Adoption of a Mitigation Monitoring and Reporting Plan, Findings of Fact, and Statement of Overriding Considerations (if necessary)
- Approval by Caltrans for improvements related to SR-49 (Diamond Road), north of Diamond Springs
- Approval by the Board of Supervisors for engineering improvement plans
- Approval of the Dust Mitigation Plan by the El Dorado County Air Quality Management District (EDCAQMD)

Future ministerial actions at the County level may include, but are not limited to, the following:

- Encroachment permits and/or approvals for sewer, water, drainage, and transportation connections and improvements (Caltrans and EID).

The project would require discretionary agency approvals for the actions listed below:

- Formation of two UUD per PUC Rule 20A and 32, which requires that 1) the local agency and affected utility companies agree upon the district boundaries; 2) the affected property owners approve the formation of the district by a simple majority based on land values; and 3) the County holds a public hearing to adopt the formation of the district.
- California Department of Fish and Game (CDFG) – approval of appropriate potential streambed alteration agreements, pursuant to Section 1600 of the Fish and Game Code.
- U.S. Army Corps of Engineers (USACE) – approval of appropriate permits under Section 404 of the Clean Water Act (CWA), which may include an evaluation of cultural resources under Section 106 of the National Historic Preservation Act. If a USACE permit is required, the project also will need to comply with Section 7 of the Federal Endangered Species Act.
- Regional Water Quality Control Board (RWQCB) – Water quality certification under Section 401 of the Clean Water Act, if a 404 permit is required, and approval for coverage under the National Pollutant Discharge Elimination System (NPDES) General Construction Permit

(General Permit) under Section 402 of the CWA. Under the General Permit, a Storm Water Pollution Prevention Plan (SWPPP) must be prepared before any construction activities begin.

- State Water Resources Control Board – Spill Prevention Control and Countermeasure Plan (SPCCP) will be prepared for the project in accordance with the 40 CFR 112.

SECTION 4: ENVIRONMENTAL IMPACT ANALYSIS

4.1 - Introduction

Section 4 describes the environmental setting and analyzes the environmental effects that would result from construction and operation of the Diamond Springs Parkway Project (Parkway, or proposed project). Issues discussed in Section 4 include Aesthetics, Air Quality, Biological Resources, Cultural and Historical Resources, Geology and Soils, Hazards, Hydrology and Water Quality, Land Use and Planning, Noise, Public Services, Traffic and Transportation, and Utilities and Service Systems. The California Environmental Quality Act (CEQA) Guidelines direct that determination of the significance of an impact to the environment be based on scientific and factual data. Accordingly, the environmental analysis section for each issue area evaluates impacts according to significance criteria established in Appendix G of the CEQA Guidelines, in accordance with California state law. In instances where the project has the potential to result in a significant environmental effect, feasible mitigation measures designed to avoid, lessen, or substantially reduce the environmental impacts are included for the issue area.

4.1.1 - Project Study Area

The study area used for the evaluation of impacts associated with each of the resource topics listed previously varies based on the physical parameters, regulatory requirements, and analysis methodology associated with each resource topic. Impacts directly related to the physical disturbance of land and project construction activities were evaluated within the project study area shown on Exhibit 3-2. The project study area generally consists of the area used for evaluating potential impacts associated with biological resources, cultural and historical resources, geology and soils, and hydrology and water quality. The study areas for the remaining resource topics consider additional areas as needed to evaluate impacts that may extend beyond the physical disturbance area of the project. For example, the aesthetics study area extends to include locations outside the study area that would be affected by changes in views located within the study area.

4.1.2 - Organization of the Environmental Impact Analysis

This EIR has been organized consistent with CEQA requirements and tailored according to the characteristics of the project to provide a clear and easy-to-read structure for decision makers, public agencies, and the public. The following describes the layout of the environmental analysis sections.

Summary

Each environmental analysis section begins with a brief summary of the potentially significant, significant unavoidable, and less than significant impacts that would result from construction and implementation of the proposed project.

Environmental Setting

The environmental setting sections describe the existing regional and site-specific conditions using the most current information available. This information provides the context and is used as the baseline for analyzing the significance of the probable environmental effects of the project with respect to each specific issue area in accordance with CEQA Guidelines Section 15125.

Regulatory Framework

The regulatory framework section identifies local, regional, state, and federal agencies that have jurisdictional control over development activities in the project vicinity. The section explains the presiding agency's jurisdictional power and lists the specific documents, standards, or policies that relate to the environmental issue area. Where compliance with existing regulations would avoid or reduce the significance of a particular environmental impact, these regulations are described and factored into the subsequent impact, wherever possible. If implementation of existing regulations is required for review or permitting of the project, these regulations and permit requirements are not included as mitigation measures unless it is determined that the EIR can offer specific guidance or prescribe performance standards for the regulations, which is in accordance with CEQA Guidelines Section 15125(d).

Project Impact Analysis

This section describes the methodology used in the analysis, identifies the significance thresholds utilized, describes, and analyzes the significance of the potential impacts of the project and, where appropriate, recommends mitigation measures.

Methodology for Analysis

This section describes the methods, process, procedures, and/or assumptions used to formulate and conduct the impact analysis.

Thresholds of Significance

Thresholds of significance are the evaluation criteria by which potential impacts are evaluated and deemed significant or less than significant. Impact evaluation criteria include local, state, and federal standards, where appropriate, in addition to the criteria contained in Appendix G of the CEQA Guidelines.

Impact Statements and Mitigation Discussion

This section succinctly identifies and describes the potential environmental impacts of the project, identifies the level of significance for each potential impact, and recommends mitigation measures, where appropriate. The format adopted in this EIR to present the evaluation of impacts is described and illustrated below.

Summary Heading of Impact

Impact 4.5-1: An impact summary heading appears immediately preceding the impact description (Summary Heading of Impact in this example). The impact number identifies the section of the report (4.5 for Cultural and Historical Resources, in this example) and the sequential order of the impact (1 in this example) within that section. To the right of the impact number is the impact statement, which identifies the potential impact, and the level of significance of the impact before any mitigation is proposed.

Impact Analysis

A narrative analysis follows the impact statement.

Significance Before Mitigation

This section identifies the level of significance of the impact before any mitigation is proposed. The EIR uses the following terminology to denote the significance of environmental impacts of the project:

No impact indicates that the construction, operation, and maintenance of the project would not have any direct or indirect effects on the environment. It means no change from existing conditions. This impact level does not need mitigation.

A **less than significant impact** is one that would not result in a substantial or potentially substantial adverse change in the physical environment. This impact level does not require mitigation, even if feasible, under CEQA.

A **significant impact** is defined by CEQA Section 21068 as one that would cause “a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project.” Levels of significance can vary by project, based on the change in the existing physical condition. Under CEQA, mitigation measures or alternatives to the proposed project must be provided, where feasible, to reduce the magnitude of significant impacts.

A **potentially significant impact**, if it were to occur, would be considered a significant impact as described above; however, the occurrence of the impact cannot be immediately determined with certainty. For CEQA purposes, a potentially significant impact is treated as if it were a significant impact. In this EIR, a potentially significant impact is an impact that can be mitigated to a less than significant level.

A **significant and unavoidable impact** is one that would result in a substantial or potentially substantial adverse effect on the environment, and that cannot be reduced to a less than significant level even with implementation of feasible mitigation. Under CEQA, a project with significant and unavoidable impacts can proceed, but the lead agency is required to prepare a “statement of overriding considerations” in accordance with CEQA Guidelines

Section 15093, explaining why the lead agency would proceed with the project in spite of the potential for significant impacts.

Mitigation Measures from the MC&FP EIR

This section describes the mitigation measures that were included in the MC&FP Program EIR (EDAW 1998) to reduce potentially significant impacts to less than significant levels. Because the MC&FP EIR included mitigation measures that addressed both retail and roadway development, only the mitigation measures that would directly apply to the proposed roadway construction have been incorporated into this document.

Significance Determination After MC&FP Mitigation, and Supporting Rationale

This section identifies the level of significance of the impact after the implementation and application of the MC&FP EIR mitigation measures.

Additional Mitigation Measures

As previously discussed, the MC&FP EIR is more than 10 years old and the regulatory environment has changed, in some cases substantially, since adoption of the EIR. For example, the MC&FP EIR was based on the previous El Dorado County General Plan (1996), and a new General Plan is now in place (El Dorado County 2004). This project-level EIR incorporates to the maximum extent feasible the information included in the MC&FP EIR. However, additional project-specific mitigation measures beyond those included in the MC&FP, or replacement mitigation measures, are included when necessary to ensure the project complies with current regulations or when mitigation measures proposed in 1998 are no longer feasible. Additional or replacement mitigation measures are formatted and numbered as shown below.

MM 4.5-1a Project-specific mitigation is identified that would reduce the impact to the lowest degree feasible. The mitigation number links the particular mitigation to the issue area with which it is associated (**Section 4.5, Cultural Resources** in this example); the letter identifies the sequential order of that mitigation for that impact (**a**, in this example).

Significance Determination After Additional Mitigation, and Supporting Rationale

This section identifies the resulting level of significance of the impact following application of additional mitigation.

EID Intertie Improvements

This section identifies potential impacts related to the EID Intertie Improvements, a significance determination regarding those impacts, and, if necessary, mitigation to lessen impacts.

4.1.3 - Effects Found Not to be Significant

Pursuant to the CEQA Guidelines Section 15060, El Dorado County Department of Transportation (DOT) conducted a preliminary review of the proposed project. Additionally, a programmatic EIR was prepared in 1998 for the MC&FP planning area that determined that the proposed project would have a less than significant impact or no impact on the CEQA issue areas identified below. These issue areas, and DOT's rationale for making this finding, are briefly described below.

- **Agricultural Resources.** No agricultural uses currently occur within the project study area. The study area includes generally disturbed industrial areas, with much of the area under existing industrial and/or commercial zoning. This factor, in combination with unfavorable soils and variable topography, render the project area unsuitable for agricultural purposes. No impacts to agricultural resources would occur as a result of implementing the proposed project.
- **Mineral Resources.** The project study area is not located within a Mineral Resource Zone designated by the State or County, and the proposed project would not affect resources that may be deemed to be a locally important mineral resource of value to the region and residents of the State. No impacts to mineral resources would occur as a result of implementing the proposed project.
- **Population and Housing.** The MC&FP EIR concluded that the MC&FP would have no impact on population and housing for the following reasons:
 - The MC&FP does not propose changes to existing El Dorado County General Plan land use designations or densities. The project assumes retail uses and associated revenue generation from properties already designated "Commercial" on the El Dorado County General Plan land use map.
 - The MC&FP assumes 1,700,000 square feet of new retail development. No properties are designated for residential use within the MC&FP Area. Since the MC&FP does not propose changes to existing land uses, and requires retail development for the generation of funds for roadway improvements, it would not result in the generation of additional population or the creation of housing in the MC&FP Area.

The project does not include the development of new housing or businesses as part of its implementation. The proposed project is necessary to alleviate congestion on Pleasant Valley Road (SR-49) between Missouri Flat Road and Diamond Road in the vicinity of Diamond Springs, improving the circulation of both local and regional traffic. The proposed project is also necessary for the 1.7 million square feet of retail development anticipated for the Missouri Flat area in the MC&FP and was subsequently incorporated into the 2004 General Plan. Any future demand associated with EID's proposed infrastructure improvements would be consistent with the General Plan and its accompanying EIR and is therefore not considered growth inducing. Accordingly, implementation of the EID intertie improvements would accommodate growth that has already been accounted for in the General Plan. No homes

would be displaced as a result of the proposed project. The project would therefore have no impact on population and housing.

- **Recreation.** The MC&FP EIR concluded that the MC&FP would have no impact on recreation for the following reasons:
 - The MC&FP Area is located within the Missouri Flat Area Planned Community, as designated in the General Plan. Development within this Planned Community is subject to a standard of 5 acres of new parkland for every additional 1,000 in population pursuant to General Plan Policy 9.1.1.1. Projects generating additional population would be required to dedicate parkland or pay in lieu fees to offset impacts to park and recreation facilities.
 - Retail development assumed in the MC&FP, including the proposed Sundance Plaza and El Dorado Villages Shopping Center projects, would not result in an increase in demand for parks and recreation facilities because it would not result in an increase in population (please refer to the discussion of population and housing impacts). Therefore, the MC&FP would result in less-than-significant impacts to parks and recreation.

While there are no parks within the project study area, the project would construct a connection to the El Dorado Multi-Use Trail (EDMUT) and a parking lot for trail users. Impacts to the EDMUT would temporarily affect alternative modes of transportation (e.g. pedestrian, bicycle and equestrian traffic); therefore, potential impacts pertaining to the EDMUT trail are discussed under Section 4.12, Traffic and Transportation.

4.2 - Aesthetics, Light, and Glare

4.2.1 - Introduction

This section describes the existing visual resources in the project area, including sources of light and glare, and the potential effects of the construction and use of the proposed project on the visual environment. Descriptions and analyses in this section are based on a site reconnaissance performed by Michael Brandman Associates (MBA) in 2008 and a review of El Dorado County General Plan Policies and Zoning Ordinances pertaining to visual resources. Information included in the Visual Resources section of the MC&FP EIR (EDAW 1998) has been included in this section where appropriate; however, the alignment of Parkway has changed substantially from that analyzed in the MC&FP EIR. As such, while this section incorporates portions of the MC&FP content and analysis, the section includes site-specific information and additional analyses as required under CEQA.

4.2.2 - Summary

Significant Unavoidable Impacts

Project construction and use would not result in any significant unavoidable impacts to aesthetics, light or glare.

Potentially Significant Impacts

Project construction and use would not result in any potentially significant impacts to aesthetics, light, or glare.

Less Than Significant Impacts

Construction and use of the proposed project would result in less than significant impacts to scenic vistas, visual character, and nighttime views.

4.2.3 - Environmental Setting

Regional Setting

El Dorado County is located in the foothills of the northern Sierra Nevada just west of the Tahoe Basin. Mountainous terrain makes up the eastern edge of the County, while urbanized areas such as Folsom, Sacramento, and Auburn surround the western portion of the County. The County has a broad range of landscapes that change with elevation, creating diverse environments, natural communities, and landforms. Rolling hills dotted with mature oaks and oak woodlands, agricultural land, apple orchards and vineyards, evergreen forests and snow-capped mountains, scenic rivers, alpine lakes, and historic structures all contribute to the visual character found in the County. This diversity is an important element of El Dorado County's visual heritage and one that many residents value as part of their quality of life.

Local Setting

The proposed project would cross visual environments characterized by a mix of wooded areas and commercial/industrial uses. The project study area ranges in elevation from approximately 1770 to 1830 feet. The proposed project would span approximately 1 mile from its westernmost terminus near Golden Center Drive to its easternmost terminus at SR-49. Construction on SR-49 would extend approximately 1 mile along SR-49, from Finch Road to Pleasant Valley Road. Roadway improvements would be limited to the portion of SR-49 south of the SR-49/Bradley Drive intersection. Given the linear nature of the proposed project the aesthetic impact analysis subdivides the project study area as into three areas as shown on Exhibit 4.2-1.

Western Section - Missouri Flat Road to Diamond Springs Parkway Intersection

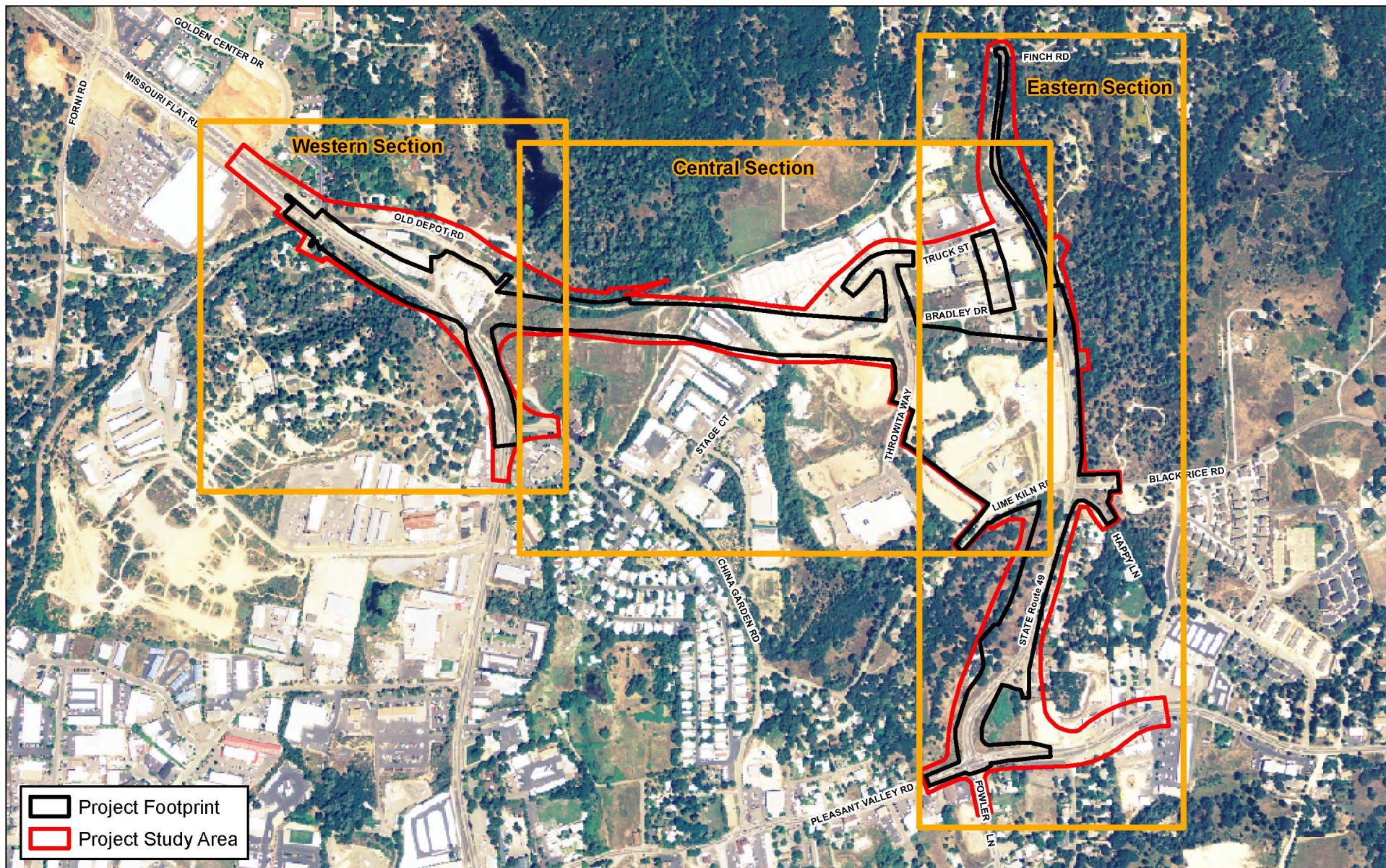
The Western Section of the proposed project begins at Missouri Flat Road at Golden Center Drive, and would extend east to the proposed intersection of Missouri Flat Road and the Parkway, and south to the intersection of Missouri Flat Road and China Garden Road. This area currently consists of Missouri Flat Road, Old Depot Road, China Garden Road, China Garden Court, industrial land uses, and vacant land containing ruderal (weedy) vegetation (refer to Exhibits 4.2-2a and 4.2-2b). The proposed Missouri Flat Road and Parkway intersection would be situated on APN 327-27-004, on which a large metal building, currently occupied by Fast Toys Consignment, is located.

The Sacramento Placerville Transportation Corridor (SPTC), formerly the Southern Pacific Railroad (SPRR) right-of-way, is located adjacent to the northern portion of the proposed project and is included in the project study area. The recently constructed El Dorado Multi-Use Trail (EDMUT), a Class I bike path, follows the former SPRR right-of-way (ROW). The EDMUT ends at Missouri Flat Road, just east of Golden Center Drive. The El Dorado Irrigation District (EID) owns a large parcel north of the SPRR ROW. Bray Reservoir, which is located within the EID parcel, is described in EID planning documents as the potential location of the Bray Reservoir Water Treatment Plant (EID 2001).

Central Section - Diamond Springs Parkway

The Central Section of the project study area consists of the majority of the proposed Parkway. The Central Section begins at the proposed Missouri Flat Road/Parkway intersection, approximately 50 feet east of the current Missouri Flat Road ROW, and continues east to SR-49 (refer to Exhibits 4.2-3a and 4.2-3b). This area currently consists of industrial and commercial land uses, vacant parcels, Stage Court, Throwita Way, Truck Street, Bradley Drive, Elisa Court, and Lime Kiln Road.

This portion of the study area is characterized by industrial buildings and associated parking lots, intermingled with vacant parcels. The industrial uses include two mini-storage facilities and the Materials Recovery Facility (MRF). The vacant parcels contain various types of ruderal (weedy) vegetation and trees, or are highly disturbed and exhibit evidence of parking, storage, and other types of disturbance attributed to the surrounding industrial uses.



Source: El Dorado County, 2007; CTA Engineers, 2007; MBA, 2007



11730025 • 11/2009 | 4.2-1_project_aerial.mxd

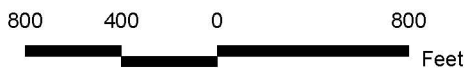
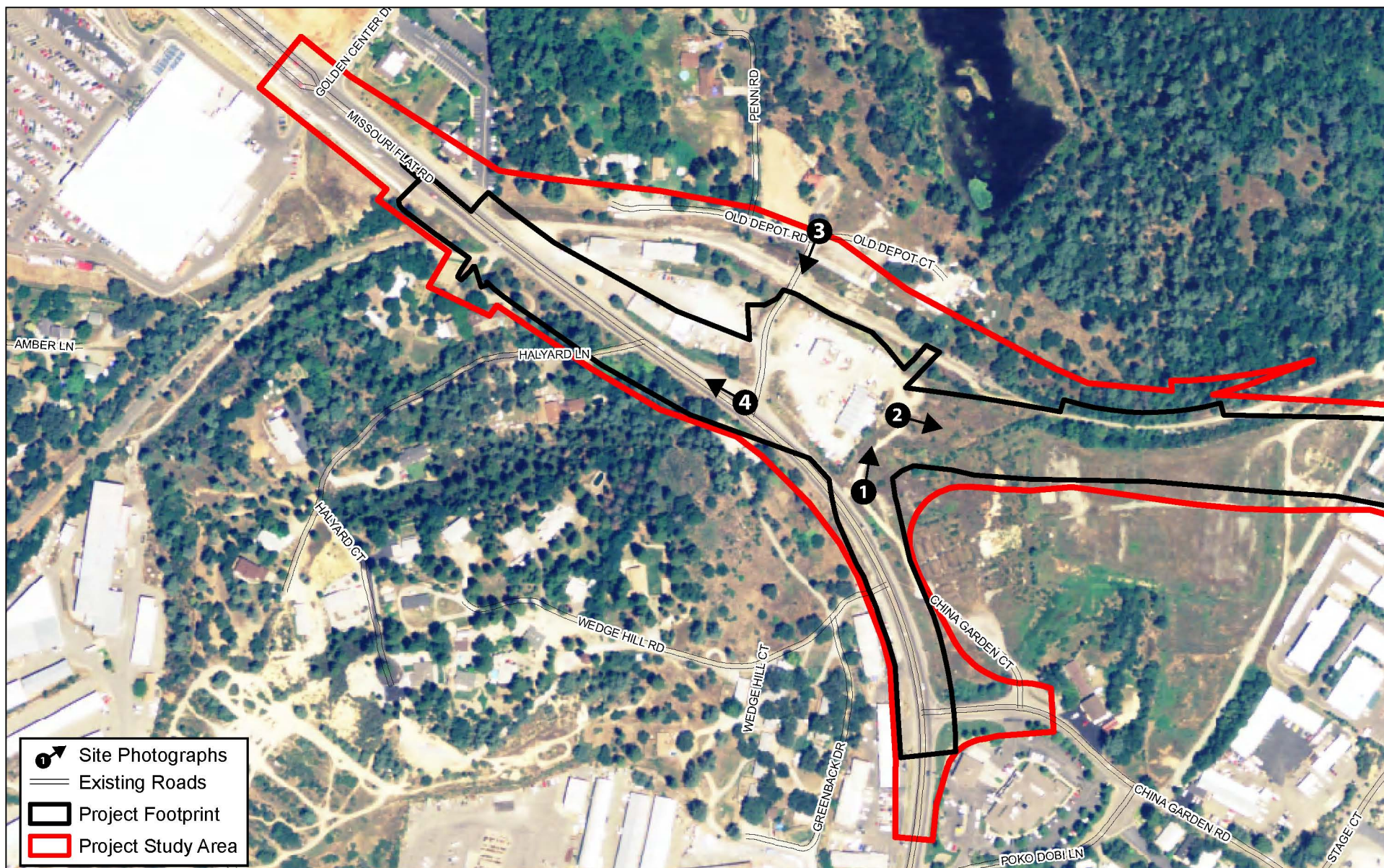


Exhibit 4.2-1 Project Study Area - Aerial Overview

COUNTY OF EL DORADO DEPARTMENT OF TRANSPORTATION
DIAMOND SPRINGS PARKWAY PROJECT
ENVIRONMENTAL IMPACT REPORT

11-0448.C.113



Source: El Dorado County, 2009; MBA, 2007



11730025 • 11/2009 | 4.2-2a_Western_Section.mxd



Exhibit 4.2-2a Western Section Missouri Flat Road to Diamond Springs Parkway Intersection

COUNTY OF EL DORADO DEPARTMENT OF TRANSPORTATION
DIAMOND SPRINGS PARKWAY PROJECT
ENVIRONMENTAL IMPACT REPORT



Photograph 1: Approximate location of proposed Missouri Flat Road and Diamond Springs Parkway intersection.



Photograph 3: View of EDMUT, Missouri Flat Road, and proposed Parkway area looking south from Old Depot Road.



Photograph 2: View of project site looking east from the proposed Missouri Flat Road/Parkway intersection.



Photograph 4: View of Missouri Flat Road looking north west towards Golden Center Drive.

Source: Michael Brandman Associates, 2008.

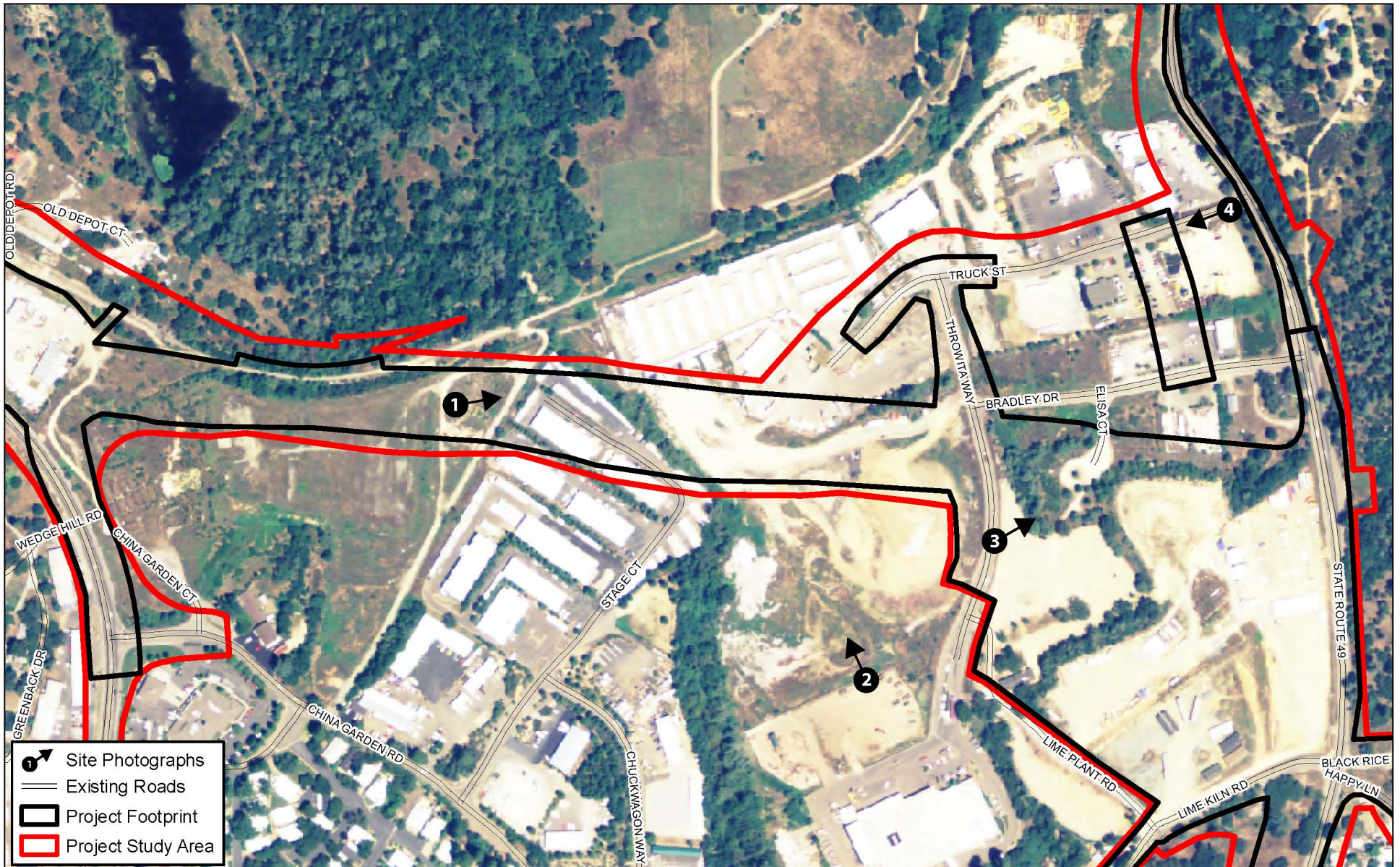


Michael Brandman Associates

11730025 • 05/2010 | 4.2-2b Western Section Photos.ai

Exhibit 4.2-2b Site Photographs - Western Section

COUNTY OF EL DORADO DEPARTMENT OF TRANSPORTATION
DIAMOND SPRINGS PARKWAY PROJECT
ENVIRONMENTAL IMPACT REPORT



Source: El Dorado County, 2009; MBA, 2007.



11730025 • 11/2009 | 4.2-2a_Western_Section.mxd



Exhibit 4.2-3a Central Section Diamond Springs Parkway

COUNTY OF EL DORADO DEPARTMENT OF TRANSPORTATION
DIAMOND SPRINGS PARKWAY PROJECT
ENVIRONMENTAL IMPACT REPORT



Photograph 1: Looking west across proposed Diamond Spring Parkway ROW.



Photograph 2: View of proposed Diamond Springs Parkway from Materials Recovery Facility



Photograph 3: View of proposed Parkway alignment from Throwita Way looking East.



Photograph 4: View of Truck Street looking east from SR 49.

Source: Michael Brandman Associates, 2008.



Michael Brandman Associates

11730025 • 10/2008 | 4.2-3b_site_photos_central_section.ai

Exhibit 4.2-3b Site Photographs - Central Section

COUNTY OF EL DORADO DEPARTMENT OF TRANSPORTATION
DIAMOND SPRINGS PARKWAY PROJECT
ENVIRONMENTAL IMPACT REPORT

Eastern Section - Diamond Road (State Route 49)

The eastern section of the project study area runs north-south along SR-49, which is a major two-lane road for the length of the project study area (El Dorado County 2004). The project area begins at the intersection of Diamond Road (SR-49) and Finch Road and continues south to the intersection of Diamond Road (SR-49) and Pleasant Valley Road (Refer to Exhibit 4.2-4a and 4.2-4b). The Eastern Section currently consists of SR-49, the adjoining portions of Black Rice Road, Happy Lane, and Lime Kiln Road, and a mix of undeveloped areas with ruderal and wooded vegetation, parking lots, disturbed areas associated with industrial buildings, and residential frontages.

Surrounding Views and Land Uses

Views

As noted in the MC&FP EIR (EDAW 1998), the proposed project would be seen most commonly by passengers in cars traveling at speeds ranging from a temporary stop to excesses of 50 miles per hour on SR-49. Observers located at adjacent commercial, industrial, and residential areas would have longer-term views of the proposed project. The MC&FP EIR indicated, “travelers generally perceive large-scale visual images, such as the change in topography, the intensity and clustering of development, and dominant vegetation colors, patterns and textures,” and determined that this was also true of trips along any of the existing streets surrounding the proposed project. However, it should be noted that views from roadways with slower speed limits would generally consist of more detail because the viewer would have more time to take in the surroundings.

Western Section

The following is a description of views and land uses surrounding the Western Section.

North

Land uses and views north of the Western Section are described from west to east. At the intersection of Golden Center Drive and Missouri Flat Road, an area of commercial and retail development dominates the landscape. Buildings are generally one to two stories in height and are a mix of concrete and wood frame structures. East of the SPRR intersection with Missouri Flat Road is an industrial area, north of which is the SPRR ROW, an area of mixed residential and commercial uses, and Bray Reservoir. Bray Reservoir is a small lake located at a lower elevation than that of the adjacent residential uses and is not visible from the project study area. Bray Reservoir is owned by EID and originally served as a regulating reservoir for the local ditch delivery system, which is no longer in use.

East

Land uses and views east of the Western Section are described from north to south. Vacant lands consisting of ruderal vegetation and end-dump piles of rock and soil material are located south of the SPRR ROW. A portion of this area would be required for the Parkway ROW. South of the end

dump piles is China Garden Court and China Garden Road. A gas station and two residential units, which are used as commercial space, are located on China Garden Road.

South

Land uses and views to the south of the Western Section consist of multiple commercial and industrial uses.

West

Land uses and views west of the Western Section are described from south to northwest along the southwestern side of Missouri Flat Road. Several commercial services, including a pool maintenance store, are located near the intersection of Missouri Flat Road and China Garden Road. To the north is an area of wooded vegetation containing scattered residential units that are set back from, and at a higher elevation than, Missouri Flat Road. West of the intersection of Missouri Flat Road and the SPRR ROW is an empty field and a northwest-oriented Wal-Mart store.

Central Section

The Central section includes the proposed Parkway, from the proposed intersection of Missouri Flat Road continuing east to SR-49.

North

Land uses and views to the north of the Central Section consist of the SPRR ROW, a large wooded area in the west, and an area of industrial development and vacant parcels in the east. The industrial uses include auto repair and recycling facilities. The vacant parcels exhibit current and prior use for parking, storage, and other industrial uses.

East

East of the Central Section is Diamond Road (SR-49). Beyond Diamond Road is a large wooded area containing scattered residences that are set back from Diamond Road.

South

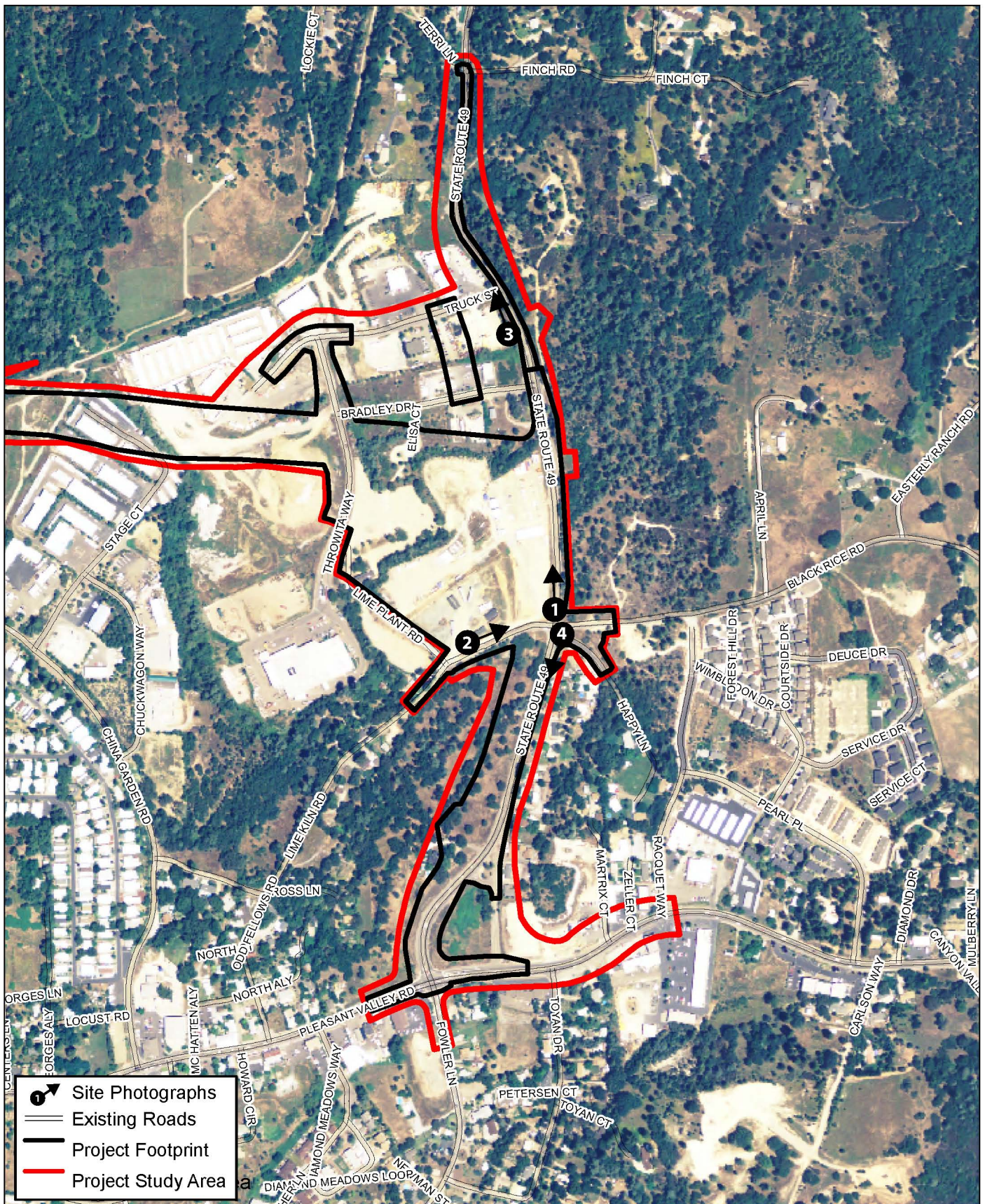
Areas south of the Central Section consist of industrial uses and disturbed vacant lands. The industrial uses include the MRF (waste transfer station), a mini storage facility, and small manufacturing shops.

West

Areas to the west of the Central Section include commercial and industrial uses along Missouri Flat Road.

Eastern Section

As previously described, the Eastern Section consists of Diamond Road (SR-49) from Finch Road south to Pleasant Valley Road.



Source: El Dorado County, 2009; MBA, 2007.



11730025 • 11/2009 | 4.2-4a_Eastern_Section.mxd

Exhibit 4.2-4a Eastern Section Diamond Road (State Route 49)

COUNTY OF EL DORADO DEPARTMENT OF TRANSPORTATION
DIAMOND SPRINGS PARKWAY PROJECT
ENVIRONMENTAL IMPACT REPORT



Photograph 1: View of proposed SR-49 / Diamond Springs Parkway Intersection looking north.



Photograph 2: Lime Kiln Road / SR-49 intersection from west.



Photograph 3: View of Diamond Road (SR 49) looking north from Truck Street.



Photograph 4: View of Diamond Road (SR 49) looking south from Black Rice Road and Happy Lane.

Source: Michael Brandman Associates, 2008.



Michael Brandman Associates

11730025 • 10/2008 | 4.2-4b_site_photos_eastern_section.ai

Exhibit 4.2-4b Site Photographs - Eastern Section

COUNTY OF EL DORADO DEPARTMENT OF TRANSPORTATION
DIAMOND SPRINGS PARKWAY PROJECT
ENVIRONMENTAL IMPACT REPORT

North

The area north of the Eastern Section consists of scattered residences amongst densely wooded vegetation. Approximately 850 feet north of Finch Road is Weber Creek, which runs in an east-west direction.

East

Land uses and views east of the Eastern Section are described here in a north-south direction following Diamond Road (SR-49). A wooded area containing scattered residential units that are set back from SR-49 extends from the southeastern corner of the Finch Road and SR-49 intersection south to Black Rice Road. South of Black Rice Road and directly adjacent to SR-49 is a higher-density residential use area. Beyond this residential area is vacant land that borders Pleasant Valley Road.

South

The southern portion of the Eastern Section consists of the SR-49 / Pleasant Valley Road intersection. The south side of Pleasant Valley Road consists of residential and business uses to the east and west.

West

Areas west of the Eastern Section are described from south to north. The northwestern corner of the SR-49 / Pleasant Valley Road intersection consists of a grassy vegetated area with scattered trees, among which a single residence is located at an elevation higher than that of the roadway. The residence can be seen from SR-49 from the north; however, a stucco privacy wall (approximately 6 feet in height) blocks views of the house as seen from the SR-49 / Pleasant Valley Road intersection. North of the SR-49 / Lime Kiln Road intersection is a highly disturbed vacant parcel (APN 051-250-12) that is currently used as an industrial storage and parking area. During construction of the proposed project, this area would be used as a borrow site and construction staging area. The MRF (solid-waste transfer station) is located west of the vacant parcel. Several industrial and commercial operations, including auto repair and recycling facilities, are located north of the SR-49/Bradley Drive intersection. The northwestern portion of the Eastern Section is dominated by rural residences among scattered trees and vegetation.

Scenic Highways

There are no State listed Scenic Highways within the project site. The nearest Officially Designated Scenic Highway is the portion of Highway 50 (Hwy 50) east of its junction with SR-49, which is located 1.73 miles northeast of the project site (California State Scenic Highway Mapping System 2008). While the portion of SR- 49 within El Dorado County has been identified by the State of California as a potential scenic highway, and contains areas of scenic value specifically in the Diamond Springs vicinity, the County has not officially designated it as a scenic highway in the General Plan or Municipal Code. The El Dorado County General Plan does not designate any roadways within the project vicinity as “county scenic roads” (El Dorado County 2004).

Light and Glare

Regional Setting

The surrounding areas have many of the same types of lighting and glare that are present within the project study area. There are, however, larger swaths of wooded vegetation located north of the Central Section and northeast and southwest of the Eastern Section (Exhibits 4.2-3a and 4.2-4a).

Local Setting

As previously described, the project study area contains a combination of roadways; commercial, industrial, and scattered residential uses; and vacant parcels. The primary existing sources of light and glare consist of headlights during the evening hours, street and parking lot lighting, commercial building signage or exterior security lighting, and residential lighting (interior and exterior). Several vegetated areas and vacant lots adjacent to the proposed project have little to no lighting (EDAW 1998).

4.2.4 - Regulatory Framework

State

California Scenic Highway Program

The California Scenic Highway Program is intended to preserve and protect scenic highway corridors from change that would diminish the aesthetic value of lands adjacent to highways. A highway may be designated scenic, depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view. A scenic corridor is the land generally adjacent to and visible from the highway and is identified using a motorist's line of vision. The State's corridor protection program seeks to encourage quality development that does not degrade the scenic value of the corridor.

State Scenic Highways are classified as either "eligible" or "officially designated." The status of a State Scenic Highway changes from eligible to officially designated when the local jurisdiction adopts a scenic corridor protection program, applies to the California Department of Transportation (Caltrans) for scenic highway approval, and receives notification from Caltrans that the highway has been officially designated as a scenic highway. When a city or county nominates an eligible scenic highway for official designation, it must identify and define the scenic corridor of the highway. The agency must also adopt ordinances to preserve the scenic quality of the corridor or document such regulations that already exist in various portions of local codes. These ordinances make up the scenic corridor protection program. Minimum requirements for scenic corridor protection include:

- Regulation of land use and density of development
- Detailed land and site planning
- Control of outdoor advertising (including a ban on billboards)
- Careful attention to and control of earthmoving and landscaping
- Careful attention to design and appearance of structures and equipment

Local

El Dorado County General Plan

Appendix J, General Plan Policies and Project Consistency Evaluation, of this Draft EIR provides a matrix that lists the policies determined to have relevance to the proposed project and provides a summary of the County's determination of project consistency with each relevant goal and policy. As shown in Appendix J, the project is consistent with all applicable goals and policies of the General Plan, including those related to aesthetics, light, and glare.

El Dorado Municipal Code

Chapter 12.12 Roadside Trees

This chapter of Title 12, Streets, Highways and Public Places, provides a comprehensive plan for the planting and maintenance of trees in public highways within subdivided lands and lands zoned for residential and commercial use.

Chapter 17.14.170 Outdoor Lighting

This Chapter of the municipal code sets forth policies to ensure that the creation of artificial light and glare be controlled to the extent that unnecessary and unwarranted illumination of an adjacent property be prohibited. The policies include, but are not limited to lighting plans, and outdoor lighting standards.

4.2.5 - Project Impact Analysis

Methodology for Analysis

MBA evaluated the potential for the project to result in significant aesthetic, light, and glare effects by conducting a site reconnaissance and reviewing the proposed project in light of applicable plans and policies, including the El Dorado County General Plan and Zoning Ordinance and the Federal Highway Administration's Visual Impact Assessment for Highway Projects, used by Caltrans. MBA personnel visited the project site and surrounding land uses in September 2007 and October 2008 to photo-document the site conditions.

Caltrans Visual Impact Assessment Methodology

Since a portion of this project would affect SR-49, which is a state highway under Caltrans jurisdiction, the visual impact assessment methodology used by Caltrans has been employed for the entire project, to ensure consistency. Caltrans sets forth guidelines regarding the aesthetic impacts of a project in terms of visual resource change and viewer response to those changes. Visual Resource Change is the combination of (1) the compatibility of the proposed project with the existing visual landscape and (2) the existing visual quality compared with the proposed visual quality resulting from project implementation. Viewer response consists of viewer sensitivity and viewer exposure. Viewer sensitivity addresses the viewers' concern for scenic quality and response to change in the visual resources that make up the view. Viewer exposure takes into consideration the number of viewers

exposed to the aesthetic changes, type of viewer activity, duration of view, speed at which the viewer moves, and the position of the viewer (Caltrans 2008).

Thresholds of Significance

According to the CEQA Guidelines' Appendix G Environmental Checklist, to determine whether impacts to aesthetics are significant environmental effects, the following questions are analyzed and evaluated. Would the project:

- a.) Have a substantial adverse effect on a scenic vista?
- b.) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway?
- c.) Substantially degrade the existing visual character or quality of the site and its surroundings?
- d.) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Impact Statements and Mitigation Discussions

This section discusses potential impacts associated with the construction and use of the proposed project. The MC&FP EIR included a programmatic analysis of the aesthetic setting of the MC&FP area, but a site-specific analysis of the proposed project area was not conducted. The MC&FP EIR impact assessment and mitigation measures are included where appropriate, since the proposed project must comply with regulations set forth by the prior programmatic-level EIR. Further analysis or mitigation required beyond that of the MC&FP EIR is included in the impacts below when the MC&FP EIR analysis was deemed no longer valid or does not appropriately cover the proposed project's impacts. Potential cumulative effects are discussed in Section 6.1, Summary of Cumulative Effects.

Scenic Vista

Impact 4.2-1:	The project has the potential to result in a substantial adverse effect on a scenic vista. (Less than Significant)
----------------------	---

Impact Analysis

The project is located within the foothills of the Sierra Nevada Mountains; however, views of the Sierra Nevada Mountains are very limited from the project study area. The most prominent visual resources within view of the project area are the nearby ridges and foothills.

The MC&FP EIR does not explicitly discuss whether roadways to be funded under the MC&FP would affect any scenic vistas or views, but generally considers visual impacts of the MC&FP projects (including the previously proposed Interconnector) to be less than significant(see Impact 4.2-3).

The proposed project would not cross, or come in proximity to, any areas identified as a scenic viewpoint as shown in the El Dorado County General Plan Draft EIR's Exhibit 5.3-1 (EDAW 2003). Construction of the proposed project would not directly result in the development of any structures that could potentially obstruct views of the surrounding ridgelines and foothills. The proposed project would involve the installation of signage and lighted intersection signals; however, these improvements would not have the potential to obstruct views of scenic vistas.

Several existing above ground utility lines along Missouri Flat Road, near China Garden Road, and along Diamond Road (SR-49), between Bradley Drive and Pleasant Valley Road, are in conflict with the proposed project. The County proposes to pursue two Underground Utility Districts (UUD) to underground the existing overhead utility lines in a joint trench within the roadway ROW or public service easement. If formation of the UUD is approved by the affected utilities and property owners, implementation of the UUD would remove existing aboveground utility lines, thereby improving the visual quality of the area (Exhibits 3-7b and 3-7d). If the UUD is not approved, the utility lines and poles would be relocated within the roadway ROWs. As shown in Exhibits 3-7a and 3-7c, it is anticipated that 38 poles would be removed, of which, only an estimated 12 poles would be replaced in a new location, resulting in an overall reduction of utility poles. The new utility poles would be visually similar to existing poles and would be placed in such a manner so they would not substantially obstruct views of or from scenic vistas.

Since the addition of signage and lighted intersection signals would be visually consistent and would not degrade scenic vistas, and the potential removal of existing utility poles and aboveground utility lines would benefit visual quality, implementation of the proposed project would result in less than significant impacts to scenic vistas.

Significance Determination Before Mitigation

Less than significant.

Mitigation Measures from the MC&FP EIR

None.

Significance Determination After MC&FP Mitigation, and Supporting Rationale

Less than significant.

Additional Mitigation Measures

No mitigation measures are necessary.

Significance Determination After Additional Mitigation, and Supporting Rationale

Less than significant.

Aesthetics, Light, and Glare

EID Intertie Improvements

Impacts related to scenic vistas resulting from the construction of the EID Intertie Improvements would be similar or less than those described above. Upon completion, the proposed waterlines would be located beneath Diamond Road (SR-49) and the proposed Parkway; however, an above-ground air release valve (ARV) would be required at any high point of the waterline. Approximately three ARVs are expected to be required, however, their exact locations must be determined based on site specific constraints during construction. ARVs are enclosed in silver metal boxes approximately 60 inches tall, 48 inches wide, and 48 inches deep. The ARVs would be discretely located adjacent to the roadway travel lanes, but within the roadway ROW and would be placed in such a manner as to not interfere with views of surrounding ridgelines. Therefore, no permanent impacts to scenic vistas would occur.

Scenic Resources within a State Scenic Highway

Impact 4.2-2: **The project has the potential to substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. (No Impact)**

Impact Analysis

The MC&FP EIR indicated that the State of California identifies SR-49 as a potential Scenic Highway. The 1996 El Dorado County General Plan EIR specifically stated that, “while SR-49 has been identified by the State as a potential scenic highway, no formal action to designate it has occurred”. As such, the MC&FP EIR determined that the proposed project would not affect a state scenic highway.

The status of SR-49 remains the same under the 2004 General Plan. Neither Missouri Flat Road nor SR-49 are identified as a scenic roadway (shown in the current General Plan Draft EIR’s Exhibit 5.3-1), and, although SR-49 is eligible, the County has not pursued nomination of any portion of the highway. Additionally, the project will not damage any trees, rock outcroppings, or historic buildings within a State scenic highway corridor. Therefore, the impact analysis of the MC&FP EIR and the General Plan EIR remains valid. No impact would occur.

Significance Determination Before Mitigation

No impact.

Mitigation Measures from the MC&FP EIR

N/A

Significance Determination After MC&FP Mitigation, and Supporting Rationale

No impact.

Additional Mitigation Measures

No mitigation is needed.

Significance Determination After Additional Mitigation, and Supporting Rationale

No impact.

EID Intertie Improvements

Impacts related to scenic resources within a State Scenic Highway resulting from the implementation of the EID Intertie Improvements would be similar as those described above. No impacts would occur.

Visual Character

Impact 4.2-3:	The project has the potential to substantially degrade the existing visual character or quality of the site and its surroundings. (Less than Significant)
----------------------	--

Impact Analysis

The MC&FP EIR evaluated the impacts to visual character and quality from construction and operation of the previously proposed Interconnector (see Section 3, Project Description, for description). The following is a summary of the analyses and determinations.

MC&FP Construction Impacts

The MC&FP EIR concluded that construction of the previously proposed Interconnector would result in short-term and adverse but less than significant impacts during construction (EDAW 1998). The MC&FP EIR specifically stated that:

- “Existing views in this area are primarily from local roads leading to industrial uses, and the uses themselves. A few rural residential uses are also located within the alignment vicinity, but do not appear to be adjacent to the alignment.”
- “Construction of the roadway would be largely not visible to the public, or limited to employees of the uses in the area. The road would, instead, provide more view access into this portion of the MC&FP Area.”
- “Since this roadway would... pass through primarily an industrial area and be largely visually inaccessible from the general public, construction improvements are not considered to be substantial and adverse.”

MC&FP Roadway Impacts

The MC&FP EIR concluded that, “since many of the uses adjacent to the (Interconnector’s) alignment are industrial, the introduction of a four-lane roadway would not adversely change the visual character of the surrounding area. Following construction, the intersection of the Pleasant Valley Interconnector and Missouri Flat Road would not create an adverse change to views along this portion of Missouri Flat Road. The long-term visual character at the intersection of the Pleasant Valley Interconnector and Main Street would change as an existing fruit-stand structure and several trees would have to be removed to accommodate the Interconnector. However, the overall change to the aesthetic quality of the area would be considered less than significant.”

Proposed Project's Impacts

While the conclusions set forth in the MC&FP EIR related to visual impacts from construction of a roadway are still applicable, the alignment of the roadway has since changed; therefore, additional analysis of possible degradation of visual character localized to the proposed project's alignment is included below.

Western Section

The Western Section of the proposed project would realign Missouri Flat Road at its intersection with the new alignment of the proposed Parkway. Roadway improvements would alter the character of the project area from that of a large metal building (currently occupied by Fast Toys Consignment) and adjacent vacant land to that of a signalized, four-way intersection. Exhibit 4.2-2b provides photographs of the Western Section. The proposed project would either underground existing overhead utilities in this area (Exhibit 3-7b) or replace the existing 12 overhead utility poles with an estimated 5 new overhead utility poles (Exhibit 3-7a). In either instance, the reduction or complete removal of overhead utility poles would be beneficial to the visual character of the area. Viewer exposure would be limited to persons traveling in automobiles through the new intersection, pedestrians utilizing the EDMUT, and existing residences or businesses on Old Depot Road. Views of the new roadway and intersection from residences on Old Depot Road closest to the proposed Parkway would be obscured by vegetation along the EDMUT. The change in landscape would not be expected to be negative, since the change in visual character would be minimal; changing from a roadway with several minor intersections to a roadway with one main intersection. Furthermore, the change in visual character would be compatible with the existing landscape and would not result in a large change in visual quality, due to the existing roadway and surrounding industrial and commercial land use types. Impacts would be less than significant.

Central Section

The Central Section of the proposed project would cross an existing industrial area, altering the visual character from that of an industrial area to one of a four-lane roadway corridor containing vehicular traffic. At the far eastern portion of the Central Section, temporary construction staging and storage would occur on APN 051-250-12, which is located adjacent to and south of the proposed Parkway and west of SR-49. Views of the Central Section are limited and would be seen primarily from local roads leading to industrial uses and from those industrial facilities. The Central Section may also be seen from the EDMUT where it is located parallel to the proposed parkway for a short distance east of the proposed Missouri Flat Road / Parkway intersection; however, existing vegetation along the EDMUT would likely obscure views. As such, viewer exposure to the Central Section is limited to employees of adjacent industrial uses, vehicular traffic on Missouri Flat Road and SR-49 at the proposed intersection locations and intermittent/obscured views from the EDMUT. As stated in the MC&FP EIR, introduction of a four-lane roadway would not adversely change the visual character of the surrounding industrial area. The change in the visual appearance of the roadway corridor would not negatively impact the visual character of the area. Therefore, impacts to the visual character in

the Central Section, resulting from project construction and the Parkway operation, would be less than significant.

Eastern Section

The proposed project would either underground existing overhead utilities in the Eastern Section (Exhibit 3-7d) or replace approximately 26 existing overhead utility poles with an estimated seven new overhead utility poles (Exhibit 3-7c). In either instance, the reduction or complete removal of overhead utility poles would be beneficial to the visual character of the area.

Within the northern half of the Eastern Section (from Lime Kiln Road to Bradley Drive), proposed project improvements would occur within the existing roadway ROW. This portion of the project would not substantially alter or contribute to changes of the visual character of the area because the visual character already consists of viewsheds that are dominated by roadways (Exhibit 4.2-4b). While construction activities and equipment would temporarily alter the visual character of the project area, viewer response to aesthetic changes would not be significantly affected by the proposed project upon completion. Furthermore, viewer exposure to project construction would be limited to views from adjacent industrial and commercial uses, a single existing residence at the southwest corner of Bradley Drive and SR 49/Diamond Road (Exhibit 4.2-5, Photograph 2), and from vehicles traveling along SR-49 and its intersecting roadways. The single residence at Bradley Drive and SR 49/Diamond Road is located on an industrially zoned parcel and is, therefore a non-conforming use and is not considered a sensitive viewer. As such, the portions of this project consisting of roadway improvements would not substantially degrade the existing visual character of the project site.

In the southern portion of the Eastern Section (from Lime Kiln Road/Black Rice Road to Pleasant Valley Road), SR-49 would be realigned to the west and upgraded to a major two-lane highway (Phase 1) or a major four-lane highway (Phase 2) (Exhibit 4.2-5). In order to accomplish the upgrade, existing driveway encroachments on the east side of SR-49 would be eliminated by constructing a frontage road. The frontage road would be located within the existing SR-49 ROW, beginning approximately 550 feet north of the SR-49/Pleasant Valley Road intersection and ending at the Black Rice Road/SR-49 intersection (Exhibits 3-5a and 3-5b). Additionally, Happy Lane, which currently enters SR-49 approximately 50 feet south of Black Rice Road, would be realigned to intersect with Black Rice Road and allow for the connection of the new frontage road.

The residences located adjacent to the eastern side of this segment of SR-49 are generally oriented towards SR-49 (Exhibit 4.2-5, Photograph 1). Views from these residences include uninterrupted views of the two-lane rural highway, a single residence located west of SR-49, and scattered trees in the background (Exhibit 4.2-5, Photograph 3). Implementation of the proposed project would realign SR-49 to the west, requiring a frontage road in front of these residences, within the existing SR-49 ROW.

Aesthetics, Light, and Glare

A retaining wall would be constructed on the west side of SR-49, along a residential property located at a higher elevation than the roadway; however, a private stucco wall blocks the majority of the views of SR-49 from this residence (Exhibit 4.2-5, Photograph 4).

Views from the residences east of SR-49 after project construction would consist of a frontage road and a major two-lane divided highway, with a retaining wall in the background. Since views from the residences already consist of a two-lane rural roadway and private stucco wall (approximately 6 feet in height), construction of the proposed project would not be considered a significant alteration of the existing visual character. Accordingly, impacts to visual character would be less than significant.

Significance Determination Before Mitigation

Less than significant.

Mitigation Measures from the MC&FP EIR

N/A

Significance Determination After MC&FP Mitigation, and Supporting Rationale

Less than significant.

Additional Mitigation Measures

N/A

Significance Determination After Additional Mitigation, and Supporting Rationale

Less than significant.

EID Intertie Improvements

Impacts related to the visual character of the project resulting from the construction of the EID Intertie Improvements would be temporary. Construction of the improvements would occur entirely within existing ROWs and, upon completion, would not be visible with the exception of approximately three ARVs. ARVs are enclosed in silver metal boxes approximately 60 inches tall, 48 inches wide and 48 inches deep. The ARVs would be discretely located adjacent to the roadway travel lanes, but within the roadway ROW. Due to the industrial and commercial uses within the majority of the proposed project's area, the presence of an ARV would not result in a significant change in visual character. As such, the impacts to visual character would be less than significant.



Photograph 1: View of Residences east of SR 49 between Happy Lane and Pleasant Valley Road looking south.



Photograph 2: View of single residence at corner of SR 49 and Bradley Drive.



Photograph 3: View of wooded parcel west of SR 49 as seen from houses east of SR 49.



Photograph 4: View of single residence and adjoining stucco wall west of SR 49.

Source: Michael Brandman Associates, 2008.



Michael Brandman Associates

33370003 • 05/2010 | 4.2-5 SR 49 Residences.ai

Exhibit 4.2-5 Site Photographs - Views of SR 49 and Surrounding Residences

COUNTY OF EL DORADO DEPARTMENT OF TRANSPORTATION
DIAMOND SPRINGS PARKWAY PROJECT
ENVIRONMENTAL IMPACT REPORT

Light or Glare

Impact 4.2-4: The project has the potential to adversely affect day or nighttime views in the area. (Less than Significant)

Impact Analysis

MC&FP Light and Glare Impacts

The MC&FP EIR concluded that improvements to existing roadways would add new sources of light but that the effects would be consistent with existing settings and, therefore, less than significant, since roadways and associated lighting already exist. Alternatively, construction of new roadways, such as the Interconnector contemplated in the MC&FP EIR, would generally result in a substantial increase in nighttime lighting where previously no lighting was present.

The MC&FP EIR stated that, “the Missouri Flat Road/Pleasant Valley Connector [Interconnector] would introduce new lighting in the form of street lamps and automobile headlights. The land uses in the Connector area are generally industrial, commercial, or vacant. However, there are residences in the vicinity of the roadway in which nighttime lighting would be discernable. In addition, since this is an altogether new road, the new lighting resulting from the road would incrementally add to the existing ambient nighttime lighting. Because this road [Interconnector] would introduce a completely new source of nighttime lighting and this would be visible to some residences in the vicinity of the road, this would be considered a significant impact of this roadway improvement.”

The MC&FP EIR concluded that “development of the Missouri Flat Road/Pleasant Valley Connector [Interconnector] would introduce a completely new source of nighttime lighting, which would be visible to some residences in the vicinity of the road resulting in a significant impact, and it would incrementally add to atmospheric lighting and consequential reduction in the clarity of stars viewed at night which is also considered significant.”

Proposed Project’s Light and Glare Impacts

Since certification of the MC&FP EIR, the proposed Parkway site and vicinity has been further developed according to General Plan designations and currently contains lighting associated with the industrial and commercial uses. Safety lighting is used on numerous adjacent parcels, as well as at the MRF, which also contributes to existing nighttime lighting. Accordingly, existing lighting and glare in the proposed project’s area has increased since the conclusions of the MC&FP EIR.

Under the proposed project, improvements to existing roadways (Diamond Road, Lime Kiln Road, Black Rice Road, Old Depot Road, etc.) would not introduce new sources of light and glare beyond what is currently present. New roadways constructed by the County of El Dorado do not include the provision of street lighting. As such, new sources of lighting along the proposed Parkway would be installed only at signalized intersections and as necessary for traffic safety purposes. All lighting would be directional or shielded in order to reduce light spillage onto adjacent land uses and constructed in accordance with California Department of Transportation Standards.

Aesthetics, Light, and Glare

A single residence is located at the corner of Bradley Street and Diamond Road (SR-49), just north of the Diamond Springs Parkway/Diamond Road (SR-49) intersection. This residence is a non-conforming use located on industrially zoned land, surrounded by industrial uses, and exposed to existing industrially related lighting. Accordingly, any impacts from additional light on this residence would be less than significant.

Several residences are located east of Diamond Road (SR-49) between Black Rice Road and Pleasant Valley Road. The proposed project would replace the existing Diamond Road (SR-49) with a frontage road and realign the Diamond Road (SR-49) ROW further to the west. Accordingly, the distance between the residences and Diamond Road (SR-49) would be increased, diminishing impacts relating to light emanating from cars.

A single residence is located west of Diamond Road (SR-49) between Black Rice Road and Pleasant Valley Road. Because of the proposed project, this residence would be closer to the Diamond Road (SR-49) ROW. However, this residence is located at a higher elevation than the proposed ROW and an existing stucco wall would block any light from the newly aligned ROW.

Any required street lighting would be directionally shielded to avoid unwanted spillover onto adjacent parcels and the majority of land use within the proposed Parkway's vicinity are commercial or industrial and therefore would not be negatively impacted by additional light. In conclusion, although new sources of light would be emitted from new intersection signals, intersection lighting, and vehicular headlights, and new sources of glare would be introduced from light reflecting off vehicles and vehicle windows, this impact is considered less than significant because the project area currently experiences exposure to light and glare that are anticipated to continue after the proposed project's implementation.

Significance Determination Before Mitigation

Less than significant.

Mitigation Measures from the MC&FP EIR

Mitigation Measure 4.3-12 from the MC&FP EIR is not applicable to the proposed project. The mitigation measure stated, "approval of any retail project in the MC&FP Area ... shall be subject to the following lighting standards" (EDAW 1998). Because Mitigation Measure 4.3-12 was specific to retail projects, it does not apply to the proposed project.

Significance Determination After MC&FP Mitigation, and Supporting Rationale

Less than significant.

Additional Mitigation Measures

N/A

Significance Determination After Additional Mitigation, and Supporting Rationale

Less than significant.

EID Intertie Improvements

The EID Intertie Improvements would be located entirely within the Parkway and SR-49 ROW and, upon completion, would not be visible or include lighting of any kind. As such, installation of the EID Intertie Improvements would not result in substantial light or glare impacts in the project area.

4.3 - Air Quality

This section describes the existing air quality and potential effects from construction of the proposed project on the project site and its surrounding area. Descriptions and analysis in this section are based on information contained in the Air Quality Analysis for the Diamond Springs Parkway Project (Michael Brandman Associates [MBA] 2009a) and the Air Quality Analysis for the Highway 49 EID Intertie Improvements Project (MBA 2008a), which are included in this EIR as Appendix C, Air Quality Analysis Technical Reports. This section summarizes the information included in these technical reports.

4.3.1 - Summary

Significant Unavoidable Impacts

Construction and use of the proposed project would not result in any significant unavoidable impacts on air quality.

Potentially Significant Impacts

Construction and use of the proposed project could contribute significantly to climate change. Implementation of mitigation measures included in this section would reduce the magnitude of climate change-related impacts to a less than significant level.

Less Than Significant Impacts

Construction and use of the proposed project would result in less than significant impacts on reactive organic gases (ROG), nitrogen oxides (NO_x), construction- and operational-related carbon monoxide (CO), diesel particulate matter, fugitive dust impacts and naturally occurring asbestos (NOA). The proposed project would also have a less than significant impact on sensitive receptors and odors.

4.3.2 - Environmental Setting

The proposed project is located within unincorporated El Dorado County, California, in the Mountain Counties Air Basin (MCAB). The MCAB comprises Plumas, Sierra, Nevada, Placer (middle portion), El Dorado (western portion), Amador, Calaveras, Tuolumne, and Mariposa counties. The MCAB lies along the northern Sierra Nevada mountain range, close to or contiguous with the Nevada border, and covers an area of roughly 11,000 square miles. The western slope of El Dorado County, from Lake Tahoe on the east to the Sacramento County boundary on the west, lies within the MCAB. Elevations range from over 10,000 feet at the Sierra crest down to several hundred feet above sea level at the Sacramento County boundary. Throughout the County, the topography varies widely: it includes rugged mountain peaks and valleys with extreme slopes and differences in altitude in the Sierras, as well as rolling foothills to the west.

The general climate of the MCAB varies considerably with elevation and proximity to the Sierra Nevada ridge. The terrain features of the MCAB make it possible for various climates to exist

relatively close to each other. The pattern of mountains and hills causes a wide variation in rainfall, temperature, and localized winds throughout the MCAB. Temperature variations have an important influence on MCAB wind flow, dispersion along mountain ridges, vertical mixing, and photochemistry. The Sierra Nevada receives large amounts of precipitation from storms moving in from the Pacific in the winter, with lighter amounts from intermittent “Monsoonal” moisture flows from the south and cumulus buildup in the summer. Precipitation levels are high in the highest mountain elevations but decline rapidly toward the western portion of the MCAB. Winter temperatures in the mountains can be below freezing for weeks at a time, and substantial depths of snow can accumulate, but in the western foothills, winter temperatures usually dip below freezing only at night and precipitation is mixed as rain or light snow. In the summer, temperatures in the mountains are mild, with daytime peaks from 70 to low 80 degrees Fahrenheit (°F), but the western end of the county can routinely exceed 100°F.

From an air quality perspective, the topography and meteorology of the MCAB combine such that local conditions predominate in determining the effect of emissions in each area. Regional airflows are affected by the mountains and hills, which direct surface airflows, cause shallow vertical mixing, and create areas of high pollutant concentrations by hindering dispersion. Inversion layers, where warm air overlays cooler air, frequently occur and trap pollutants close to the ground. In the winter, these conditions can lead to CO “hotspots” along heavily traveled roads and at busy intersections. During summer’s longer daylight hours, stagnant air, high temperatures, and plentiful sunshine provide the conditions and energy for the photochemical reaction between ROG and NO_x, which results in the formation of ozone (O₃).

In the summer, the strong upwind valley air flowing into the MCAB from the Central Valley to the west is an effective transport medium for ozone precursors and ozone generated in the San Francisco Bay Area and the Sacramento and San Joaquin valleys. These transported pollutants predominate as the cause of ozone in the MCAB and are largely responsible for the exceedances of the state and federal standards in the MCAB. The California Air Resources Board (CARB) has officially designated the MCAB as “ozone impacted” by transport from those areas (13 CCR §70500).

4.3.3 - Regional Sources of Air Pollutants

CARB publishes emissions inventory data for air districts and counties. Table 4.3-1 provides a summary of emissions for El Dorado County.

Table 4.3-1: El Dorado County Almanac Emissions Projection Data

Emission Category	Tons Per Day		
	ROG	NO _x	PM ₁₀
Stationary Sources	0.8	0.3	0.5
Areawide Sources	3.7	0.5	16.7

Table 4.3-1 (cont.): El Dorado County Almanac Emissions Projection Data

Emission Category	Tons Per Day		
	ROG	NO _x	PM ₁₀
Mobile Sources	8.0	5.8	0.3
Natural Sources	49.6	0.2	0.5
Total El Dorado in MCAB	62.1	6.8	18.0
Source: CARB, 2008d.			

ROG. Natural sources contributed approximately 80 percent of the 2006 ROG emissions, with biogenic (plant-generated) emissions constituting the majority of natural source missions. Mobile sources accounted for approximately 13 percent of the 2006 emissions inventory.

NO_x. Mobile sources generated the majority of NO_x emissions in the MCAB portion of El Dorado County at approximately 85 percent of the total NO_x inventory.

PM₁₀. For inhalable particulate matter (PM₁₀), areawide sources contributed more than 90 percent of the 2006 inventory. The main PM₁₀-generating areawide sources include unpaved road dust, residential fuel combustion, and paved road dust.

4.3.4 - Local Air Quality

Existing levels of ambient air quality and historical trends and projections of air quality in the proposed project's vicinity are best documented from measurements made near the project site. The nearest monitoring site is in Placerville, approximately 1.5 miles northeast of the proposed project. The monitoring site measures ozone, CO, and PM₁₀. Table 4.3-2 summarizes the latest published monitoring data for each pollutant of concern monitored. The data shows that the ozone is an air quality problem in the area, as all years experienced a violation of the state 1-hour and the federal 8-hour ozone standards.

Table 4.3-2: Air Quality Monitoring Summary

Pollutant	Standard	Monitoring Year		
		2004	2005	2006
Ozone	California Standard			
	1-Hour - 0.09 ppm (no. of days exceeded)	9	17	23
	Federal Primary Standards			
	1-Hour - 0.12 ppm ^a (no. of days exceeded)	0	0	0
	8-Hour - 0.08 ppm (no. of days exceeded)	7	16	20
	Maximum 1-Hour Concentration (ppm)	0.106	0.114	0.114
	Maximum 8-Hour Concentration (ppm)	0.095	0.104	0.102

Table 4.3-2 (cont.): Air Quality Monitoring Summary

Pollutant	Standard	Monitoring Year		
		2004	2005	2006
Respirable particulates (PM ₁₀)	California Standards			
	24-Hour - 50 µg/m ³ (no. of days exceeded)	0	0	0
	Annual Geometric Mean (µg/m ³)	14.8	12.9	14.1
	Federal Primary Standards			
	24-Hour - 150 µg/m ³ (no. of days exceeded)	0	0	0
	Annual Arithmetic Mean (µg/m ³)	15.4	13.5	14.8
	Maximum 24-Hour Concentration (µg/m ³)	51	28	27
Carbon monoxide	California Standards			
	1-Hour - 20 ppm (no. of days exceeded)	0	0	0
	8-Hour - 9.0 ppm (no. of days exceeded)	0	0	0
	Federal Primary Standards			
	1-Hour - 35 ppm (no. of days exceeded)	0	0	0
	8-Hour - 9.5 ppm (no. of days exceeded)	0	0	0
	Maximum 1-Hour Concentration (ppm)	2.4	6.1	1.5
	Maximum 8-Hour Concentration (ppm)	1.9	4.4	0.7
Notes: ^a Data for federal 1-hour standard exceedances included because standard was in effect for monitoring years. ppm = parts per million µg/m ³ = micrograms per cubic meter Source: California Air Quality Data, http://www.arb.ca.gov/aqd/aqdpge.htm , accessed February 2008.				

4.3.5 - Local Sources of Air Pollutants

Nearby sources of air pollution include Missouri Flat Road and the U.S. 50 (US-50) Interchange, Pleasant Valley Road (State Route 49 [SR-49]), Diamond Road (SR-49) and the Western El Dorado County Materials Recovery Facility.

4.3.6 - Sensitive Receptors

The potential for adverse air quality impacts increases as the distance between the source of emissions and members of the public decreases. The EDAQMD's Guide to Air Quality Assessment: Determining Significance of Air Quality Impacts (Guide) states that while impacts on all members of the population should be considered, impacts on sensitive receptors are of particular concern (EDAQMD 2002). Sensitive receptors are facilities that house or attract children, the elderly, people with illnesses or others who are especially sensitive to the effects of air pollutants. Hospitals, schools, and convalescent facilities are examples of sensitive receptors.

The project site is located in a predominantly industrial and commercial setting and, with the exception of the Materials Recovery Facility, the existing sources of air pollution are mainly mobile sources traveling along the nearby regional roadways located near the project site.

CARB's Land Use Handbook

The CARB adopted the Air Quality and Land Use Handbook: A Community Health Perspective (Land Use Handbook). The Land Use Handbook provides information and guidance on siting sensitive receptors in relation to sources of Toxic Air Contaminants (TACs). The sources of TACs identified in the Land Use Handbook are high traffic freeways and roads, distribution centers, rail yards, ports, refineries, chrome plating facilities, dry cleaners, and large gas-dispensing facilities. If a project involves siting a sensitive receptor or source of TAC discussed in the Land Use Handbook, siting mitigation may be added to avoid potential land use conflicts, thereby reducing the potential for health impacts to the sensitive receptors.

In traffic-related studies, the additional non-cancer health risk attributable to proximity was seen within 1,000 feet and was strongest within 300 feet. California freeway studies show about a 70 percent drop off in particulate pollution levels at 500 feet. The CARB recommends avoiding siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles per day, or rural roads with 50,000 vehicles per day.

4.3.7 - Pollutants of Concern

The criteria pollutants of greatest concern for the MCAB are ozone and particulate matter (PM₁₀ and PM_{2.5}). Background concentrations of CO are well below the California ambient air quality standards (CAAQS); however, there is a potential for CO hotspots on congested roadways and at congested intersections. Other pollutants of concern are toxic air contaminants (TACs) and greenhouse gases (GHGs). The proposed project is not expected to produce air emissions containing hydrogen sulfide, sulfates, and vinyl chloride; therefore, these pollutants will not be discussed.

Ozone

Ozone is not emitted directly into the air but is formed by a photochemical reaction between the ozone precursors ROG and NO_x, and sunlight. Because photochemical reaction rates depend on the intensity of ultraviolet light and air temperature, ozone is primarily a summer air pollution problem. Ozone is a regional pollutant that is generated over a large area and is transported and spread by the wind.

As a photochemical pollutant, ozone is formed only during daylight hours under appropriate conditions, but it is destroyed throughout the day and night. Thus, ozone concentrations vary, depending upon both the time of day and the location. Even in pristine areas, some ambient ozone forms from natural emissions that are not controllable. This is termed background ozone. The

average background ozone concentrations near sea level are in the range of 0.015 to 0.035 parts per million (ppm), with a maximum of about 0.04 ppm (CARB 2005).

Ground-level ozone is a respiratory irritant and an oxidant that increases susceptibility to respiratory infections and can cause substantial damage to vegetation and other materials.

Particulate Matter (PM_{10} and $PM_{2.5}$)

PM is the term for a mixture of solid particles and liquid droplets found in the air. Some particles, such as dust, dirt, soot, or smoke, are large or dark enough to be seen with the naked eye. Others are so small they can only be detected using an electron microscope. Particle pollution includes “inhalable coarse particles,” with diameters larger than 2.5 micrometers and smaller than 10 micrometers and “fine particles,” with diameters that are 2.5 micrometers and smaller. These particles come in many sizes and shapes and can be made up of hundreds of different chemicals.

Particle exposure can lead to a variety of health effects. For example, numerous studies link particle levels to increased hospital admissions and emergency room visits—and even to death from heart or lung diseases. Both long- and short-term particle exposures have been linked to health problems. Long-term exposures, such as those experienced by people living for many years in areas with high particle levels, have been associated with problems such as reduced lung function and the development of chronic bronchitis, and even premature death. Short-term exposures to particles (hours or days) can aggravate lung disease, causing asthma attacks and acute bronchitis, and may increase susceptibility to respiratory infections. In people with heart disease, short-term exposures have been linked to heart attacks and arrhythmias. Healthy children and adults have not been reported to suffer serious effects from short-term exposures, although they may experience temporary minor irritation when particle levels are elevated.

Carbon Monoxide

CO is a colorless, odorless gas that is formed when carbon in fuel is not burned completely. It is a component of motor vehicle exhaust, which contributes about 56 percent of all CO emissions nationwide. Higher levels of CO generally occur in areas with heavy traffic congestion.

CO is a public health concern because it combines readily with hemoglobin, reducing the amount of oxygen transported in the bloodstream. High levels of CO can affect even healthy people. At extremely high levels, CO is poisonous and can cause death.

Motor vehicles are the dominant source of CO emissions in most areas. CO is described as having only a local influence because it dissipates quickly. High CO levels develop primarily during winter, when periods of light winds combine with the formation of ground-level temperature inversions (typically from the evening through early morning). These conditions result in reduced dispersion of vehicle emissions. Because CO is a product of incomplete combustion, motor vehicles exhibit

increased CO emission rates at low air temperatures. High CO concentrations occur in areas of limited geographic size, sometimes referred to as hot spots.

Other Pollutants of Concern

Toxic Air Contaminants

A TAC is defined as an air pollutant that may cause or contribute to an increase in mortality or serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at very low concentrations. In general, for those TACs that may cause cancer, there is no concentration that does not present some risk. In other words, there is no threshold level below which adverse health impacts are not expected to occur. This contrasts with the criteria pollutants for which acceptable levels of exposure can be determined and for which the state and federal governments have set ambient air quality standards. According to the California Almanac of Emissions and Air Quality, the majority of the estimated health risk from TACs can be attributed to relatively few compounds, the most important being particulate matter from diesel-fueled engines (DPM). Another TAC of concern in El Dorado County is asbestos since there is a known potential for naturally occurring asbestos.

Diesel Particulate Matter

The CARB identified the PM emissions from diesel-fueled engines as a TAC in August 1998 under California's TAC program. The State of California, after a 10-year research program, determined in 1998 that DPM from diesel-fueled engines is a human carcinogen and that chronic (long-term) inhalation exposure to DPM poses a chronic (long-term) health risk. The California Office of Environmental Health Hazard Assessment (OEHHA) recommends using a 70-year exposure duration for determining residential cancer risks. Diesel PM is emitted from both mobile and stationary sources. In California, on-road diesel-fueled vehicles contribute approximately 40 percent of the statewide total, with an additional 57 percent attributed to other mobile sources such as construction and mining equipment, agricultural equipment, and transport refrigeration units.

Asbestos

Asbestos is listed as a TAC by CARB and as a Hazardous Air Pollutant (HAP) by the EPA. Asbestos is of special concern in El Dorado County because it occurs naturally in surface deposits of several types of rock formations. Crushing or breaking these rocks, through construction or other means, can release asbestiform fibers into the air. Asbestos emissions can result from the sale or use of asbestos-containing materials, road surfacing with such materials, grading activities, and surface mining (EDAQMD 2002). The risk of disease is dependent upon the intensity and duration of exposure. When inhaled, asbestos fibers may remain in the lungs and with time may be linked to such diseases as asbestosis, lung cancer, and mesothelioma.

The EDAQMD is responsible for implementing and enforcing Title 17 §93106 of the California Code of Regulations, Asbestos Airborne Toxic Control Measure-Asbestos-Containing Serpentine. The County, along with other state and federal agencies, are taking measures to define the locations of asbestos-bearing serpentine rock, the potential for public exposure, and procedures to minimize the impacts of NOA.

During construction in areas that contain NOA-containing rock formations, asbestos can be released into the air and pose a health hazard. The Department of Conservation, Division of Mines and Geology (DMG) has a published guide for generally identifying areas that are likely to contain NOA in western El Dorado County (DMG 2002). The screening criterion for determining if a project has the potential to disturb NOA is to identify if the project location is in an area likely to contain NOA. This discussion is limited to NOA as discussed in the Governor's Office of Planning and Research (OPR's) memorandum "Addressing Naturally Occurring Asbestos in CEQA Documents" (OPR 2007).

A Parcel Specific Query was conducted on the EDAQMD's website (2008) to view asbestos information specific to Assessor's Parcel Numbers associated with the proposed project. Current County records indicate these properties are not located within the Asbestos Review Area; therefore, it is not foreseeable that disturbance of soils in the proposed project's area will increase airborne asbestos.

Greenhouse Gases (GHGs)

Unlike criteria air pollutants and TACs, which are pollutants of regional and local concern, greenhouse gases are global pollutants. Worldwide, California is the 12th to 16th largest emitter of CO₂ and is responsible for approximately 2 percent of the world's CO₂ emissions (California Energy Commission [CEC] 2006). In 2004, California produced 497 million gross metric tons of carbon dioxide-equivalent (CARB 2007b).

Gases that trap heat in the atmosphere are called greenhouse gases. The effect is analogous to the way a greenhouse retains heat. Common greenhouse gases include water vapor, carbon dioxide, methane, nitrous oxides, chlorofluorocarbons, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, ozone, and aerosols. Natural processes and human activities emit greenhouse gas. The presence of greenhouse gases in the atmosphere affects the earth's temperature. Without the natural heat-trapping effect of greenhouse gas, the earth's surface would be about 34° Centigrade (93°F) cooler (Climate Action Team [CAT] 2006). However, it is believed that emissions from human activities, such as electricity production and vehicle use, have elevated the concentration of these gases in the atmosphere beyond the level of naturally occurring concentrations.

Individual greenhouse gas compounds have varying warming potentials and atmospheric lifetimes. The reference gas for global warming potential is carbon dioxide. Carbon dioxide has a global warming potential of 1. The calculation of the carbon dioxide equivalent is a consistent methodology

for comparing greenhouse gas emissions, since it normalizes various greenhouse gas emissions to a consistent metric. Methane's warming potential of 23 indicates that methane has a global warming effect 23 times greater than carbon dioxide on a molecule per molecule basis. A carbon dioxide equivalent is the mass emissions of an individual greenhouse gas multiplied by its global warming potential.

The following greenhouse gases are defined under Assembly Bill 32, but are not expected to be generated by the project: chlorofluorocarbons, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Table 4.3-3 contains descriptions of the major greenhouse gases expected to be generated by the project.

Table 4.3-3: Greenhouse Gases

Greenhouse Gas	Description and Physical Properties	Sources
Ozone (O ₃)	Ozone is a short-lived local greenhouse gas and photochemical pollutant. Tropospheric ozone changes contribute to radiative forcing on a global scale. Global warming potential for short-lived greenhouse gases, such as ozone and aerosols, are not defined by the IPCC.	Ozone is formed from reactions of ozone precursors (nitrogen oxides [NO _x] and volatile organic compounds [VOC]) and sunlight in the atmosphere. VOC and NO _x are emitted from automobiles, solvents, and fuel combustion.
Methane (CH ₄)	Methane is a flammable gas and is the main component of natural gas. global warming potential = 21.	A natural source of methane is from the anaerobic decay of organic matter. Methane is extracted from geological deposits (natural gas fields). Other sources are from landfills, fermentation of manure, and cattle.
Nitrous oxide (N ₂ O)	Nitrous oxide is also known as laughing gas and is a colorless greenhouse gas. global warming potential = 310.	Microbial processes in soil and water, fuel combustion, and industrial processes.
Carbon dioxide (CO ₂)	Carbon dioxide is an odorless, colorless, natural greenhouse gas. Global warming potential = 1.	Carbon dioxide is emitted from natural and anthropogenic sources. Natural sources include decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic sources are from burning coal, oil, natural gas, and wood. The concentration in 2005 was 379 ppm, which is an increase of about 1.4 ppm per year since 1960.
<p>Notes: ppm = parts per million; ppt = parts per trillion (measure of concentration in the atmosphere). Source: Intergovernmental Panel on Climate Change, 2007.</p>		

4.3.8 - Regulatory Framework

Air pollutants are regulated at the national, state, and air basin level; each agency has a different degree of control. The EPA regulates at the national level. The CARB regulates at the state level. The EDAQMD regulates at the air basin level, maintaining ambient air monitoring sites, and regulating stationary sources and indirect sources.

Federal and State Regulatory Agencies

The EPA handles global, international, national, and interstate air pollution issues and policies. The EPA sets national vehicle and stationary source emission standards, oversees approval of all State Implementation Plans (SIPs), and provides research and guidance in air pollution programs, and sets National Ambient Air Quality Standards (NAAQS), also known as federal standards. There are NAAQS for six common air pollutants, called criteria air pollutants, which were identified resulting from provisions of the Clean Air Act of 1970 (CAA). The six criteria pollutants are:

- Ozone
- Particulate matter (PM₁₀ and PM_{2.5})
- Nitrogen dioxide
- Carbon monoxide (CO)
- Lead
- Sulfur dioxide

The NAAQS were set to protect public health, including that of sensitive individuals; thus, the standards continue to change as more medical research is available regarding the health effects of the criteria pollutants.

The SIP for the State of California is administered by CARB, which has overall responsibility for statewide air quality maintenance and air pollution prevention. A SIP is a document prepared by each state describing existing air quality conditions and measures that will be followed to attain and maintain NAAQS. The SIP incorporates the individual plans for regional air districts. Regional air quality attainment plans (AQPs) prepared by individual regional air districts are sent to the CARB to be approved and incorporated into the California SIP. SIPs include the technical foundation for understanding the air quality (e.g., emission inventories and air quality monitoring), control measures and strategies, and enforcement mechanisms. The CARB also administers California Ambient Air Quality Standards (CAAQS) for the 10 air pollutants designated in the California Clean Air Act (CCAA). The 10 state air pollutants are the six national criteria pollutants plus:

- Visibility reducing particulates
- Hydrogen sulfide (H₂S)
- Sulfates
- Vinyl chloride

In addition to the SIP, state ozone standards have planning requirements. However, state PM₁₀ standards have no attainment planning requirements, but air districts must demonstrate that all measures feasible for the area have been adopted. The federal and state ambient air quality standards and the most relevant effects are summarized in Table 4.3-4.

Table 4.3-4: Ambient Air Quality Standards

Air Pollutant	Averaging Time	California Standard	National Standard	Most Relevant Effects
Ozone	1-hour	0.09 ppm	—	(a) Decrease of pulmonary function and localized lung edema in humans and animals; (b) risk to public health implied by alterations in pulmonary morphology and host defense in animals; (c) increased mortality risk; (d) risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (e) vegetation damage; (f) property damage.
	8-hour	0.070 ppm	0.075 ppm	
Carbon Monoxide (CO)	1-hour	20 ppm	35 ppm	(a) Aggravation of angina pectoris (chest pain or discomfort) and other aspects of coronary heart disease; (b) decreased exercise tolerance in persons with peripheral vascular disease and lung disease; (c) impairment of central nervous system functions; (d) possible increased risk to fetuses.
	8-hour	9.0 ppm	9 ppm	
Nitrogen Dioxide (NO ₂)	1-hour	0.18 ppm	0.100 ppm	(a) Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; (b) risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; (c) contribution to atmospheric discoloration.
	Mean	0.030 ppm	0.053 ppm	
Sulfur Dioxide (SO ₂)	1-hour	0.25 ppm	—	Bronchoconstriction accompanied by symptoms which may include wheezing, shortness of breath and chest tightness, during exercise or physical activity in persons with asthma.
	24-hour	0.04 ppm	0.14 ppm	
	Mean	—	0.030 ppm	
Particulate Matter (PM ₁₀)	24 hour	50 µg/m ³	150 µg/m ³	(a) Exacerbation of symptoms in sensitive patients with respiratory or cardiovascular disease; (b) declines in pulmonary function growth in children; (c) increased risk of premature death from heart or lung diseases in the elderly.
	Mean	20 µg/m ³	—	
Particulate Matter (PM _{2.5})*	24-hour	—	35 µg/m ³	
	Mean	12 µg/m ³	15.0 µg/m ³	

Table 4.3-4 (cont.): Ambient Air Quality Standards

Air Pollutant	Averaging Time	California Standard	National Standard	Most Relevant Effects
Sulfates	24-hour	25 µg/m ³	—	(a) Decrease in ventilatory function; (b) aggravation of asthmatic symptoms; (c) aggravation of cardio-pulmonary disease; (d) vegetation damage; (e) Degradation of visibility; (f) property damage.
Lead	30-day	1.5 µg/m ³	—	(a) Learning disabilities; (b) impairment of blood formation and nerve conduction.
	Quarter	—	1.5 µg/m ³	
	Rolling 3-month average	—	0.15 µg/m ³	

Notes:

ppm = parts per million (concentration)

Mean = Annual Arithmetic Mean

Source: CARB, 2010.

µg/m³ = micrograms per cubic meter

30-day = 30-day average

Quarter = calendar quarter

Toxic Air Contaminant Regulations

The California legislature enacted the Toxic Air Contaminant Identification and Control Act (AB 1807; Tanner 1983) governing the release of TACs into the air. This law charges the CARB with the responsibility for identifying substances as TACs, setting priorities for control, adopting control strategies, and promoting alternative processes. The CARB has designated almost 200 compounds as TACs. AB 2588, the Air Toxics “Hot Spots” Program, was enacted in 1987, and requires stationary sources to report the types and quantities of certain substances routinely released into the air. The goals of the Air Toxics “Hot Spots” Act are to collect emission data, to identify facilities having localized impacts, to ascertain health risks, to notify nearby residents of significant risks, and to reduce those significant risks to acceptable levels. Additionally, the CARB has implemented control strategies, called Airborne Toxic Control Measures, for a number of compounds that pose high health risk and show potential for effective control, including DPM and asbestos. CARB also prepares the California Toxics Inventory, and provides Risk Management Guidelines for new and modified sources of TACs. Detailed information can be found at the CARB’s Air Toxics Program webpage at <http://www.arb.ca.gov/toxics/toxics.htm>.

Climate Change

The State of California has enacted key legislation in an effort to reduce its contribution to climate change, as discussed below.

On June 1, 2005, the Governor issued Executive Order S 3-05, which set the following greenhouse gas emission reduction targets:

- By 2010, reduce greenhouse gas emissions to 2000 levels;
- By 2020, reduce greenhouse gas emissions to 1990 levels;
- By 2050, reduce greenhouse gas emissions to 80 percent below 1990 levels.

To meet these targets, the Climate Action Team prepared a report to the Governor in 2006 that contains recommendations and strategies to help ensure the targets in Executive Order S-3-05 are met (2006 CAT Report).

In 2006, the California State Legislature enacted Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006. AB 32 focuses on reducing greenhouse gas emissions in California. Greenhouse gases, as defined under AB 32, include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. AB 32 requires that greenhouse gases emitted in California be reduced to 1990 levels by the year 2020. Under AB 32, CARB is the state agency charged with monitoring and regulating sources of emissions of greenhouse gases that cause global warming in order to reduce emissions of greenhouse gases. CARB approved a 1990 greenhouse gas emissions level of 427 million metric tons of carbon dioxide equivalent (MMTCO₂e), on December 6, 2007. Therefore, in 2020, emissions in California are required to be at or below 427 MMTCO₂e.

Under the current “business as usual” (BAU) scenario, statewide emissions are increasing at a rate of approximately 1 percent per year as noted in Table 4.3-5. Also shown are the average reductions needed from all statewide sources (including all existing sources) to reduce greenhouse gas emissions back to 1990 levels.

Table 4.3-5: AB 32 Necessary Reductions

Year	BAU Emissions Projection	Necessary Reductions
1990	427 MMTCO ₂ e	None *
2004	480 MMTCO ₂ e	11% reduction
2008	495 MMTCO ₂ e	14% reduction
2020	296 MMTCO ₂ e	28% reduction
Notes: * Year 1990 emissions are the target baseline. Source: California Air Resources Board. 2008. AB 32 Scoping Plan: A Framework for Change. December 11.		

Under AB 32, CARB published its Final Expanded List of Early Action Measures to Reduce Greenhouse Gas Emissions in California in October 2007. Discrete Early Action Measures are currently underway or are enforceable by January 1, 2010. Early Action Measures are regulatory or non-regulatory measure that are currently underway or to be initiated by the CARB in the 2007 to 2012 timeframe. CARB has 44 early action measures that apply to the transportation, commercial,

forestry, agriculture, cement, oil and gas, fire suppression, fuels, education, energy efficiency, electricity, and waste sectors. Of those 44 early action measures, nine are considered discrete Early Action Measures. CARB estimates that the 44 recommendations will result in reductions of at least 42 MMTCO₂e by 2020, representing approximately 25 percent of the 2020 target.

CARB's Governing Board approved the Climate Change Scoping Plan (Scoping Plan) in December 2008. The Scoping Plan outlines actions to obtain the goal set out in AB 32 of reducing emissions to 1990 levels by the year 2020. The Scoping Plan "proposes a comprehensive set of actions designed to reduce overall greenhouse gas emissions in California, improve our environment, reduce our dependence on oil, diversify our energy sources, save energy, create new jobs, and enhance public health" (California Air Resources Board, 2008a). The measures in the Scoping Plan will be in place by 2012. The Scoping Plan's recommendations for reducing greenhouse gas emissions to 1990 levels by 2020 providing for emission reduction measures, including a cap-and-trade program linked to Western Climate Initiative partner jurisdictions, green building strategies, recycling and waste-related measures, and Voluntary Early Actions and Reductions. AB 32 did not amend CEQA or establish regulatory standards to be applied to new development or environmental review of projects within the State.

The Scoping Plan states that "The 2020 goal was established to be an aggressive, but achievable, mid-term target, and the 2050 greenhouse gas emissions reduction goal represents the level scientists believe is necessary to reach levels that will stabilize climate" (California Air Resources Board, 2008a, page 4). The year 2020 goal of AB 32 corresponds with the mid-term target established by S-3-05, which aims to reduce California's fair-share contribution of greenhouse gases in 2050 to levels that will stabilize the climate.

SB 97 was passed in August 2007, and added Section 21083.05 to the Public Resources Code. The code states "(a) On or before July 1, 2009, the Office of Planning and Research shall prepare, develop, and transmit to the Resources Agency guidelines for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions as required by this division, including, but not limited to, effects associated with transportation or energy consumption. (b) On or before January 1, 2010, the Resources Agency shall certify and adopt guidelines prepared and developed by the Office of Planning and Research pursuant to subdivision (a)."

The Office of Planning and Research transmitted proposed SB 97 CEQA Guidelines Amendments to the Natural Resources Agency on April 13, 2009. On July 3, 2009, the Natural Resources Agency commenced the Administrative Procedure Act rulemaking process for certifying and adopting these amendments pursuant to Public Resources Code section 21083.05. On December 31, 2009, the Natural Resources Agency delivered its rulemaking package to the Office of Administrative Law for their review pursuant to the Administrative Procedure Act. The Adopted Amendments became effective March 18, 2010.

The CEQA Guideline Amendments Section 15064.4(a) states, "...A lead agency shall have discretion to determine, in the context of a particular project, whether to: (1) Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use...; or (2) Rely on a qualitative analysis or performance based standards."

A new section, CEQA Guidelines § 15064.4, was included to assist agencies in determining the significance of GHG emissions. The new Guidelines section allows agencies the discretion to determine whether a quantitative or qualitative analysis is best for a particular project. Importantly, however, little guidance is offered on the crucial next step in this assessment process—how to determine whether the project's estimated GHG emissions are significant or cumulatively considerable. The CEQA Guidelines Amendments include the following considerations assessing the significance of impacts from greenhouse gas emissions on the environment:

- (1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting.
- (2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- (3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must include specific requirements that reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

Also amended were CEQA Guidelines §§ 15126.4 and 15130, which address mitigation measures and cumulative impacts respectively. In the proposed revision, GHG mitigation measures are referenced in general terms, but no specific measures are championed by OPR. The proposed revision to the cumulative impact discussion requirement (§ 15130) simply directs agencies to analyze GHG emissions in an EIR when a project's incremental contribution of emissions may be cumulatively considerable; however, it does not answer the question of when emissions are cumulatively considerable.

In addition, the amendments revise Appendix F of the CEQA Guidelines, which focuses on Energy Conservation, and Appendix G, which includes the sample Environmental Checklist Form. Appendix G Checklist was amended to include the following questions. Would the project:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?
- Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs?

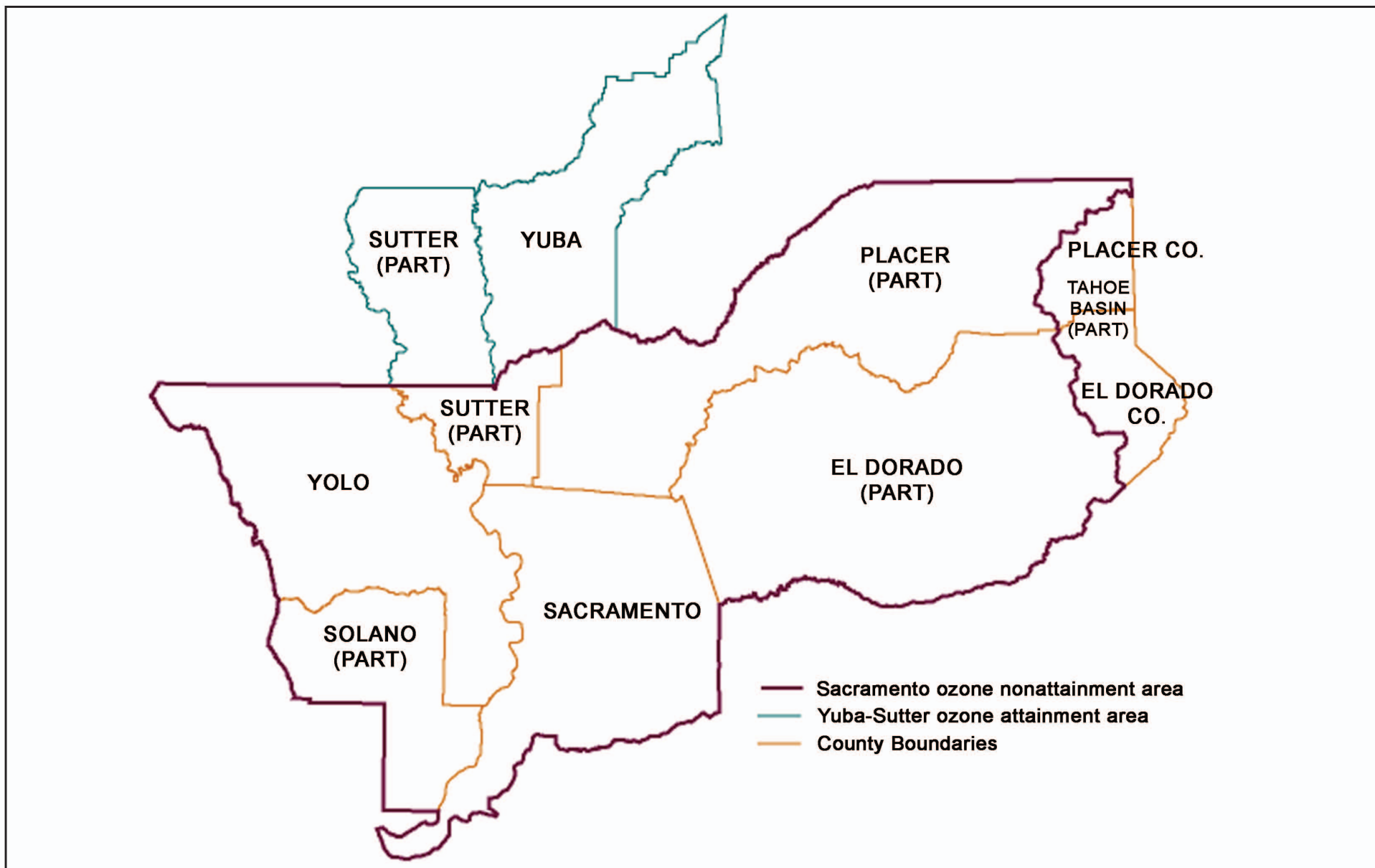
OPR published “CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act (CEQA) Review,” a technical advisory which offers informal guidance regarding the steps lead agencies should take to address climate change in their CEQA documents (OPR 2008). The advisory indicates that each public agency needs to develop its own approach for climate change analyses. The steps for the analysis include the following: identify and quantify greenhouse gas emissions; assess the significance of impact; and identify alternatives and/or mitigation measures to reduce the impacts. The advisory does not specify thresholds or approaches for the analysis. This climate change analysis for the project follows the guidance presented in the OPR’s advisory.

On January 8, 2008, the California Air Pollution Control Officers Association (CAPCOA) released “CEQA & Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act,” a paper to provide information and tools for public agencies. The paper contains a disclaimer that it is not a guidance document but a resource to enable local decision makers to make the best decisions they can in the face of incomplete information during a period of change. The paper does not endorse any particular approach. It discusses three groups of potential thresholds, including a no significance threshold, a threshold of zero, and a non-zero threshold (CAPCOA 2008). The non-zero quantitative thresholds identified in the paper range from 900 to 50,000 metric tons per year.

El Dorado County Air Quality Management District

The air pollution control agency for the whole of El Dorado County is the EDAQMD. The MCAB portion of El Dorado County lies within the area designated by the EPA as the Sacramento Federal Ozone Nonattainment Area (SFONA), comprised of Sacramento and Yolo counties, and parts of El Dorado, Solano, Placer, and Sutter counties (Exhibit 4.3-1).

The EDAQMD is the local agency with primary responsibility for compliance with both the federal and state standards and for ensuring that air quality conditions are maintained. The EDAQMD accomplishes its responsibility through a comprehensive program of planning, regulation, enforcement, and promotion of air quality issues.



Source: Feather River Air Quality Management District 2008.



NOT TO SCALE

Michael Brandman Associates

11730025 • 09/2008 | 4.3-1 _sac_fed_ozone_nonattainment_area.pdf

Exhibit 4.3-1 Sacramento Federal Ozone Nonattainment Area

COUNTY OF EL DORADO DEPARTMENT OF TRANSPORTATION
DIAMOND SPRINGS PARKWAY PROJECT
ENVIRONMENTAL IMPACT REPORT

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

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

Attainment Status and Current Air Quality Plans

Three terms are used to describe if an air basin is exceeding or meeting federal and state standards: Attainment, Nonattainment, and Unclassified. Air basins are assessed for each applicable standard, and they receive a designation for each standard based on that assessment. If an ambient air quality standard is exceeded, the air basin is designated as “nonattainment” for that standard. An air basin is designated as an “attainment” area for standards that are met. If there is inadequate or inconclusive data to make a definitive attainment designation for an air quality standard, the air basin is considered “unclassified.” The current attainment designations for the project area are shown in Table 4.3-6.

Federal nonattainment areas are further divided into classifications—severe, serious, or moderate—as a function of deviation from standards. As of June 15, 2005, the EPA revoked the 1-hour ozone standard in all areas except the 8-hour ozone nonattainment Early Action Compact (EAC) Areas. Therefore, the federal 1-hour ozone standard is only applicable to certain areas. The EDAQMD is not listed as an EAC area; therefore, the federal 1-hour ozone standard does not apply to the project area. However, the EDAQMD is still subject to anti-backsliding requirements such as continuation of 1-hour ozone control strategies.

Table 4.3-6: Attainment Status

Pollutant	Averaging Time	National Status	State Status
Ozone	1-hour	No Federal Standards ¹	Nonattainment
Ozone	8-hour	Serious Nonattainment	No state standard
PM ₁₀	24-hour; Annual	Unclassified	Nonattainment
PM _{2.5}	24-hour; Annual	Nonattainment ²	Unclassified
Carbon monoxide	1-hour and 8-hour	Unclassifiable/Attainment	Unclassified

Exhibit 4.3-6 (cont.): Sacramento Federal Ozone Nonattainment Area

Pollutant	Averaging Time	National Status	State Status
Nitrogen dioxide	1-hour and Annual	Unclassifiable/Attainment	Attainment
Sulfur dioxide	24-hour; 1-hour	Unclassified	Attainment
Notes: ¹ The federal one-hour ozone standard was revoked on June 15, 2005. ² The 2006 standard. The US Environmental Protection Agency (EPA) Administrator signed the final PM _{2.5} nonattainment designations for Sacramento on October 8, 2009. Source: CARB, 2006. National Status from EPA, 2010.			

For the federal ozone standard, the EPA has identified Sacramento and Yolo counties, and parts of El Dorado, Solano, Placer, and Sutter counties as the Sacramento Federal Ozone Nonattainment Area, also called the Sacramento Region (Exhibit 4.3-1). In response to the complex factors that contribute to the regional ozone problem, the air districts that govern in the region jointly developed and approved a plan for achieving attainment, as discussed below. The EDAQMD is responsible for participating in the development, updating, and implementation of the Air Quality Management Plan (AQMP) for the SFONA.

Current Air Quality Plans

The following discusses federal and State attainment plans applicable to the proposed project.

Federal Air Quality Attainment Plan

The federal attainment plan for the Sacramento Region is the 1994 Sacramento Area Regional Ozone Attainment Plan, also called the Sacramento Regional Clean Air Plan. The air districts of the Sacramento Region adopted a Rate of Progress Plan for the federal 8-hour ozone standard in 2006.

A draft 8-hour Attainment Demonstration Plan was released for public comment in September 2008, and adopted by the various air districts' boards in early 2009. On March 26, 2009, the ARB approved the 2009 Sacramento Regional 8 Hour Ozone Attainment and Reasonable Further Progress Plan (Plan). The plan sets out a strategy for attaining the 1997 federal 8-hour ozone standard in the Sacramento Nonattainment Area by 2018.

State Air Quality Attainment Plans

The CCAA does not contain planning requirements for areas in nonattainment of the state PM₁₀ standards, but air districts must demonstrate to the CARB that all feasible measures for their district have been adopted.

The CCAA requires air districts that are nonattainment of the state ozone standards to adopt air quality attainment plans and to review and revise their plans to address deficiencies in interim measures of progress once every 3 years.

District Rules Applicable to the Project

As discussed above, the AQMP for the SFONA establishes a program of rules and regulations administered by the EDAQMD in El Dorado County to obtain attainment of the national air quality standards. The rules and regulations that apply to this project include but are not limited to the following:

- EDAQMD Rule 224 governs the sale and use of asphalt and limits the VOC content in asphalt.
- EDAQMD Rule 223-1 governs the amount of particulate matter entrained in the ambient air as a result of anthropogenic (man-made) fugitive dust sources by requiring actions to prevent, reduce, or mitigate fugitive dust emissions and applies to any construction or construction related activities, including, but not limited to, land clearing, grubbing, scraping, travel on-site, and travel on access roads. This rule also applies to all sites where carryout or trackout has occurred or may occur on paved public roads or the paved shoulders of a paved public road.
- EDAQMD Rule 223-2 may potentially apply if any portion of the area to be disturbed is located in a geographic ultramafic rock unit or if naturally occurring asbestos is discovered during construction. This rule reduces the amount of asbestos entrained into the air as a result of construction or construction-related activities.
- EDAQMD Rule 300 applies to open burning. The burning of unsalable wood waste from trees, vines, and bushes on property being developed for commercial or residential purposes is allowed to burn as long as there is compliance with provisions in the rule regarding minimum drying time, no-burn days, smoke management, and obtain a burning permit.

Local Government

El Dorado County General Plan

The local government with jurisdiction of the project area is El Dorado County. The goals, policies, and implementation programs from the 2004 General Plan are considered in this analysis. Appendix J, General Plan Policies and Project Consistency Evaluation, of this Draft EIR provides a matrix that lists the General Plan policies determined to have relevance to this proposed project and provides a summary of the County's determination of project consistency with each relevant goal and policy. As shown in Appendix J, the project is consistent with all applicable goals, objectives and policies regarding air quality including cumulative air impacts, air quality plan conflicts, exposure of sensitive receptors to pollutants, and exposure to odors.

Certain General Plan policies related to water conservation and biological resource conservation (Policy 7.3.1.2 and 7.4.4.4, respectively) have related effects on air quality. Water conservation affects air quality through the reduction in air pollutant emissions generated by the transport and treatment of water, and reduces offsite energy consumption. Tree replacement and retention affects air quality through carbon sequestration. A Tree Benefit Estimator indicated that trees have varying

carbon sequestration depending on the age (Sacramento Municipal Utility District 2007). A 1-year-old tree would sequester 0.003 ton of carbon dioxide per year, a 5-year-old tree would sequester 0.02 ton of carbon dioxide per year, and a mature tree would sequester 0.161 ton of carbon dioxide per year.

El Dorado County Resolution No. 29-2008

On March 25, 2008, the El Dorado County Board of Supervisors adopted the “Environmental Vision for El Dorado County” Resolution No. 29-2008, brought forward by the Youth Commission. The Resolution sets forth goals and calls for implementation of positive environmental changes to reduce global impact, improve air quality and reduce dependence on landfills, promote alternative energies, increase recycling, and encourage local governments to adopt green and sustainable practices.

El Dorado County Department of Transportation Standard Procedures/Requirements Applicable to Project Construction

The project would be constructed in accordance with the Public Contracts Code of the State of California, the State of California Department of Transportation Standard Plans and Standard Specifications, and the Contract, Project Plans, and Project Special Provisions under development by the County of El Dorado Department of Transportation. The DOT would retain a construction contractor to construct the proposed improvements and the contractor would be responsible for compliance with all applicable rules, regulations and ordinances associated with construction activities and for actual implementation of the construction-related mitigation measures to be adopted for the proposed project. DOT would provide construction contractor oversight and management and would be responsible for verifying mitigation measure implementation.

The following are a combination of standard and project-specific procedures/requirements applicable to project construction that are related to air quality:

- Construction contract special provisions will require that a traffic management plan be prepared. The traffic management plan will include construction staging and traffic control measures to be implemented during construction to maintain and minimize impacts to traffic during construction.

Air Benefit: Decreased congestion and idling emissions.

- Contract special provisions will require compliance with EDAQMD Rules 223 and 223-1 to minimize fugitive dust emissions and the potential for risk of disturbance to naturally occurring asbestos. Compliance with EDAQMD Rules for fugitive dust will require the preparation of a Fugitive Dust Best Management Practices Plan that will describe the application of standard best management practices, as described in EDAPQMD Rule 223-1, to control dust during construction. Best management practices will include applying water to disturbed soils a minimum of two times per day, covering haul vehicles, replanting disturbed areas as soon as

practical, restricting vehicle speeds on unpaved roads to 15 mph, and other measures, as deemed appropriate to control fugitive dust.

Air Benefit: Minimization of construction emissions associated with construction of the proposed project.

- Compliance with the California Air Resources Board Airborne Toxic Control Measure at Title 17 Section 93105 addressing Construction, Grading, Quarrying, and Surface Mining activities and with the Asbestos ATCM for Surfacing Applications (California Code of Regulations, Title 17, Section 93106).

Air Benefit: Control of toxic air emissions.

4.3.9 - Project Impact Analysis

Methodology for Analysis

This impact analysis was conducted within the context of the California Environmental Quality Act (CEQA, California Public Resources Code Sections 21000, et seq.). The methodology follows the Guide to Air Quality Assessment - Determining Significance of Air Quality Impacts Under the California Environmental Quality Act (Guide) prepared by EDAQMD to facilitate the evaluation and review of air quality impacts for projects under CEQA.

Approach to Analysis

EDAQMD's Guide distinguishes between short-term and long-term impacts of projects. Short-term impacts are those that can occur during site grading and project construction. Long-term air quality impacts are those that can occur once the project is in operation. Air quality impacts can be qualitatively or quantitatively determined.

The proposed project was included in the Circulation Element of the General Plan (El Dorado County 2004, as amended 2008). Operational emissions from the buildout of the El Dorado County General Plan were determined to have a significant and unavoidable impact (EDAW 2003).

The project itself would not generate new operational emissions in the form of new traffic, but it would result in modified traffic patterns in the general project area; therefore, regional pollutant emissions from operations (vehicle use) are not quantified. However, carbon monoxide and TACs (localized pollutants) are addressed in this analysis, as the realignment would move the location of operational emissions in relation to sensitive receptors.

Climate Change Analysis

OPR has included climate change impacts in proposed amendment to the CEQA Guidelines; therefore, the impacts of climate change are included in this analysis.

This analysis includes a CEQA-level climate change discussion, a threshold of significance, and an evaluation of the potential impact of the proposed project based on the intent of AB 32.

Thresholds of Significance

According to the CEQA Guidelines' Appendix G Environmental Checklist, to determine whether impacts to air quality are significant environmental effects, the following questions are analyzed and evaluated. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.

Would the project:

- a.) Conflict with or obstruct implementation of the applicable air quality plan?
- b.) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?
- c.) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?
- d.) Expose sensitive receptors to substantial pollutant concentrations?
- e.) Create objectionable odors affecting a substantial number of people?

Along with the above guidelines from the CEQA Checklist, the additional impacts are addressed in this section pursuant to EDAQMD and State guidance:

- f.) Would the project exceed the EDAQMD significance thresholds during construction or operation of the project?
- g.) Would the project cause or contribute to a carbon monoxide violation from project-related and cumulative traffic during operation?
- h.) Does the project comply with the provisions of an adopted Greenhouse Gas Reduction Plan or Strategy? If no such Plan or Strategy is applicable, would the project significantly hinder or delay California's ability to meet the reduction targets contained in AB 32?

Impact Statements and Mitigation Discussions

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate. The MC&FP EIR impact assessment and mitigation measures are included where appropriate, since the proposed project must comply with regulations set forth by the prior programmatic level EIR. Further analysis or mitigation required beyond that of the

MC&FP EIR is included where necessary. Potential cumulative effects are discussed in Section 6.0 of this Draft EIR.

Air Quality Plan

Impact 4.3-1: The project has the potential to conflict with or obstruct implementation of the applicable air quality plan. (Less than Significant)

EDAQMD Significance Criteria

The CEQA Guidelines states that projects in the MCAB are consistent with the AQAP if:

1. The project requires a change in the existing land use designation (i.e., general plan amendment, rezone, and projected emissions (ROG, NO_x, CO or PM₁₀) are not greater than the emissions anticipated for the site if developed under the existing land use designation;
2. The project does not exceed the “project alone” significance criteria;
3. The lead agency for the project requires the project to implement any applicable emission reduction measures contained in and/or derived from the AQAP; or
4. The project complies with all applicable EDAQMD rules and regulations.

Impact Analysis

As discussed in Section 4.3.9, Regulatory Framework, the applicable AQMP for the project area is the 1994 Sacramento Regional Clean Air Plan.

The project will not require any land use designation changes. It was determined that the project would not contribute to air quality violations because it does not exceed the EDAQMD thresholds for ROG or NO_x emissions. The existing General Plan includes the project in its Circulation Element. The AQMP uses General Plan land use designations for their growth assumptions. The project would not result in an increase in population in the Basin; therefore, it is consistent with the assumption in the AQMP and the General Plan. Since this project is consistent with the General Plan, the AQMP assumptions remain valid and there would be no impact.

The AQMP contains a number of land use and transportation control measures that include the EDAQMD’s Stationary and Mobile Source Control Measures and State Control Measures proposed by CARB. CARB’s strategy for reducing mobile source emissions include the following approaches: adopt new engine standards, reduce emissions from in-use fleets, require clean fuels, support alternative fuels and reduce petroleum dependency, work with the EPA to reduce emissions from federal and state sources, and pursue long-term advanced technology measures. The project will indirectly comply with the control measures set by CARB by increasing existing roadway efficiencies, which will reduce mobile source emissions. Additionally, as discussed in an earlier under EDAQMD Rules Applicable to the Project, the project will comply with all of the EDAQMD’s applicable rules and regulations. Therefore, the project complies with this criterion.

Air Quality

The project does not exceed the EDAQMD thresholds for short-term construction; therefore, the project would not contribute to an air quality violation. Considering that criterion, the project is consistent with the AQMP. The project complies with the growth assumptions in the AQMP. The project will comply with applicable control measures in the AQMP. Therefore, the project is consistent with all three criteria.

Significance Determination Before Mitigation

Less than significant impact. The project would comply with the EDAQMD's control measures and would not exceed EDAQMD thresholds of significance nor contribute to a CO violation, nor expose sensitive receptors to substantial pollutant concentrations.

Mitigation Measures from the MC&FP EIR

N/A

Significance Determination After MC&FP Mitigation, and Supporting Rationale

Less than significant impact.

Additional Mitigation Measures

No mitigation measures required.

Significance Determination After Additional Mitigation, and Supporting Rationale

Less than significant impact.

EID Intertie Improvements

El Dorado Irrigation District (EID) would construct the Highway 49 Intertie Improvements Project concurrent with the proposed project. As described in more detail below, under Impact 4.3-2, the proposed EID Intertie Improvements would result in additional contribution of pollutants during construction that by themselves, and/or in combination with the project, would not be significant. Impacts from constructing the EID Intertie Improvements would therefore be less than significant.

Construction Emissions

Air Quality Standards/Violations

Impact 4.3-2:	The project has the potential to violate an air quality standard or contribute substantially to an existing or projected air quality violation from construction impacts. (Less than Significant)
----------------------	--

EDAQMD Significance Criteria

EDAQMD has established quantitative significance criteria for ozone. If any of the thresholds are exceeded, then a project is deemed to have a significant air quality impact. The daily operational emissions "significance" thresholds are 82 pounds per day of ROG or NO_x.

Table 4.3-7: Ozone Precursor Significance Thresholds

Pollutant	Pounds per Day
NO _x	82
ROG	82
Source: EDAQMD, 2002.	

Impact Analysis

Short-term construction impacts associated with the proposed project will include fugitive dust and other particulate matter, as well as exhaust emissions generated by rough grading, excavation and site work. Short-term impacts will also include emissions generated during construction of structural facilities (structural forms, rebar and conduits), paving and striping, and the use of personal vehicles by construction workers.

The EDAQMD's CEQA Guide says that construction emissions for road construction and road widening projects can be estimated using the latest version of the Roadway Construction Emissions Model developed by the Sacramento Metropolitan AQMD. The Roadway Construction Emissions Model is a Microsoft Excel worksheet available to assess the emissions of linear construction projects. The worksheet can be used to estimate emissions for both vehicle exhaust and fugitive dust. The methodology used to estimate fugitive dust emissions is a simplified methodology involving estimates of the maximum area (acreage) of land disturbed daily. DOT provided a construction phasing schedule for the project. The phases and modeling assumptions are described below:

Phase 1 (Diamond Road (SR-49) segment): For purposes of this study, it is assumed that this phase would begin construction in April 2011. This phase would involve improvements to Diamond Road (SR-49), Lime Kiln, Happy Lane, Black Rice, and the frontage road paving. DOT estimates the total area that would be graded for this phase to be 13 acres, with a maximum of 6 acres of soil disturbed on a single day. Approximately 3 months would be spent on grading and drainage improvements, 1 month on paving/striping and 1 month for signalization. Further assumptions are as follows:

Diamond Road (SR 49) Road Construction

- Approximately 2,700 feet of roadway will be widened.
- A maximum width of 200 feet of ROW will be disturbed.

Happy Lane/Black Rice Road Improvements

- Approximately 250 feet of roadway will be widened.
- A maximum width of 24 feet of will be disturbed.

Lime Kiln/Diamond Road Improvements

- Approximately 500 feet of roadway will be widened.

- A maximum width of 24 feet of will be disturbed.

Frontage Road for Diamond Road (SR 49)

- Approximately 1,500 feet of roadway will be constructed.
- A maximum width of 40 feet of ROW will be disturbed.

Phase 2 (Diamond Springs Parkway segment): This analysis assumes that Phase 2 would begin construction in January 2012. This phase would involve the construction of Diamond Springs Parkway, DOT estimates the total area that would be graded for this phase to be 20 acres, with a maximum of 7 acres of soil disturbed on a single day. Approximately 4.5 months would be spent on grading and drainage improvements, 1.5 months on paving/stripping and 1 month for signalization. Further assumptions are as follows:

Diamond Springs Parkway Road Construction

- Total Amount of Soil Imported: 121,000 cubic yards.
- Total Amount of Soil Exported: 43,100 cubic yards.
- The bulk of construction staging would occur on, and fill material would be acquired from APN 051-250-12, which is located adjacent to and south of the proposed Parkway and west of SR-49 (Exhibit 3-4). This represents an approximately 2-mile round trip for soil import and export, which was used as the basis for project impact analyses.
- Approximately 4,400 feet of roadway will be constructed.
- A maximum width of 150 feet of ROW will be disturbed.

Truck Street/Bradley Drive

- Approximately 400 feet of roadway will be constructed.
- A maximum width of 24 feet of will be disturbed.

Truck Street Improvements

- Approximately 475 feet of roadway will be realigned.
- A maximum width of 24 feet of will be disturbed.

Throwita Way Improvements

- Approximately 500 feet of roadway will be realigned.
- A maximum width of 24 feet of will be disturbed.

Old Depot Road Improvements

- Approximately 400 feet of roadway will be widened.
- A maximum width of 28 feet of will be disturbed.

Realignment of El Dorado Multi-Use Trail

- Approximately 1,140 feet of trail/roadway will be constructed.
- A maximum width of 8 feet of will be disturbed.

The Guide states that mass emissions of fugitive dust need not be quantified and may be assumed to be less than significant, if a project includes mitigation measures that will prevent visible dust beyond the property line, as detailed in Tables C.4 and C.5 of the CEQA Guide (EDAQMD 2002). This recommendation was made prior to EDAQMD's adoption of Rule 223-1 (Fugitive Dust), which limits the fugitive dust from construction and construction-related activities.

The project is required to incorporate dust control measures in compliance with Rule 223-1 (see Section 4.3.9, above). Therefore, the project will generate less than significant amounts of fugitive PM₁₀ emissions.

ROG and NO_x emissions were evaluated with the Roadway Construction Emissions Model Version 6.2. Table 4.3-8 summarizes the results of these evaluations for Phase 1, and Table 4.3-8 summarizes the results for Phase 2.

Table 4.3-8: Phase 1 Construction Emissions - Unmitigated (maximum lbs per day)

Phase 1 Component	Construction Phase							
	Grading/ Excavation		Drainage/ Sub-grade		Paving		Signalization	
	ROG	NO _x	ROG	NO _x	ROG	NO _x	ROG	NO _x
SR-49 (Diamond Road)	7.6	60.1	5.1	37	5.7	31.6	2.6	17.6
Lime Kiln	*	*	*	*	2.4	13.5	**	**
Happy Lane/Black Rice	*	*	*	*	2.3	13.4	**	**
Frontage Road	*	*	*	*	2.6	14.0	**	**
EDAQMD Significance Threshold	82	82	82	82	82	82	82	82
Significant?	No	No	No	No	No	No	No	No
Notes: Modeling assumes that construction phases for each Phase Component do not overlap. * Total acreage and maximum acreage per day were included in the SR-49 modeling. ** Signalization equipment fleet and worker commute emissions included in the SR-49 modeling. Source: Michael Brandman Associates, 2009a.								

Table 4.3-9: Phase 2 Construction Emissions - Unmitigated (maximum lbs per day)

Phase 2 Component	Construction Phase							
	Grading/ Excavation		Drainage/ Sub-grade		Paving		Signalization	
	ROG	NO _x	ROG	NO _x	ROG	NO _x	ROG	NO _x
Diamond Springs Parkway	8.3	55.9	4.9	33.8	5.3	29.4	2.45	16.48
Truck Street	*	*	*	*	2.1	12.2	**	**
Truck Street/Bradley Drive	*	*	*	*	2.1	12.2	**	**
Old Depot Road	*	*	*	*	2.1	12.2	**	**
Throwita Way	*	*	*	*	2.1	12.2	**	**
El Dorado Multiuse Trail	*	*	*	*	2.2	12.5	**	**
EDAQMD Significance Threshold	82	82	82	82	82	82	82	82
Significant?	No	No	No	No	No	No	No	No
Notes: Modeling assumes that construction phases for each Phase Component do not overlap. * Total acreage and maximum acreage per day were included in the SR-49 modeling. ** Signalization equipment fleet and worker commute emissions included in the SR-49 modeling. Source: Michael Brandman Associates, 2009a.								

As shown above, based on the assumptions used in this Draft EIR, project emissions of ROG and NO_x will not exceed the EDAQMD's thresholds of significance.

Significance Determination Before Mitigation

Less than significant impact.

Mitigation Measures from the MC&FP EIR

The following mitigation measure was included in the MC&FP EIR (EDAW 1998) as Mitigation Measure 4.5-1: Short-Term Grading and Construction Air Quality. While the proposed project would not violate an air quality standard as previously discussed, the MC&FP Mitigation Measure 4.5-1 is still applicable and the proposed project must implement it. Therefore, the MC&FP Mitigation Measure is included below and has been renumbered to match that of other mitigation measures included in this document.

MM 4.3-1a Comply with El Dorado County APCD Rule 223 (Fugitive Dust), as required by the Air Pollution Control Officer. Compliance may include, but is not limited to, implementation of the following measures:

- Application of water or suitable chemicals or other specified covering on material stockpiles, wrecking activity, excavation, grading, sweeping, clearing

of land, solid waste disposal operations, or construction or demolition of buildings or structures (all exposed soil shall be kept visibly moist during grading);

- Installation and use of hoods, fans and filters to enclose, collect, and clean the emissions of dusty materials;
- Covering or wetting at all times when in motion of open-bodied trucks, trailers or other vehicles transporting materials, which create a nuisance by generating particulate matter in areas where the general public has access.
- Application of asphalt, oil, water or suitable chemicals on dirt roads;
- Paving of public or commercial parking surfaces;
- Removal from paved streets and parking surfaces of earth or other material which has a tendency to become airborne;
- Alternate means of control as approved by the Air Pollution Control Officer.

MM 4.3-1b Use only low-emission mobile construction equipment (e.g., tractor, scraper, dozer, etc.).

MM 4.3-1c Maintain construction equipment engines in proper operating condition.

MM 4.3-1d Develop and implement construction activity management techniques, such as extending construction period, reducing number of pieces used simultaneously, increasing distance between emission sources, reducing or changing hours of construction, and scheduling activity during off-peak hours.

MM 4.3-1e Comply with El Dorado County APCD Rule 224 (Cutback and Emulsified Asphalt Paving Materials).

MM 4.3-1f Comply with El Dorado County APCD Rule 215 pertaining to architectural coatings.

MM 4.3-1g Obtain permission from the APCD and/or the local fire agency prior to burning of wastes from land development clearing, depending upon the time of year the burning is to take place. Only vegetative waste materials may be disposed of using an outdoor fire.

Significance Determination after MC&FP Mitigation, and Supporting Rationale

With implementation of MM 4.3-1a through 4.3-1g, the proposed project would result in less than significant short-term grading and construction air quality impacts. No additional mitigation measures are required.

Additional Mitigation Measures

No additional mitigation measures are required.

Significance Determination After Additional Mitigation, and Supporting Rationale

Standard construction specifications require the project to implement various construction air pollution control measures set forth by the EDAQMD. Implementation of standard fugitive dust control measures effectively incorporates the applicable measures from Tables C.4 and C.5 of the EDAQMD CEQA Guide. Therefore, emissions of fugitive dust are considered less than significant. Additionally, short-term construction emissions of ROG and NO_x do not exceed EDAQMD significance thresholds and are less than significant.

EID Intertie Improvements

Off-road vehicle emissions associated with EID's Intertie Improvements were calculated using Sacramento Metropolitan Air Quality Management District's (SMAQMD) Road Construction Emissions Model version 6.3.1 (Roadway Model). SMAQMD developed the Roadway Model to assess the emissions of linear construction projects. The proposed construction activities as described by EID correspond to the following Roadway Model default phases: grading/excavation, drainage/utilities/subgrade, and paving. For the purposes of conservative analysis, this analysis assumes that grading/excavation and drainage/utilities/subgrade would occur concurrently, followed by paving (MBA 2008a).

Modeling Assumptions

EID estimates that excavation and pipeline construction will progress at a rate of approximately 100 feet per day, for a total of 58 days. This analysis assumes that final paving will take 10 days. The following types of construction equipment would be used for the Intertie Improvements: trucks, excavators, compactors, loaders, and graders. However, the number of each equipment type and daily hours of use for each piece of equipment is unknown. Therefore, this analysis uses the SMAQMD Roadway Model equipment use assumptions for each phase. The Roadway Model default assumptions were also used to estimate emissions from construction worker trips, the use of a water truck, and fugitive dust.

The total EID Intertie length is approximately 5,800 feet, or 1.1 miles. This analysis assumes that the width of roadway to be disturbed by grading would be approximately 8 feet. Therefore, approximately 1.06 acres would be disturbed by grading. The analysis assumes that the maximum area to be disturbed on any one day of construction would be 0.3 acres. Further project-specific information indicates that the width of roadway to be disturbed would be approximately 4 feet, meaning only 0.53 acres would be disturbed. Therefore, the analysis presented below is conservative.

The exact amount of soil to be moved during the construction of the Intertie is unknown. EID estimates that up to 1/3 of the earth moved by trenching may be exported. At an assumed trench dimension of 4 feet wide by 4 feet deep at a length of 100 feet per day, approximately 1,600 cubic feet (or 59 cubic yards) may be disturbed daily by trenching. Therefore, up to 19.7 cubic yards of soil may be hauled off-site during construction of the Intertie Improvements. Table 4.3-9 shows the

additional contribution of pollutants projected to result from construction of the Intertie Improvements.

**Table 4.3-10: EID Intertie Improvements Construction Emissions - Unmitigated
(maximum lbs per day)**

Source	Emissions (lbs/day)	
	ROG	NO _x
Grading/Excavation	5.5	39.9
Drainage/Excavation/Sub-Grade	4.8	33.5
Paving	3.4	16.0
Maximum Daily Emissions	10.3	73.4
Significance Threshold	82	82
Significant Impact?	No	No
Source: Michael Brandman Associates, 2008a.		

Projected emissions of ROG and NO_x associated with construction of the Intertie Improvements are less than EDAQMD thresholds of significance. EDAQMD's CEQA Guide states that if the estimated ROG and NO_x emissions are less than EDAQMD's thresholds, then exhaust emissions of CO and PM₁₀ may also be deemed less than significant. Therefore, impacts would be less than significant for construction exhaust emissions of ROG and NO_x, as well as CO and PM₁₀.

Construction of the Intertie Improvements would occur during Phase 1 of the construction schedule described above. Therefore, Table 4.3-10 shows the total Phase I emissions associated with simultaneous construction of Phase 1 and the Intertie Improvements.

**Table 4.3-11: Phase 1 and EID Intertie Construction Emissions -
Unmitigated (maximum lbs per day)**

Phase Component	Construction Phase							
	Grading/ Excavation		Drainage/ Sub-grade		Paving		Signalization	
	ROG	NO _x	ROG	NO _x	ROG	NO _x	ROG	NO _x
SR-49 (Diamond Road)	7.6	60.1	5.1	37	5.7	31.6	2.6	17.6
Lime Kiln	*	*	*	*	2.4	13.5	**	**
Happy Lane/Black Rice	*	*	*	*	2.3	13.4	**	**
Frontage Road	*	*	*	*	2.6	14.0	**	**
EID Intertie	5.5	39.9	4.8	33.5	3.4	16.0	N/A	N/A

Table 4.3-11 (cont.): Phase 1 and EID Intertie Construction Emissions - Unmitigated (maximum lbs per day)

Phase Component	Construction Phase							
	Grading/ Excavation		Drainage/ Sub-grade		Paving		Signalization	
	ROG	NO _x	ROG	NO _x	ROG	NO _x	ROG	NO _x
EDAQMD Significance Threshold	82	82	82	82	82	82	82	82
Significant?	No	No	No	No	No	No	No	No
Notes: Modeling assumes that construction phases for each Phase Component do not overlap. * Total acreage and maximum acreage per day were included in the SR-49 modeling. ** Signalization equipment fleet and worker commute emissions included in the SR-49 modeling. N/A – not applicable Source: Michael Brandman Associates, 2009a and 2008a.								

Emissions of ROG and NO_x associated with the construction of Phase 1 and the EID Intertie Improvements are less than EDAQMD thresholds of significance. As stated previously, if the estimated ROG and NO_x emissions are less than EDAQMD's thresholds, then exhaust emissions of CO and PM₁₀ may also be deemed less than significant. Therefore, impacts associated with the proposed project would be less than significant for construction exhaust emissions of ROG and NO_x, as well as CO and PM₁₀.

Construction-Generated CO

Impact 4.3-3: The project has the potential to violate ambient carbon monoxide (CO) standards or contribute substantially to an existing or projected air quality violation of CO standards as a result of construction. (Less than Significant)

EDAQMD Significance Criteria

A project is considered to have a significant impact on air quality if it will cause or contribute significantly to a violation of the applicable national or state ambient air quality standard(s). For CO, a project is considered significant if the 1-hour ambient concentration exceeds the CAAQS of 20 ppm or the 8-hour ambient concentration exceeds the CAAQS of 9.0 ppm.

Impact Analysis

In addition to the mass daily regional threshold standards, project construction has the potential to raise localized ambient concentrations. EDAQMD guidance was used to determine the project's background CO concentration and to conservatively estimate the additional CO contribution of the project from construction.

Table 4.3-12: Carbon Monoxide Concentration and Significance Determination

Concentration	1-Hour	8-Hour
Background Concentration	1.32	0.92
Project-Related Concentration	3.10	3.10
EID Intertie Improvements	0.40	0.40
Anticipated Total Concentration	4.82	4.42
Ambient Air Quality Standard	20	9
Exceed Significance Threshold?	No	No
<p>Notes: 1. The CAAQS are more stringent than the NAAQS which is 35.0 ppm The above calculations assume project-related CO concentration levels associated with additional peak-hour trips are based on a conservative assumption that the project would result in 1,000 additional peak-hour trips during construction. The Highway 49 Intertie Improvements were conservatively estimated to add an additional 100 peak-hour trips during construction. Source: Michael Brandman Associates, 2009a and 2008a.</p>		

As shown in the table above, the CO concentration will not exceed California ambient air quality standards; therefore, no violation is anticipated.

Significance Determination Before Mitigation

Less than significant impact.

Mitigation Measures from the MC&FP EIR

N/A

Significance Determination After MC&FP Mitigation, and Supporting Rationale

Less than significant impact.

Additional Mitigation Measures

No mitigation is required.

Significance Determination After Additional Mitigation, and Supporting Rationale

Less than significant impact.

EID Intertie Improvements

The proposed EID Intertie Improvements would not contribute a significant amount of CO and, therefore, would have a less than significant impact on a potential CO violation during construction.

Criteria Pollutant

Impact 4.3-4: **The project has the potential to result in a cumulatively considerable net increase of PM₁₀ and ozone during construction. (Less than Significant)**

Impact Analysis

The project region is in nonattainment for ozone and PM₁₀ standards, as discussed above under Section 4.3.9, Regulatory Framework. This project consists of construction of roadways and widening of existing roadways and would not by itself result in new operational emissions in the form of new traffic, but it would result in modified traffic patterns in the general project area; therefore, regional pollutant emissions from operations (vehicle use) are not quantified. Impacts for operational pollutants for which the project region is nonattainment are less than significant, because the project will not result in operational emissions.

Fugitive PM₁₀. As discussed above in Impact 4.3-2, construction-generated PM₁₀ is less than significant with incorporation of fugitive dust control measures, which are standard to construction specifications.

Construction ROG and NO_x. Emissions were estimated for the project's main construction activities, which include grading/excavation, drainage/utilities/sub-grading, paving and signalization. Construction ROG and NO_x emissions will not exceed the EDAQMD significance threshold of 82 lbs per day and are therefore less than significant.

Significance Determination Before Mitigation

Less than significant impact.

Mitigation Measures from the MC&FP EIR

N/A

Significance Determination After MC&FP Mitigation, and Supporting Rationale

Less than significant impact.

Additional Mitigation Measures

No mitigation is required.

Significance Determination After Additional Mitigation, and Supporting Rationale

Less than significant impact.

EID Intertie Improvements

As discussed above in Impact 4.3-2, the proposed EID Intertie Improvements, in conjunction with the project construction, would result in a less than significant impact.

Operational CO

Impact 4.3-5: The project has the potential to violate ambient carbon monoxide (CO) standards or contribute substantially to an existing or projected air quality violation of CO standards as a result of the realignment of roadways. (Less than Significant)

EDAQMD Significance Criteria

As stated previously under Impact 4.3-3, a project is considered significant if the CO 1-hour ambient concentration exceeds the CAAQS of 20 ppm or the CO 8-hour ambient concentration exceeds the CAAQS of 9.0 ppm.

Impact Analysis

A CO hot spot is a localized concentration of CO that is above the state or national 1-hour or 8-hour CO ambient air standards. Localized high levels of CO are associated with traffic congestion and idling or slow-moving vehicles.

EDAQMD's methodology for estimating operational CO impacts uses the number of peak hour trips a project will contribute and adds the potential CO concentration levels associated with those trips to the background CO concentration level to determine if there is a potential air quality violation. The proposed project does not generate additional peak hour trips, but rather redirects where existing and future trips will travel. In the absence of a peak hour value to determine the project concentration contribution, a CO analysis using the Caltrans CO Protocol modeling tool CALINE4 was used to assess the potential CO impacts at intersections with the greatest congestion reflected by decreased Level of Service (LOS). The Traffic Impact Analysis (TIA) for the proposed project (KHA 2009) identified several intersections that would experience the most traffic congestion under the following scenarios: Existing (2010) plus Proposed Project Conditions and Cumulative (2030) plus Proposed Project Conditions. The intersections listed in Table 4.3-13 were evaluated using CALINE4 to determine if they would cause a CO violation. Because the greatest CO concentration potential exists at the intersections, the roadway segments were not evaluated. If the intersections do not violate the CO standard then the roadway segments, which experience greater dispersion and decreased CO concentration levels would also not violate the CO standard. Table 4.3-13 provides a summary of the potential CO concentrations that would result from the project.

Table 4.3-13: CO Concentrations

Intersection	1-Hour Estimated CO Concentration (ppm)*	8-Hour Estimated CO Concentration (ppm)**	Significant Impact?***
2010 Diamond Road & Lime Kiln/Black Rice Road	3.1	2.2	No
2010 Diamond Road & Pleasant Valley Road	3.2	2.3	No
2030 Diamond Road & Lime Kiln/Black Rice Road	1.7	1.2	No
2030 Diamond Springs Parkway & Missouri Flat Road	1.7	1.2	No

Table 4.3-13 (cont.): CO Concentrations

Intersection	1-Hour Estimated CO Concentration (ppm)*	8-Hour Estimated CO Concentration (ppm)**	Significant Impact?***
2030 Diamond Springs Parkway & Throwita Way	1.6	1.1	No
Notes: * CALINE4 output (see Appendix C for model output) plus the 1-hour background concentration of 1.32 ppm (CARB 2008) ** The 8-hour project increment was calculated by multiplying the 1-hour CALINE4 output by 0.7 (persistence factor), then adding the 8-hour background concentration of 0.92 ppm. *** Comparison of the 1-hour concentration to the state standard of 20 ppm and the 8-hour concentration to the state/national standard of 9 ppm. Source: Michael Brandman Associates, 2009a.			

As shown in Table 4.3-13, the estimated 1-hour and 8-hour average CO concentrations for the most congested project intersections in the near-term 2010 with project traffic and cumulative 2030 project traffic impacts in combination with background concentrations are below the state and federal ambient air quality standards. No CO hotspots are anticipated because of redirected traffic emissions by the proposed project. Therefore, the project is not anticipated to contribute substantially to an existing or projected air quality violation of CO.

Significance Determination Before Mitigation

Less than significant impact.

Mitigation Measures from the MC&FP EIR

N/A

Significance Determination After MC&FP Mitigation, and Supporting Rationale

Less than significant impact.

Additional Mitigation Measures

No mitigation is required.

Significance Determination After Additional Mitigation, and Supporting Rationale

Less than significant impact.

EID Intertie Improvements

The proposed EID Intertie Improvements would not affect roadway alignments and, therefore, would not have an impact on CO concentrations (MBA 2008a).

Sensitive Receptors

Impact 4.3-6: **The project has the potential to expose sensitive receptors to substantial pollution concentrations of naturally occurring asbestos or diesel particulate matter. (Less than Significant)**

Impact Analysis

Naturally Occurring Asbestos

During construction in areas that contain NOA-containing rock formations, asbestos can be released into the air and pose a health hazard. The Department of Conservation, Division of Mines and Geology (DMG) has a published guide for generally identifying areas that are likely to contain NOA in western El Dorado County (DMG 2000). The screening criterion for determining if a project has the potential to disturb NOA is to identify if the project location is in an area likely to contain NOA. This discussion is limited to NOA as discussed in the OPR's memorandum, Addressing Naturally Occurring Asbestos in CEQA Documents (OPR 2007).

A Parcel Specific Query was conducted on the EDAQMD's website (EDAQMD 2008) to view asbestos information specific to Assessor's Parcel Numbers associated with the proposed project. Current county records indicate these properties are not located within the Asbestos Review Area. The potential for asbestos-related impacts is less than significant.

Diesel Particulate Matter

Construction equipment would emit diesel particulate matter, which is a carcinogen. However, the diesel particulate matter emissions would be short term in nature. Determination of risk from diesel particulate matter is considered over a 70-year exposure time. Therefore, considering the dispersion of the emissions and the short time frame during which emissions would occur, exposure to diesel particulate matter is anticipated to be less than significant.

Significance Determination Before Mitigation

Less than significant impact.

Mitigation Measures from the MC&FP EIR

N/A

Significance Determination After MC&FP Mitigation, and Supporting Rationale

Less than significant impact.

Additional Mitigation Measures

No mitigation is necessary.

Significance Determination After Additional Mitigation, and Supporting Rationale

Less than significant impact.

Air Quality

EID Intertie Improvements

The EID Intertie Improvements are not in an area that is likely to contain naturally occurring asbestos. The potential for asbestos-related impacts is less than significant.

Similar to the proposed project, construction equipment used for the EID Intertie Improvements would emit diesel particulate matter, which is a carcinogen. However, the diesel particulate matter emissions would be short term in nature. Determination of risk from diesel particulate matter is considered over a 70-year exposure time. Therefore, considering the dispersion of the emissions and the short time frame during which emissions would occur, exposure to diesel particulate matter is anticipated to be less than significant.

Odors

Impact 4.3-7:	The project has the potential to create objectionable odors affecting a substantial number of people. (Less than Significant)
----------------------	--

Impact Analysis

Odor impacts are based on the location of the sensitive receptors relative to their proximity to sources of odors. A project can be a generator of odors; therefore, concern focuses on which sensitive receptors are located close to the proposed project. Alternatively, a project can be a new sensitive receptor that could be affected by sources of air pollution or odors.

Transportation projects are traditionally not considered odor generators. A survey of the area surrounding the project reveals existing sources of air pollution and odors from industrial sources and the Materials Recovery Facility. Diesel exhaust and ROG's would be emitted during construction of the project, which are objectionable to some; however, emissions would disperse rapidly from the project site and, therefore, would be unlikely to occur in levels that would induce a negative response.

Significance Determination Before Mitigation

Less than significant impact.

Mitigation Measures from the MC&FP EIR

N/A

Significance Determination After MC&FP Mitigation, and Supporting Rationale

Less than significant impact.

Additional Mitigation Measures

No mitigation is necessary.

Significance Determination After Additional Mitigation, and Supporting Rationale

Less than significant impact.

EID Intertie Improvements

The proposed EID Intertie Improvements would result in diesel exhaust and ROG odor emissions during construction, which are objectionable to some; however, emissions would disperse rapidly from the project site and, therefore, should not be at a level to induce a negative response. This would be a less than significant impact.

Greenhouse Gas Emissions

Impact 4.3-8:	The project has the potential to result in an increase in greenhouse gas emissions that would significantly hinder or delay the State's ability to meet the reduction targets contained in AB 32. (Potentially Significant)
----------------------	--

Impact Analysis

The project will contribute to climate change impacts through its contribution of greenhouse gases (GHG). The project will emit greenhouse gases such as carbon dioxide, methane, and nitrous oxide from the exhaust of equipment used during construction and exhaust of vehicles during operation. The following approach is used to address the impact of the proposed project on climate change:

1. Inventory: Generate an inventory of greenhouse gas emissions emitted during construction and operation.
2. Onsite mitigation measures: Mitigation measures and strategies from various sources are reviewed to determine the applicability and feasibility of such measures to reduce project-related greenhouse gas emissions.
3. Determination of significance: The level of significance after mitigation is determined.

Project Inventory of Greenhouse Gas Emissions

Construction

Emission Estimation Assumptions

Exhaust emissions during construction were estimated using the Sacramento Metropolitan AQMD's Road Construction Model, Version 6.3. Table 4.3-14 provides a summary of the emissions.

Emissions Inventory

The project would emit greenhouse gases from upstream emission sources (the manufacture of building materials such as cement) and direct sources (combustion of fuels from worker vehicles and construction equipment). An upstream emission source refers to emissions that were generated during the manufacture of products to be used for construction of the project. Upstream emission sources for the project include but are not limited to the following: emissions from the manufacture of cement, emissions from the manufacture of steel, and/or emissions from the transportation of building materials. The upstream emissions were not estimated because CEQA does not require a "lifecycle" analysis approach to determine the significance of potential environmental impacts.

Emissions of nitrous oxide and methane are negligible. The emissions of carbon dioxide from project construction equipment and worker vehicles are shown in Table 4.3-14. Without mitigation, project construction emissions total 557.38 MTCO₂e.

Table 4.3-14: Construction Exhaust CO₂ Emissions (Unmitigated)

Phase Component	Total Tons	(MTCO ₂ e)*
SR-49	193.20	175.27
Lime Kiln	12.70	11.52
Happy Lane/Black Rice	12.40	11.25
Frontage Road	13.10	11.88
2011 Subtotal	231.40	209.93
Diamond Springs Parkway	288.20	261.46
Truck Street	18.80	17.06
Truck Street/Bradley Drive	18.80	17.06
Old Depot Road	18.80	17.06
Throwita Way	19.00	17.24
El Dorado Multiuse Trail	19.40	17.60
2012 Subtotal	383.00	347.46
Project Total	614.40	557.38
Notes: *MTCO ₂ e = metric tons of carbon dioxide equivalent, converted from tons by multiplying by 0.9072. Source: Michael Brandman Associates, 2009a.		

Onsite Greenhouse Gas Reduction Options

Although not required by statute or regulation, there are voluntary greenhouse gas reduction strategies available for projects to reduce greenhouse gas emissions. The California Attorney General has provided suggestions on ways to reduce overall impacts. The CARB adopted a Scoping Plan in December 2008, which includes a few measures that would be applicable to the project. The OPR has also suggested mitigation measures. The Office of the California Attorney General has distributed voluntary mitigation measures and resources (2008). The OPR has published a Technical Advisory that contains examples of mitigation measures used by some public agencies to reduce greenhouse gas emissions (OPR 2008).

Mitigation measures applicable to the project offered by the Attorney General, OPR, and CARB are listed below. Project consistency or applicability with those measures is assessed below, after applicable mitigation measures.

Summary of Impacts

The project would construct or widen roads to improve existing Level of Service (LOS) deficiencies on US-50 at the Missouri Flat Road Interchange, Missouri Flat Road from its intersection with US-50 south to Pleasant Valley Road (SR-49), and Pleasant Valley Road (SR-49) in the vicinity of Diamond Springs.

The project could incorporate (but currently has not incorporated) several measures that would either directly or indirectly reduce emissions of greenhouse gases. Without mitigation, the project would generate 557.38 MTCO₂e and would not be doing all it can do to reduce its emissions of greenhouse gases. Therefore, the project could hinder or delay California's ability to meet the reduction targets by 2020. This is a potentially significant impact.

Significance Determination Before Mitigation

Potentially significant impact.

Mitigation Measures from the MC&FP EIR

N/A

Significance Determination After MC&FP Mitigation, and Supporting Rationale

Potentially significant impact.

Additional Mitigation Measures

- MM 4.3-8a** Any traffic lights installed or replaced as part of this project shall use Light Emitting Diodes (LEDs) or the most energy-efficient technology available, unless technical feasibility or safety concerns take precedent.
- MM 4.3-8b** Prior to commencement of construction, the project construction contractor(s) shall have in place a County-approved Solid Waste Diversion and Recycling Plan (or such other documentation to the satisfaction of the County) that demonstrates the diversion and recycling of salvageable and re-useable wood, metal, plastic, and paper products during project construction. The Solid Waste Diversion and Recycling Plan shall comply with County Ordinance Chapter 8.43–Construction and Demolition Debris Recycling Within the County of El Dorado. This requirement shall be included in the construction/specification bid documents for the project.

Significance Determination After Additional Mitigation, and Supporting Rationale

Less than significant impact.

Table 4.3-15 demonstrates the post-mitigation project consistency and feasibility analysis with applicable Attorney General, OPR, and CARD GHG reduction measures. The proposed project incorporates a number of features and mitigation measures that would minimize greenhouse gas emissions to the maximum extent practicable. These features and mitigation measures are consistent

with all applicable strategies identified by the OPR, CARB and the Attorney General's Office. The road construction and realignment would improve circulation and safety in the project vicinity for vehicles, pedestrians, and bicycles and promote reductions in vehicular emissions. For these reasons, the proposed project's greenhouse gas emissions would not significantly hinder or delay California's ability to meet the reduction targets contained in AB 32.

Table 4.3-15: Post-Mitigation Project Consistency and Feasibility Analysis with Applicable Attorney General, OPR, and CARB GHG Reduction Measures

Suggested Greenhouse Gas Reduction Measure	Project Consistency/Applicability
Energy Efficiency	
Replace traffic lights, streetlights, and other electrical uses to energy efficient bulbs and appliances. (OPR 2008)	Consistent with Mitigation Measure 4.3-8a
Water Conservation and Efficiency	
Create water-efficient landscapes. (AG 2008)	Consistent with General Plan Policy 7.3.1.2.
Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls. (AG 2008)	Consistent with General Plan Policy 7.3.1.2.
Solid Waste Measures	
Reuse and recycle construction and demolition waste (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard). (AG 2008)	Consistent with Mitigation Measure 4.3-8b
Land Use and Transportation Measures	
Create bicycle lanes and walking paths directed to the location of schools, parks and other destination points. (OPR 2008)	Consistent. One of the key objectives of the project is to provide opportunities for improved bicycle and pedestrian facilities consistent with the 2005 El Dorado County General Plan and coordinate the construction of the Parkway with the planned El Dorado Multi-Use Trail.
Implement street improvements that are designed to relieve pressure on a region's most congested roadways and intersections. (OPR 2008)	Consistent. The project will be improving level of service deficiencies, thereby relieving congestion on roadways.
Urban Forestry	
Preserve or replace onsite trees (that are removed due to development) as a means of providing carbon storage. (AG 2008)	Consistent with General Plan Policy 7.4.4.4.,
Source for Measures: California Attorney General, 2008; OPR, 2008. Source for CARB Draft Scoping Plan Reduction Measure: CARB, 2008. Source for Project Consistency Analysis: Michael Brandman Associates, 2009a.	

EID Intertie Improvements

The EID Intertie Improvements would emit GHGs from combustion of fuels in worker vehicles accessing the site as well as from equipment used during construction. Exhaust emissions during

construction for the EID Intertie Improvements were estimated using SMAQMD's Roadway Model, using the same methodology as for the project impacts, described above.

Table 4.3-16: EID Intertie Improvements Construction Exhaust CO₂ Emissions (Unmitigated)

Phase Component	Total Tons	(MTCO ₂ e)*
EID Intertie Improvements	156.7	142.2
Notes: *MTCO ₂ e = metric tons of carbon dioxide equivalent, converted from tons by multiplying by 0.9072 Source: Michael Brandman Associates, 2008a.		

The EID Intertie Improvements would generate a minor amount of construction-related carbon dioxide, with most of the emissions generated by off-road construction equipment and construction worker trips. Currently, there are no known mitigation measures that directly reduce GHG emissions from construction equipment. Construction activities that generate GHGs would be limited by the nature and scope of the Intertie Improvements, which would not generate long-term operational GHGs or increase water conveyance, which could lead to increased GHGs through water procurement, transport, treatment, and use. Because of the limited GHG generation during construction of the Intertie Improvements, and because such improvements would not lead to ongoing operational emissions, the Intertie Improvements would not significantly hinder or delay California's ability to meet the reduction targets contained in AB 32

4.4 - Biological Resources

This section describes existing biological resources and evaluates potential effects on these resources that may result from construction of the proposed project. Resources evaluated include potentially occurring special-status species; wildlife habitats; vegetation communities; and waters of the U.S., including wetlands. In addition to reviewing previously prepared environmental documents, this analysis is based on the results of recent field surveys, literature searches, and database queries.

4.4.1 - Summary

Significant Unavoidable Impacts

Project construction and use would not result in significant unavoidable impacts to biological resources.

Potentially Significant Impacts

Construction and use of the project could have substantial adverse effects on species considered special-status by state and federal agencies, on riparian habitat, and on federally protected wetlands. Construction and operation would conflict with local policies protecting oak woodlands. These impacts are potentially significant and require mitigation. Implementation of mitigation included in this section would reduce the magnitude of impacts to a less than significant level.

Less Than Significant Impacts

The project would not interfere substantially with the movement of any species, with established wildlife corridors, or with wildlife nursery sites. The project also would not conflict with the provisions of any approved local, regional, or state habitat conservation plan. Therefore, these impacts are considered less than significant.

4.4.2 - Environmental Setting

The project study area is located at the east edge of the Sacramento Valley in the lower Sierra Nevada foothills at an elevation of approximately 1,800 feet above mean sea level (msl). Average temperatures range from January lows of 32.4 degrees Fahrenheit (°F) to July highs of 92.6 °F. Average annual precipitation is approximately 38.5 inches; precipitation falls primarily as rain with most precipitation occurring between the months of October and April (Western Regional Climate Center 2008).

The project study area encompasses approximately 99.96 acres and is bordered by several land use types, including undeveloped land, industrial facilities, vacant lots, and scattered residences. Land uses are primarily industrial, although there are several highly disturbed, undeveloped areas as well as scattered undisturbed areas.

Vegetation Communities and Wildlife Habitats

Vegetation communities are assemblages of plant species that occur together in the same area and are defined by their structure and by the relative abundance of associated plant species. The vegetation communities within the project study area are classified as habitat types according to the Guide to Wildlife Habitats (Mayer and Laudenslayer 1988). By using this habitat classification system, it is possible to predict the wildlife species likely to occur within the study area using the California Wildlife Habitat Relationship System (CWHR). CWHR is based upon the Guide to Wildlife Habitats; it is a predictive model that lists species likely to occur in a given location under certain habitat conditions. The project study area contains four vegetation communities/habitat types: blue oak-foothill pine, valley foothill riparian, annual grassland, and urban (Exhibit 4.4-1).

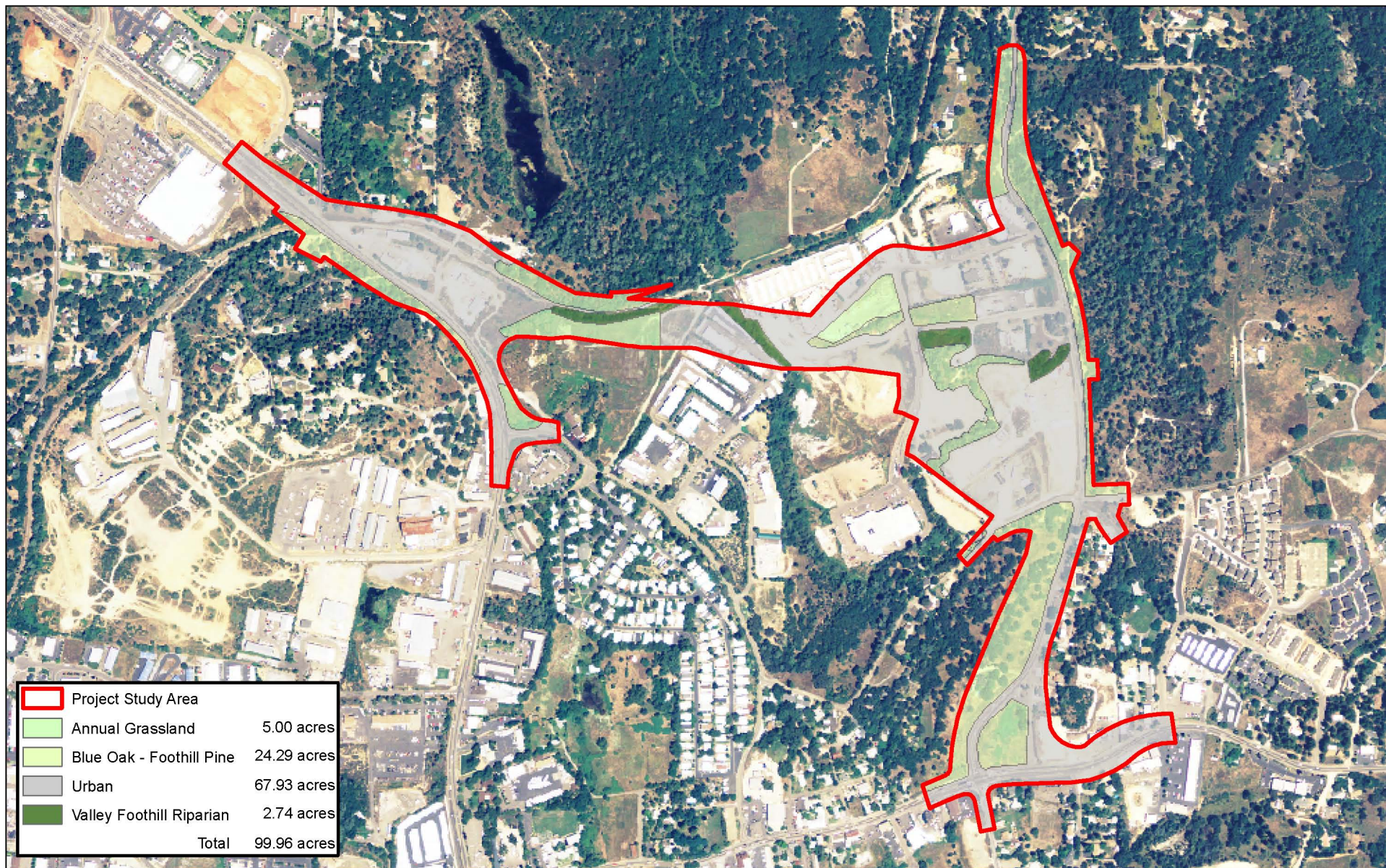
Blue Oak-Foothill Pine

Blue oak-foothill pine habitat (24.29 acres) is scattered throughout the project study area, with the largest area occurring in the southeast just west of State Route 49 (SR-49) (Exhibit 4.4-1). Overstory species observed are blue oak (*Quercus douglasii*), valley oak (*Q. lobata*), interior live oak (*Q. wislizenii*), foothill pine (*Pinus sabiniana*), and California black walnut (*Juglans californica*). Shrub species include whiteleaf manzanita (*Arctostaphylos viscida*), greenleaf manzanita (*A. patula*), toyon (*Heteromeles arbutifolia*), buckbrush (*Ceanothus cuneatus*), California coffeeberry (*Rhamnus californica*), coyotebrush (*Baccharis pilularis*), bitter cherry (*Prunus emarginata*), and Himalayan blackberry (*Rubus discolor*). Other understory species include narrowleaf plantain (*Plantago lanceolata*), yellow star-thistle (*Centaurea solstitialis*), clover (*Trifolium* sp.), tall annual willowherb (*Epilobium brachycarpum*), California grape (*Vitis californica*), dogtail grass (*Cynosurus echinatus*), mugwort (*Artemisia douglasiana*), St. John's wort (*Hypericum perforatum*), prickly lettuce (*Lactuca serriola*), tall wheatgrass (*Elytrigia pontica*), Queen Anne's lace (*Daucus carota*), and hairy pink (*Petrorhagia dubia*).

Valley Foothill Riparian

Valley foothill riparian habitat (2.74 acres) is restricted to small, typically linear inclusions within urban habitat (Exhibit 4.4-1). Overstory species include Fremont cottonwood (*Populus fremontii*), valley oak, foothill pine, and arroyo willow (*Salix lasiolepis*). Shrub species observed include coyotebrush and Himalayan blackberry. Understory species include sweetpea (*Lathyrus latifolius*), white sweetclover (*Melilotus alba*), St. John's wort, rabbitfoot grass (*Polypogon monspeliensis*), dogtail grass, seashore vervain (*Verbena litoralis*), soft chess (*Bromus hordeaceus*), Queen Anne's lace, and nutsedge (*Cyperus* sp.).

There are only two inclusions of valley foothill riparian habitat that are associated with wetlands or drainages and are, therefore, considered sensitive habitat. These occur in the central portion of the site associated with the drainage that runs roughly north-south from the north-central portion of the proposed Parkway (ED3, Exhibit 4.4-2), and the western-most inclusion which is associated with seasonal wetlands (ED4A, Exhibit 4.4-2). These habitat areas are relatively degraded.



Source: USDA NAIP El Dorado County (2005), MBA Field Survey Data (2007).



700 350 0 700
Feet

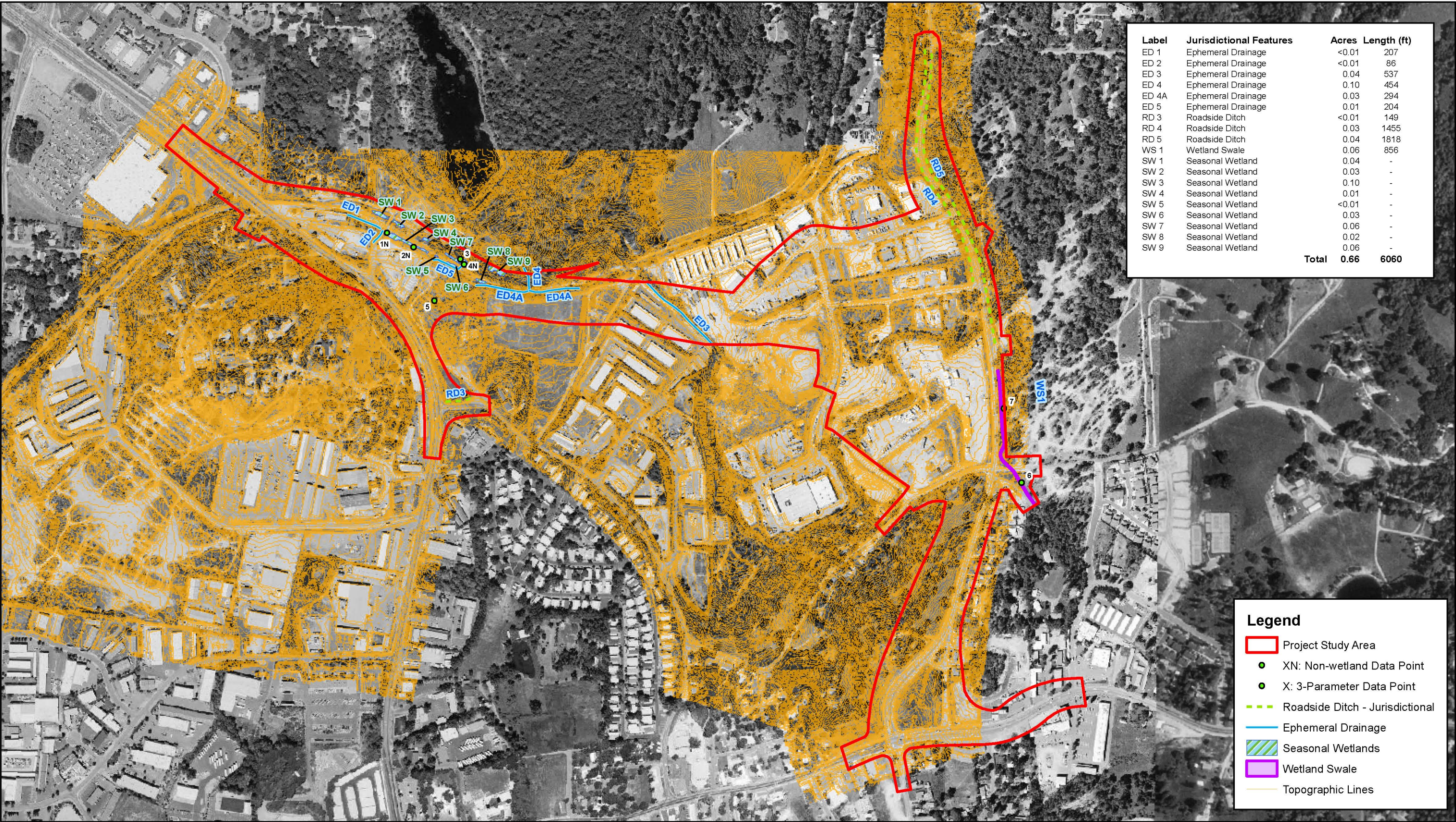
Michael Brandman Associates

11730025 • 12/2009 | 4.4-1_plant_communities.mxd

Exhibit 4.4-1 Plant Communities Map

COUNTY OF EL DORADO DEPARTMENT OF TRANSPORTATION
DIAMOND SPRINGS PARKWAY PROJECT
ENVIRONMENTAL IMPACT REPORT

11-0448.C.193



Source: CTA, 2008; MBA, 2009; Padre Associates, Inc., 2008.



Exhibit 4.4-2
Delineation of Jurisdictional Waters and Wetlands

ED3 is surrounded by industrial development, which discharges runoff directly into this feature via a number of PVC pipes that enter above the ordinary high water mark (OHWM). The habitat has also been degraded by dumping; old oil bottles, large 50-gallon drums, and other garbage were observed throughout this feature. ED4A is an artificial seasonal wetland bordered by railroad tracks to the north and commercial development to the south. Wetlands and other waters of the U.S. are described in more detail below.

Annual Grassland

Annual grassland (5.00 acres) occurs in patches throughout the project study area (Exhibit 4.4-1). Many of these patches contain shrubs and young trees that suggest they are early successional blue-oak foothill pine habitat. Species observed in these areas include interior live oak, buckbrush, coyotebush, valley oak, yellow-star thistle, narrowleaf plantain, tumble mustard (*Sisymbrium altissimum*), medusahead grass (*Taeniatherum caput-medusae*), soft chess, rip-gut brome (*Bromus diandrus*), hare barley (*Hordeum leporinum*), tree-of-heaven (*Ailanthus altissima*), madia (*Madia elegans*), Queen Anne's lace, clover (*Trifolium* sp.), narrowleaf plantain, and rabbitfoot grass, tall annual willow-herb, and seashore vervain.

Urban

Urban habitat (67.93 acres) occurs primarily along the southeastern edge of SR-49 and the associated residences (Exhibit 4.4-1). These areas of urban habitat are dominated by lawns and a variety of horticultural ornamental plants such as rose (*Rosa* sp.), iris (*Iris* sp.), and shade trees. Other urban areas are located on the east side of Missouri Flat Road, and the portion of the proposed Parkway that runs east-west between Missouri Flat Road and SR-49. These areas, however, are heavily disturbed and largely unvegetated.

Waters of the U.S., Including Wetlands

Federally Jurisdictional Features

A jurisdictional delineation of waters of the U.S., including wetlands, was conducted throughout the project study area on December 11, 12, and 13, 2007; January 10 and 11, 2008; and March 20, 2008 (MBA 2009c; 2008f). A delineation report has been prepared and was submitted to the United States Army Corps of Engineers (USACE) for verification; the USACE verified the delineation on April 28, 2009. In addition to the work conducted by Michael Brandman Associates (MBA), Padre Associates conducted a jurisdictional delineation of a portion of the project study area associated with the El Dorado Multi-Use Trail (EDMUT) in November 2007, which the USACE verified in October 2008. Table 4.4-1 provides a summary of all features delineated within the project study area. A map showing the locations of all delineation features is provided in Exhibit 4.4-2.

Table 4.4-1: Federally Jurisdictional Wetland Features in the Project Study Area

Federally Jurisdictional Features	Total Acreage
Drainages	
Ephemeral Drainage 1	<0.01 (207 linear feet)
Ephemeral Drainage 2	<0.01 (86 linear feet)
Ephemeral Drainage 3	0.04 (537 linear feet)
Ephemeral Drainage 4	0.10 (454 linear feet)
Ephemeral Drainage 4A	0.03 (294 linear feet)
Ephemeral Drainage 5	0.01 (204 linear feet)
Roadside Ditch 3	<0.01 (149 linear feet)
Roadside Ditch 4	0.03 (1,455 linear feet)
Roadside Ditch 5	0.04 (1,818 linear feet)
Total Acreage of Drainages	0.25 (5,204 linear feet)
Wetlands	
Wetland Swale	0.06 acre (856 linear feet)
Seasonal Wetland 1	0.04 acre
Seasonal Wetland 2	0.03 acre
Seasonal Wetland 3	0.10 acre
Seasonal Wetland 4	0.01 acre
Seasonal Wetland 5	<0.01 acre
Seasonal Wetland 6	0.03 acre
Seasonal Wetland 7	0.06 acre
Seasonal Wetland 8	0.02 acre
Seasonal Wetland 9	0.06 acre
Total Acreage of Wetlands	0.41 acres (856 linear feet)
Total Acreage, Federally Jurisdictional Features	0.66 acre (6,060 linear feet)
Source: MBA, 2008f.	

Federally Jurisdictional Features (Waters of the U.S., Including Wetlands)

U.S. Army Corps of Engineers (USACE) asserts jurisdiction over waters that are presently used, or have been used in the past, or may be susceptible for use to transport interstate foreign commerce. Other waters that are generally jurisdictional include interstate waters and wetlands, intrastate waters whose degradation or destruction could affect interstate or foreign commerce; and impoundments of, tributaries of, and wetlands adjacent to waters of the U.S.

Wetlands

Wetlands are those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. They include swamps, marshes, bogs, and similar areas (33 CFR part 328.3(b)).

Seasonal Wetlands and Swales

Seasonal wetlands and swales are defined by the positive indication of three wetland parameters: hydrophytic vegetation, hydric soils, and hydrology (i.e., ponding). These features allow water to pond for a long enough period of time to support hydrophytic vegetation and hydric soils. Seasonal wetlands tend to lack standing water during the late summer months or during prolonged dry periods. They support hydrophytic species, such as *Eleocharis*, that require longer and typically deeper inundation periods than those of vernal species. These features show positive indicators for hydric soils including mottling, an organic stratum, concretions, and oxidized root channels. Seasonal wetlands may be fed or connected by low drainage pathways called “swales.” There is approximately 0.06 acre (856 linear feet) of wetland swale and 0.35 acre of seasonal wetland within the project study area (Exhibit 4.4-2).

Other Waters of the U.S.

Other Waters of the U.S. are seasonal or perennial water bodies, including lakes, stream channels, drainages, ponds, and other surface water features that exhibit an OHWM but lack positive indicators for one or more of the three wetland parameters (i.e., hydrophytic vegetation, hydric soil, and wetland hydrology) (33 CFR 328.4). The above definition was applied while delineating all Other Waters of the U.S. Drainages exhibit an OHWM and contained bed, bank, and/or scour morphology. A total of 0.25 acre (5,204 linear feet) of Other Waters of the U.S. was delineated within the project study area (Exhibit 4.4-2).

Non-Relatively Permanent Waters

A water body is “non-relatively permanent” or “ephemeral” if it does not hold flows for at least 3 months out of the year. Non-relatively permanent waters (NRPW) within the project study area include small tributaries and low-lying areas adjacent to abandoned railroad tracks, which do not hold water for more than 3 months out of the year. There is a total of 0.18 acre (1,782 linear feet) of NRPW within the project study area that is federally jurisdictional (ED1 through ED5, Exhibit 4.4-2).

Roadside Ditch

Roadside ditches are located adjacent to roadways and serve to capture and channel water away from road surfaces. Roadside ditches are considered non-jurisdictional when they are excavated wholly in and drain only uplands; they do not carry relatively permanent flows; and they do not enter, intersect, or otherwise capture flows from any traditionally navigable water (TNW), relatively permanent water (RPW), or seasonal wetland. Within the project study area, there are eight roadside ditches that drain

to Weber Creek, a TNW; therefore, these features are considered federally jurisdictional. Total area of these features is 0.07 acre (3,422 linear feet) (RD3, RD4, and RD5, Exhibit 4.4-2).

Non-Federally Jurisdictional Features

Non-federally jurisdictional features include wetlands and drainage features that do not meet the criteria for USACE jurisdiction. These features may be regulated by the Regional Water Control Board or by CDFG. During the jurisdictional delineation of waters of the U.S., including wetlands, which was conducted throughout the project study area on December 11, 12, and 13, 2007; January 10 and 11, 2008; and March 20, 2008 (MBA 2009c; 2008f), non-federally jurisdictional features were also delineated and mapped. Table 4.4-2 provides a summary of non-federally jurisdictional features delineated within the project study area.

Table 4.4-2: Non-federal Jurisdictional Wetland Features in the Project Study Area

Non-Federally Jurisdictional Features	Total Acreage
Drainages	
Roadside Ditch 1	0.04 (1,527 linear feet)
Roadside Ditch 2	0.02 (754 linear feet)
Roadside Ditch 3	<0.01 (149 linear feet)
Roadside Ditch 6	0.02 (994 linear feet)
Roadside Ditch 7	<0.01 (201 linear feet)
Roadside Ditch 8	<0.01 (77 linear feet)
Roadside Ditch 9	<0.01 (161 linear feet)
Roadside Ditch 10	<0.01 (118 linear feet)
Roadside Ditch 11	0.01 (299 linear feet)
Total Acreage of Drainages	0.10 (4,280 linear feet)
Wetlands	
Fresh Emergent Wetland 2	0.02 acre
Total Acreage of Wetlands	0.08 acre (856 linear feet)
Total Acreage, Non-Federally Jurisdictional Features	0.18 (5,136 linear feet)
Source: MBA, 2008f.	

Wetlands

Fresh Emergent Wetland

Fresh emergent wetlands are those that can be defined as containing emergent vegetation, rooted plants that have parts extending above the water surface for at least part of the year, and are intolerant of complete inundation over prolonged periods, such as *Typha*, *Salix*, and *Eleocharis*. Water depths vary but rarely exceed 2 meters (6.6 feet) for long periods. Ponding is a condition in which free water

covers the soil surface (e.g., in a closed depression) and is removed only by percolation, evaporation, or transpiration. There is 0.02 acre of fresh emergent wetland within the project study area.

Non-Wetland Features

Roadside Ditch

Roadside ditches are located adjacent to roadways and serve to capture and channel water away from road surfaces. Roadside ditches are considered non-jurisdictional when they are excavated wholly in and drain only uplands; they do not carry relatively permanent flows; and they do not enter, intersect, or otherwise capture flows from any TNW, RPW, or seasonal wetland. Within the project study area, there are eight roadside ditches considered federally non-jurisdictional totaling 0.10 acre (4,280 linear feet).

Special-Status Species

Special-status species are those plants and animals that, because of their recognized rarity or vulnerability to various causes of habitat loss or population decline, are recognized by federal, state, or other agencies as deserving special consideration. Some of these species receive specific legal protection pursuant to Federal or State endangered species legislation. Others lack such legal protection, but have been characterized as “sensitive” based on adopted policies and expertise of state resource agencies or organizations with acknowledged expertise, or policies adopted by local governmental agencies such as counties, cities, and special districts to meet local conservation objectives. These species are referred to collectively as “special-status species” in this EIR, following a convention that has developed in practice but has no official sanction. The various categories encompassed by the term, and the legal status of each, are discussed later in this section under Section 4.4.3, Regulatory Framework.

For the purposes of this EIR, special-status species are those species:

- Listed as threatened or endangered under the Federal Endangered Species Act (ESA) and those species formally proposed or candidates for listing.
- Listed as threatened or endangered under California Endangered Species Act (CESA) or candidates for listing.
- Designated as endangered or rare pursuant to California Fish and Game Code (Section 1901).
- Designated as fully protected pursuant to California Fish and Game Code (Sections 3511, 4700, and 5050).
- Designated as a Species of Special Concern by California Department of Fish and Game (CDFG).
- Plants listed as rare under the California Native Plant Protection Act or considered by the California Native Plant Society (CNPS) as List 1A, 1B, or 2 species.

Methodology

This evaluation of biological resources includes a review and inventory of potentially occurring special-status species (including those officially designated as “endangered” or “threatened”), wildlife habitats, sensitive vegetation communities, and jurisdictional waters of the U.S. The setting descriptions provided in this section are based upon a combination of field reconnaissance, literature reviews, and database queries. The reference data reviewed for this report include the following:

- The Placerville, California USGS 7.5-minute topographic quadrangle (1973)
- Aerial photography of the project study area (Google Earth undated)
- A Natural Resource Conservation Service (NRCS) soils map of the project study area (Soil Survey Staff undated)
- California Department of Fish and Game (CDFG) California Natural Diversity Data Base (CNDDDB) records for the Placerville, California 7.5-minute topographic quadrangle and the surrounding eight quadrangles (CNDDDB 2009)
- CDFG California Wildlife Habitat Relationship System (CWHR) (CDFG 2005)
- U.S. Fish and Wildlife Service (USFWS) list of endangered and threatened species that may occur, or be affected by the project, in the Placerville, California quadrangle (USFWS 2007) (Appendix D)
- The California Native Plant Society (CNPS) online Inventory of Rare and Endangered Vascular Plants of California (CNPS 2008) (Appendix D)
- Pertinent literature including The Jepson Manual, Higher Plants of California (Hickman 1993); Amphibian and Reptile Species of Special Concern in California (Jennings and Hayes 1994); California Birds: Their Status and Distribution (Small 1994); Bird Species of Special Concern in California (Remsen 1978); and Mammalian Species of Special Concern in California (Williams 1986)

In addition, existing technical studies prepared for the project were reviewed and their results incorporated into this document. These documents include the following:

- Missouri Flat Area MC&FP and Sundance Plaza and El Dorado Villages Shopping Center Projects DEIR (EDAW 2008)
- Biological Resources Assessment Report for the Diamond Springs Parkway Alignment Project, El Dorado County, California (MBA 2008b) (Appendix D)
- Biological Resources Assessment Report for the El Dorado Irrigation District Intertie Improvements Project, El Dorado County, California (MBA 2008c) (Appendix D)

- California Red-Legged Frog Protocol Survey Report, Diamond Springs Parkway Project, Unincorporated Missouri Flat Area of El Dorado County, California (MBA 2009b) (Appendix D)
- Delineation of Jurisdictional Waters and Wetlands, Diamond Springs Parkway Project, Missouri Flat Area of Unincorporated, El Dorado County, California (MBA 2008f) (Appendix D)

Special-Status Plant Species

The complete list of special-status plant species reviewed for this document are listed in tables provided in the Biological Resources Assessment reports prepared for the Parkway and for the El Dorado Irrigation District (EID) Intertie Improvements projects (Appendix D). This list was compiled from query results from CNDDDB and the CNPS online inventory, as well as a list obtained from the U.S. Fish and Wildlife Service (USFWS). CNDDDB-recorded occurrences of special-status plant species within 5 miles of the project study area are shown in Exhibit 4.4-3.

Several regionally occurring species were determined not to have potential to occur within the project study area, either because the distribution of the species does not extend into the project vicinity, or because the habitat and/or microsite conditions (e.g., serpentine soils, mesic sites) required by the species are not present.

Based upon query results and field assessments, there are six special-status plants species with potential to occur within the project study area. A protocol-level survey for the special-status plant species having potential to occur within the project study area were conducted within all suitable habitats on June 19, 2008 by MBA Botanist Deborah Stout. No special-status plant species were identified during this survey.

Special-Status Wildlife Species

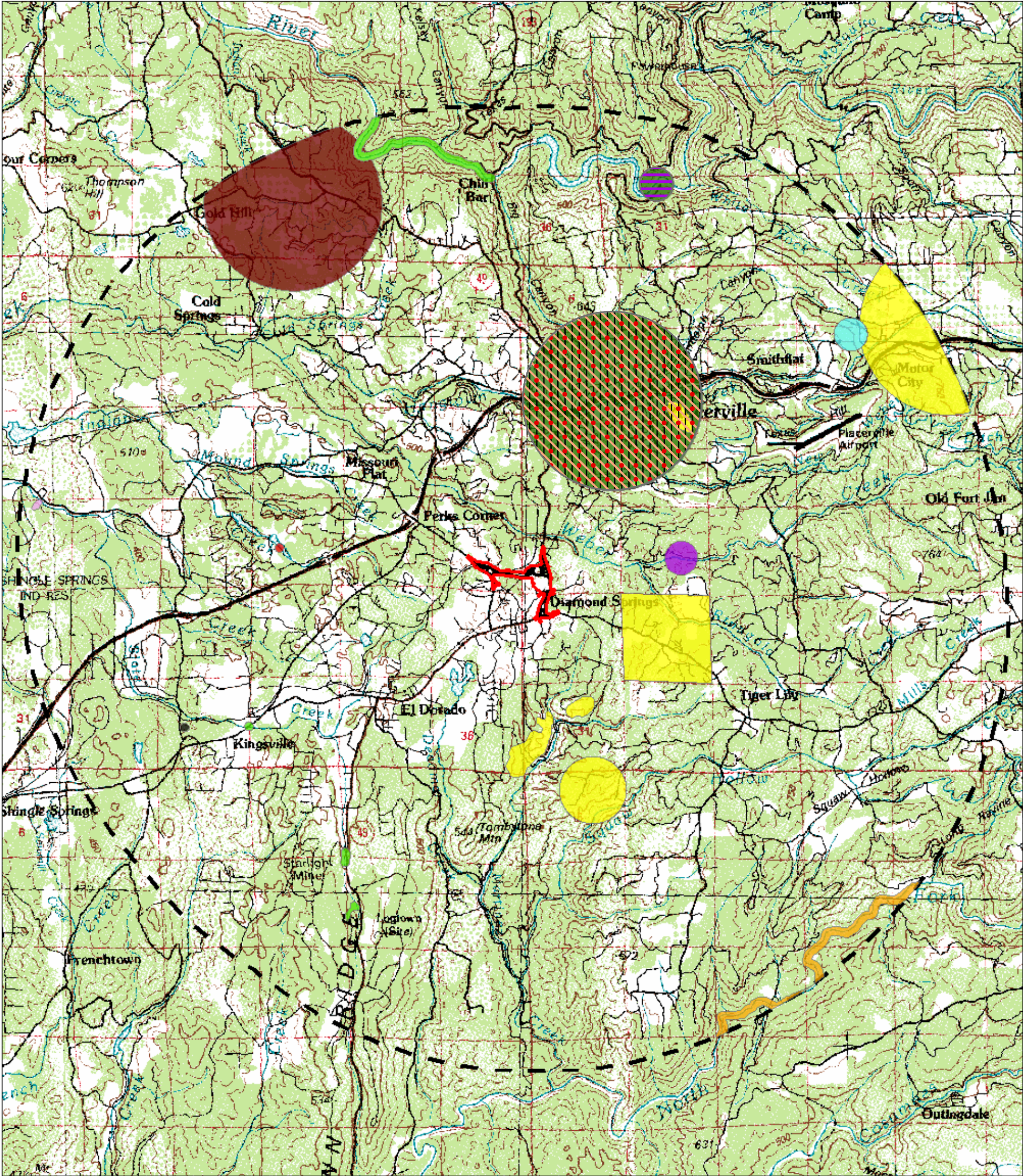
The complete list of special-status wildlife species reviewed for this document are listed in tables provided in the Biological Resources Assessment reports prepared for the Parkway and for the EID Intertie Improvements projects (Appendix D). This list was compiled from the USFWS list and query results from CNDDDB and CWHR. The CWHR is a predictive model that lists species likely to occur in a given location under certain habitat conditions. It also predicts the suitability of those conditions for reproduction, cover, and feeding for each modeled species. Information fed into the model for this project includes location (El Dorado County) and habitat type (blue oak-foothill pine, annual grassland, etc.). The CWHR does not include any information on plants, fish, invertebrates, or rare natural communities.

Several regionally occurring species were determined not to have potential to occur within the project study area, either because the distribution of the species does not extend into the study area vicinity,

Biological Resources

or because the habitat or habitat elements (e.g., caves, tall snags) required by the species are not present.

Based upon results of the species review, there are 11 special-status wildlife species with potential to occur within the project study area (Table 4.4-3). Descriptions of these species are provided below. Recorded occurrences of special-status wildlife species within 5 miles of the project study area are shown in Exhibit 4.4-3.



Source: California Dept. of Fish and Game CNDDDB Data (November 2009), CaSIL USGS 100k Scale 30x60' DRG.

Legend

- Project Study Area
- Project Footprint
- 5-Mile Radius

Common Name

- Brandegee's clarkia
- Central Valley Drainage Hardhead/Squawfish Stream
- Jepson's onion
- Layne's ragwort
- Mariposa clarkia
- oval-leaved viburnum

- (Scientific Name)
- (Clarkia biloba ssp. brandegeae)
 - (Central Valley Drainage Hardhead/Squawfish Stream)
 - (Allium jepsonii)
 - (Packera layneae)
 - (Clarkia Biloba ssp. australis)
 - (Viburnum ellipticum)

- Parry's horkelia (Horkelia parryi)
- Red Hills soaproot (Chlorogalum grandiflorum)
- Yuma myotis (Myotis yumanensis)
- great egret (Ardea alba)
- northwestern pond turtle (Actinemys marmorata marmorata)
- silver-haired bat (Lasionycteris noctivagans)
- tricolored blackbird (Agelaius tricolor)
- western pond turtle (Actinemys marmorata)
- Nissenan manzanita (Arctostaphylos nissenana)

Exhibit 4.4-3
CNDDDB-Recorded Occurrences
of Special-Status Species Within
Five Miles of the Project Study Area

Table 4.4-3: Special-Status Wildlife Species with Potential to Occur Within the Study Area

Common name Scientific Name	Listing Status USFWS/ CDFG	General Habitat Description	Potential for Presence	Period of Identification*
Amphibians				
California red-legged frog <i>Rana aurora draytonii</i>	FT/CSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby, or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to aestivation habitat.	Very Low. There are no permanent sources of deep water within the project site that are suitable for breeding. The drainage that runs through the project site is ephemeral in nature and highly degraded, and does not support any backwater ponds or other deep-water habitats. There are no CNDDDB-recorded occurrences of this species within 5 miles of the project site (CNDDDB 2009).	April 15 to July 1 (breeding) July 1 to September 30 (non-breeding)
Birds				
Sharp-shinned hawk <i>Accipiter striatus</i>	—/CSC	Winter resident throughout much of the state; permanent at higher elevations. Breeds in ponderosa pine, black oak, riparian deciduous, mixed conifer, and Jeffrey pine habitats. Prefers but is not restricted to riparian habitats.	Moderate. Blue oak-foothill pine and riparian habitats throughout the project site are suitable for nesting and foraging by this species. There are no CNDDDB-recorded occurrences of this species within 5 miles of the project site (CNDDDB 2009).	Year-round
Long-eared owl <i>Asio otus</i>	—/CSC	Breeding resident throughout much of the state. Found in dense riparian and live oak thickets near meadow edges, and nearby woodland and forest habitats; also found in dense conifer stands at higher elevations.	Moderate. Dense riparian wetland habitat at the north-central edge of the project site may be suitable for breeding by this species. Although trees would not be removed from this habitat, construction adjacent to an active nest may result in nest abandonment. There are no CNDDDB-recorded occurrences of this species within 5 miles of the project site (CNDDDB 2009).	Year-round

Table 4.4-3 (cont.): Special-Status Wildlife Species with Potential to Occur Within the Study Area

Common name <i>Scientific Name</i>	Listing Status USFWS/ CDFG	General Habitat Description	Potential for Presence	Period of Identification*
Yellow warbler <i>Dendroica petechia brewsteri</i>	—/CSC	Requires riparian thickets of willow and other brushy tangles near watercourses for cover. Nests in dense shrubs along a stream or river.	Moderate. Riparian habitat at the northern edge of the project site may be suitable for nesting and foraging. Although trees would not be removed from this habitat, construction adjacent to an active nest may result in nest abandonment. There are no CNDDDB-recorded occurrences of this species within 5 miles of the project site (CNDDDB 2009).	April to September
<i>Elanus leucurus</i> White-tailed kite	—/CFP	Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	High. Blue oak-foothill pine and riparian habitats throughout the project site are suitable for nesting by this species. There are no CNDDDB-recorded occurrences of this species within 5 miles of the project site (CNDDDB 2009).	January to August (breeding)
Merlin <i>Falco columbarius</i>	—/CSC	Uncommon winter migrant. Seldom found in heavily wooded areas or open deserts. Frequents open habitats at low elevations near water and tree stands. Favors coastlines, lakeshores, and wetlands. Ranges from annual grasslands to ponderosa pine and montane hardwood-conifer habitats.	Moderate. Blue oak-foothill pine habitat within the project site is suitable for this species. There are no CNDDDB-recorded occurrences of this species within 5 miles of the project site (CNDDDB 2009).	September to May
Yellow-breasted chat <i>Icteria virens</i>	—/CSC	Breeds in riparian habitats having dense understory vegetation, such as willow and blackberry.	Low. Riparian habitat at the northern edge of the project site may be suitable for nesting and foraging. Although trees would not be removed from this habitat,	April to July

Table 4.4-3 (cont.): Special-Status Wildlife Species with Potential to Occur Within the Study Area

Common name Scientific Name	Listing Status USFWS/ CDFG	General Habitat Description	Potential for Presence	Period of Identification*
			construction adjacent to an active nest may result in nest abandonment. There are no CNDDDB-recorded occurrences of this species within 5 miles of the project site (CNDDDB 2009).	
Loggerhead shrike <i>Lanius ludovicianus</i>	—/CSC	Found in a variety of habitats with open areas, available perches, and dense shrubs for nesting.	Low. The project site provides suitable nesting and foraging habitat for this species. There are no CNDDDB-recorded occurrences of this species within 5 miles of the project site (CNDDDB 2009).	March to August
Purple martin <i>Progne subis</i>	—/CSC	An uncommon to rare, local summer resident in a variety of wooded, low-elevation habitats throughout the state; a rare migrant in spring and fall, absent in winter. Breeding habitat includes old-growth, multi-layered, open forest and woodland with snags; forages over riparian areas, forest, and woodlands	Low. Blue oak-foothill pine habitat in the eastern portion of the project site may provide suitable nesting habitat for this species. There are no CNDDDB-recorded occurrences of this species within 5 miles of the project site (CNDDDB 2009).	April to September
Mammals				
Pallid bat <i>Antrozous pallidus</i>	—/CSC	Broadly distributed in California from sea level to over 6,000 feet. Roosts in caves, buildings, rock crevices, and tree hollows. Overwinters in summer habitats at lower elevations.	Low. Riparian and blue oak-foothill pine habitats within the project site may provide suitable maternity roosts for this species. There are no CNDDDB-recorded occurrences of this species within 5 miles of the project site (CNDDDB 2009).	April to October

Table 4.4-3 (cont.): Special-Status Wildlife Species with Potential to Occur Within the Study Area

Common name <i>Scientific Name</i>	Listing Status USFWS/ CDFG	General Habitat Description	Potential for Presence	Period of Identification*
Silver-haired bat <i>Lasionycteris noctivagans</i>	—/CSC	Primarily a coastal and montane forest dweller feeding over streams, ponds, and open brushy areas. Roosts in hollow trees, beneath exfoliating bark, abandoned woodpecker holes and rarely under rocks. Needs drinking water.	Low. Blue oak-foothill pine and riparian habitat within the project site may provide suitable roosting habitat for this species. There is a CNDDDB-recorded occurrence of this species approximately 2 miles north of the project site (CNDDDB 2009).	April to October
Source: MBA, 2008f.				

California Red-Legged Frog

California red-legged frog is listed as federally threatened and designated as a California State Species of Special Concern. The Recovery Plan for the California Red-Legged Frog (*Rana aurora draytonii*) (Recovery Plan) was published in 2002 (USFWS 2002), and Critical Habitat was designated in 2006 (USFWS 2006). The project area does not fall within currently designated critical habitat for this species. However, on October 8, 2009, USFWS opened a 30-day comment period on a new plan to designate 1.8 million acres of critical habitat for the California red-legged frog. Although a final ruling has not been made, the new proposed critical habitat does not include any areas within the project study area.

The project study area is situated within Core Area 4 (Cosumnes River - South Fork American River) as defined in the Recovery Plan. According to the Recovery Plan, areas mapped as a core area may not represent suitable California red-legged frog habitat, and habitats within core areas should be assessed for suitability. "...many portions of the mapped core areas are agricultural lands and urban developments which, in most cases, will be considered unsuitable and excluded from the recovery efforts. Recovery goals should be implemented only where suitable or potentially suitable habitat is present" (USFWS 2002).

California red-legged frog is known from isolated localities in the Sierra Nevada, along the north and central Coast Range, and the northern Transverse Range (USFWS 2002). The California red-legged frog inhabits lowlands and foothills in or near permanent deep water with dense growth of emergent and woody riparian vegetation bordering permanent and semi-permanent ponds, stream pools, marshes, and springs. Upland habitat surrounding breeding areas is important for shelter during dispersal and aestivation, and dispersing individuals may travel considerable distances away from water on rainy nights. At any time of the year, the frogs may take refuge in burrows and other upland

refugia away from permanent or semi-permanent water sources. This species is known to occur in the region; however, it has not been recorded within a 5-mile radius of the project study area (CNDDDB 2009).

On June 30, 2008, MBA submitted to Sacramento Fish and Wildlife Office (SFWO) a request for concurrence regarding the absence of suitable habitat for red-legged frog within the project study area. On July 24, 2008, SFWO responded to MBA's request, stating that:

While it is apparent that the project site does not contain suitable breeding habitat, the information provided was insufficient for us to conclude that the on-site drainage does not provide potential non-breeding habitat....The proposed project is located approximately 0.4 miles west of Weber Creek, an area that has historically been known to contain frogs, and is located adjacent to an aquatic feature that may provide suitable breeding habitat for the frog...Since the project is located within the range of the frog and there are no apparent dispersal barriers between the project site and potentially suitable breeding habitat, we recommend that an adequate site assessment be conducted following the Service's 2005, Revised Guidance on Site Assessment and Field Surveys for the California Red-Legged Frog.

On September 18, 2008, and October 3, 2008, MBA spoke with Jeremiah Karuzas, a biologist with the SFWO, to discuss the habitats and developments that occur within 1 mile of the project and determine what assessments and/or surveys may be required. Because the Initial Study/Mitigated Negative Declaration (IS/MND) for the El Dorado Trail Improvement Project Forni Road to Missouri Flat Road (El Dorado County 2007) identified the EID-owned Bray Reservoir, which is located just north of the project study area, as suitable breeding habitat for California red-legged frog, the USFWS stated that a site assessment is not required, but that protocol-level surveys for the species within Bray Reservoir would be required.

Accordingly, In June and July 2009, MBA conducted protocol surveys within Bray Reservoir in accordance with the Revised Guidance on Site Assessments and Field Surveys for the California Red-Legged Frog (USFWS 2005). No CRLF tadpoles, metamorphs, juveniles, or adults were observed during the surveys. Surveys did detect several adult bullfrogs (*Rana catesbeiana*); tadpoles, metamorphs, and juvenile Pacific chorus frog (*Pseudacris regilla*); and several juvenile western toad (*Bufo boreas halophilus*). MBA submitted the survey report to SFWO on August 12, 2009 (MBA 2009b, Appendix D). On September 11, 2009, the SFWO reviewed the survey report and confirmed the surveys had been conducted appropriately. The SFWO representative recommended that appropriate mitigation measures be implemented that would prevent frogs dispersing from Weber Creek from entering the project site during construction (Appendix D). These mitigation measures are included in Section 4.4.4, Project Impact Analysis, below.

Biological Resources

Sharp-Shinned Hawk

Sharp-shinned hawk is a California Species of Special Concern. It is a fairly common migrant and winter resident throughout California, except in areas with deep snow, and it is an uncommon permanent resident and breeder in mid-elevation habitats. Some individuals migrate into California for the winter, and others migrate to the mountains for summer and downslope to foothills and valleys for the winter. Sharp-shinned hawk commonly is found in urban habitats during the winter where large trees are available for roosting.

The breeding distribution of sharp-shinned hawk is documented poorly. This species is known to breed in ponderosa pine, black oak, riparian deciduous, mixed conifer, and Jeffrey pine habitats, and it prefers but is not restricted to riparian habitats. Nesting typically occurs in dense, pole and small-tree stands of conifers, which are cool, moist, well shaded, with little groundcover, and near water. Sharp-shinned hawk eats mostly small birds, small mammals, insects, reptiles, and amphibians. North-facing slopes with plucking perches are critical habitat requirements for this species. Breeding occurs from April through August.

Suitable nesting and foraging habitat for this species occurs in dense riparian forest located in the north-central portion of the project study area. There are no CNDDDB-recorded occurrences of this species within 5 miles of the project study area (CNDDDB 2009).

Long-Eared Owl

Long-eared is a California Species of Special Concern. Long-eared owl is an uncommon yearlong resident throughout the State, with the exception of the Central Valley and Southern California deserts, where it is an uncommon winter visitor. This species frequents dense riparian and live oak thickets near meadow edges, other dense stands of trees, and nearby woodland and forest habitats. Short-eared owl preys on voles and other rodents; occasionally birds, including smaller owls; and other vertebrates. Long-eared owl searches for prey in low, gliding flight and pounces on prey on the ground. It usually hunts in open areas but occasionally forages in woodland and forested habitats. Nesting is restricted to riparian habitats or other thickets with small, densely canopied trees. Old crow, magpie, hawk, heron, and squirrel nests in a variety of trees with dense canopy may be used. Breeding occurs from valley foothill hardwood up to ponderosa pine habitats.

Suitable nesting habitat for this species occurs in dense riparian forest located in the north-central portion of the project study area. There are no CNDDDB-recorded occurrences of this species within 5 miles of the project study area (CNDDDB 2009).

Yellow Warbler

Yellow warbler is a widely distributed California Species of Special Concern. It is a breeding summer resident of northern California (from Shasta County north), the western and eastern slopes of the Sierra Nevada, and the Coast and Transverse ranges. This species is generally absent from the Sacramento Valley and the southern deserts. Wintering populations occur in the Colorado and

Imperial river valleys. Breeding populations generally arrive in California in April and depart by October. Yellow warbler eats primarily insects and spiders; foraging strategies include gleaning and hovering in upper canopy of deciduous trees and shrubs. Suitable breeding habitat is riparian deciduous habitat that includes cottonwoods, willows, alders, and other small trees and shrubs typical of low, open-canopy riparian woodland. Yellow warbler also has been known to breed in montane shrubbery in open conifer forests. In migration, yellow warbler visits woodland, forest, and shrub habitats.

Suitable nesting habitat for this species occurs in dense riparian forest located in the north-central portion of the project study area. There are no CNDDDB-recorded occurrences of this species within 5 miles of the project study area (CNDDDB 2009).

White-Tailed Kite

White-tailed kite is a California Species of Special Concern and a fully protected species. This species is considered a common to uncommon, yearlong resident in coastal and valley lowlands and is strongly associated with agricultural areas. White-tailed kite inhabits herbaceous and open stages of most habitats. It preys mostly on voles and other small, diurnal mammals, and occasionally on birds, insects, reptiles, and amphibians. Foraging occurs in undisturbed, open grasslands, meadows, farmlands, and emergent wetlands. White-tailed kite typically nests in and roosts in substantial groves of dense, broad-leaved deciduous trees located near an open foraging area. Breeding occurs from February through October.

Suitable nesting habitat for this species occurs in areas where large trees are present. There are no CNDDDB-recorded occurrences of this species within 5 miles of the project study area (CNDDDB 2009).

Merlin

Merlin is a California Species of Special Concern and an uncommon winter migrant throughout the State, with the exception of the high Sierra Nevada Mountains. It is typically present in California from September through May. This species frequents coastlines, open grasslands, savannahs, woodlands, lakes, wetlands, habitat edges, and early successional stages of many habitats. It is rarely found in heavily wooded areas or in open deserts. Merlin requires dense tree stands close to bodies of water for cover.

Suitable wintering habitat for this species is present in blue oak-foothill pine habitat, and in dense riparian habitat in the north-central portion of the project study area. There are no CNDDDB-recorded occurrences of this species within 5 miles of the project study area (CNDDDB 2009).

Yellow-Breasted Chat

Yellow-breasted chat is a California Species of Special Concern, which frequents dense, brushy thickets and tangles near water, and thick understory in riparian woodland. It is an uncommon

Biological Resources

summer resident and migrant in coastal California and in foothills of the Sierra Nevada up to approximately 4,800 feet in elevation. Yellow-breasted chat typically arrives in California in April and departs by late September for wintering grounds in Mexico and Guatemala. This species preys on insects and spiders, and berries and other fruits, typically gleaning from foliage of shrubs and low trees. Yellow-breasted chat requires riparian thickets of willow and other brushy tangles near watercourses for cover.

Suitable nesting and foraging habitat for this species occurs at the north-central boundary of the project study area where dense riparian forest is present. There are no CNDDDB-recorded occurrences of this species within 5 miles of the project study area (CNDDDB 2009).

Loggerhead Shrike

The loggerhead shrike is a California Species of Special Concern. The loggerhead shrike is a resident of a wide range of foothill and lowland habitat throughout California, with limited numbers of winter migrants known in coastal areas north of Mendocino County. Loggerhead shrikes prefer open habitats with scattered shrubs, trees, posts, fences, utility lines, or other perches (PG&E 2007). Highest density occurs in open-canopied valley foothill hardwood, valley foothill hardwood-conifer, valley foothill riparian, pinyon-juniper, juniper, desert riparian, and Joshua tree habitats, but it also is found in cropland areas.

Moderately suitable nesting and foraging habitat for this species occurs throughout wooded portions of the project study area. There are no CNDDDB-recorded occurrences of this species within 5 miles of the project study area (CNDDDB 2009).

Purple Martin

The purple martin is designated as a California Species of Special Concern. The purple martin is an uncommon to rare local summer resident in a variety of wooded, low-elevation habitats throughout California. This species is a rare migrant in spring and fall as well, however is absent in winter when it migrates to South America. General habitat for the purple martin consists of valley foothill and montane hardwood and hardwood-conifer forests, and riparian habitats. Individuals are typically observed near lakes, marshes, and urban and suburban environments. Purple martins nest in open and semi-open areas, including savannas, cultivated lands, fields, parks, and pastures, and utilizes natural cavities in trees and cliff niches. Purple martins will also nest in artificial housing, structures, or landscape features. This species often forms colonies.

Moderately suitable nesting and foraging habitat for this species occurs throughout wooded portions of the project study area. There are no CNDDDB-recorded occurrences of this species within 5 miles of the project study area (CNDDDB 2009).

Pallid Bat

Pallid bat is a California Species of Special Concern. This species occurs in a variety of habitats throughout the state, typically below 6,000 feet in elevation. It is most abundant in xeric ecosystems. Pallid bats roost alone and in both large and small groups. Day and night roosts include crevices in rocky outcrops and cliffs, caves, mines, trees, and human structures such as bridges, barns, porches, bat boxes, and buildings. This species also has been found roosting on or near the ground under stone piles, rags, and baseboards. Pallid bats are generalists that surface-glean for arthropods and capture insects on the wing. Breeding occurs from October to February, pups are born from late April to July, and breeding colonies disperse between August and October. In California, pallid bat often overwinters in or near its summer roost site, and is active periodically throughout the winter. This species' tendency to roost gregariously, combined with a relative sensitivity to disturbance, makes it vulnerable to mass displacement.

Riparian and blue oak-foothill pine habitats within the project study area may provide suitable maternity roosts for this species. There are no CNDDDB-recorded occurrences of this species within 5 miles of the project study area (CNDDDB 2009).

Silver-Haired Bat

The silver-haired bat is a California Species of Special Concern. The silver-haired bat occurs as a yearlong resident of a wide range of habitats throughout California, preferring temperate, northern hardwoods with ponds or streams nearby. The typical day roost for silver-haired bats includes loose tree bark. These bats are most often associated with willow, maple, and ash trees in day roosting, most likely due to the deeply fissured bark. Hollow snags, bird nests, and buildings also provide daytime roosting areas. During the winter months, this species hibernates in shelters in northern areas inside trees, buildings, rock crevices, and similar protected structures. Silver-haired bats are insectivorous, foraging primarily on flies, beetles, and moths.

Riparian and blue oak-foothill pine habitats within the project study area may provide suitable maternity roosts for this species. There is a CNDDDB-recorded occurrence of this species approximately 2 miles north of the project study area (CNDDDB 2009).

4.4.3 - Regulatory Framework

Federal

Special-Status Species

Federal Endangered Species Act

The USFWS administers the Federal ESA, which provides a process for listing species as either threatened or endangered, and methods of protecting them. The ESA defines as "endangered" any plant or animal species that is in danger of extinction throughout all or a significant portion of its range. A "threatened" species is a species that is likely to become endangered in the near future. A

Biological Resources

“proposed” species is one that has been officially proposed by USFWS for addition to the Federal threatened and endangered species list.

Section 9 of the ESA prohibits “take” of threatened or endangered species. The term “take” means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in such conduct. The presence of any federally threatened or endangered species that are in a project area generally imposes severe constraints on development, particularly if development would result in take of the species or its habitat. Under the regulations of the ESA, the USFWS may authorize take when it is incidental to, but not the purpose of, an otherwise lawful act.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) makes it unlawful to pursue, capture, kill, or possess or attempt to do the same to any migratory bird or part, nest, or egg of any such bird listed in wildlife protection treaties between the United States, Great Britain, Mexico, Japan, and the countries of the former Soviet Union.

Waters of the U.S., Including Wetlands

Clean Water Act

Section 404 of the Federal Clean Water Act, which is administered by USACE, regulates the discharge of dredge and fill material into waters of the United States (U.S.). The USACE has established a series of nationwide permits that authorize certain activities in waters of the U.S., if a proposed activity can demonstrate compliance with standard conditions. Normally, the USACE requires an individual permit for an activity that would affect an area equal to or in excess of 0.5 acre of waters of the U.S. Projects that result in impacts to less than 0.5 acre can normally be conducted pursuant to one of the nationwide permits, if consistent with the standard permit conditions. The USACE also has discretionary authority to require an Environmental Impact Statement for projects that result in impacts to an area between 0.1 and 0.5 acre. Use of any nationwide permit is contingent on the activities having no impacts to endangered species.

Section 401 of the Clean Water Act requires that “any applicant for a federal permit for activities that involve a discharge to waters of the State shall provide the federal permitting agency with a certification from the State, in which the discharge is proposed, that states the discharge will comply with the applicable provisions under the federal Clean Water Act.” Therefore, before the USACE will issue a Section 404 permit, applicants must apply for and receive a Section 401 water quality certification from the Regional Water Quality Control Board (RWQCB).

State

Special-Status Species

California Endangered Species Act

The CDFG administers the CESA. The State of California considers an endangered species as one whose prospects of survival and reproduction are in immediate jeopardy. A threatened species is

considered as one present in such small numbers throughout its range that it is likely to become an endangered species in the near future in the absence of special protection or management. A rare species is one that is considered present in such small numbers throughout its range that it may become endangered if its present environment worsens. State threatened and endangered species are fully protected against take, as defined above.

CEQA Guidelines Section 15380

Threatened and endangered species are protected by specific Federal and State statutes. In addition, the CEQA Guidelines section 15380 provides that a species not listed on the Federal or State lists of threatened or endangered species may be considered rare or endangered under CEQA review if the species can be shown to meet certain specified criteria. This section was included in the CEQA Guidelines primarily to deal with situations in which a public agency is reviewing a project that may have a significant impact on for example, a “candidate species” that has not yet been listed under the Federal ESA or the CESA. Therefore, CEQA provides an agency with the ability to protect a species from a project’s potential impacts until the respective government agency has an opportunity to formally designate to species as protected, if warranted.

Sensitive plant species are afforded protection under CEQA through the CNPS inventory of rare, threatened, and endangered plants of California. CNPS is a California resource conservation organization that has developed an inventory of California’s sensitive plant species. This inventory summarizes information on the distribution, rarity, and endangerment of California’s vascular plants. The inventory is divided into four lists based on the rarity of the species. In addition, the CNPS provides an inventory of plant communities that are considered sensitive by the state and federal resource agencies, academic institutions, and various conservation groups. Determination of the level of sensitivity is based on the number and size of remaining occurrences as well as recognized threats.

California Fish and Game Code, Sections 3503 and 3511

The CDFG administers the California Fish and Game Code. There are particular sections of the Code that are applicable to natural resource management. For example, Section 3503 of the Code states it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. Section 3511 of the Code lists fully protected bird species, where the CDFG is unable to authorize the issuance of permits or licenses to take these species.

Native Plant Protection Act

The Native Plant Protection Act (California Fish and Game Code Sections 1900-1913) prohibits taking, possessing, or selling within the State any rare, threatened, or endangered plants as defined by the CDFG. Where notification has been received that state-listed plants are present on private property, the CDFG must be notified 10 days prior to destruction to allow for salvage of individuals and/or populations.

Waters and Wetlands

Clean Water Act - Section 401

In accordance with Section 401 of the Clean Water Act (CWA), “any applicant for a Federal permit for activities that involve a discharge to waters of the State, shall provide the Federal permitting agency a certification from the State in which the discharge is proposed that states that the discharge will comply with the applicable provisions under the Federal Clean Water Act.” Therefore, before the USACE will issue a Section 404 permit, applicants must apply for and receive a Section 401 water quality certification from the RWQCB.

Porter-Cologne Water Quality Act

The RWQCB regulates actions that would involve “discharging waste, or proposing to discharge waste, within any region that could affect the water of the state” (California Water Code Section 13260(a)), pursuant to provisions of the Porter-Cologne Water Quality Act. “Waters of the State” are defined as “any surface water or groundwater, including saline waters, within the boundaries of the state” (California Water Code 13050 (e)).

California Fish and Game Code, Sections 1600 through 1603

All diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake in California are subject to the regulatory authority of the CDFG pursuant to Sections 1600 through 1603 of the Fish and Game Code, requiring preparation of a Streambed Alteration Agreement. Under the Code, a stream is defined as a body of water that flows at least periodically, or intermittently, through a bed or channel having banks and supporting fish or other aquatic life. Included are watercourses with surface or subsurface flows that support or have supported riparian vegetation. Additionally, the CDFG has jurisdiction over altered or artificial waterways as well as dry washes that carry water ephemerally during storm events based on the biological value of these drainages to fish and wildlife.

Local

El Dorado County General Plan

Appendix J of this Draft EIR provides a matrix that lists the policies determined to have relevance to this proposed project and provides a summary of the County’s determination of project consistency with each relevant goal and policy. As shown in Appendix J, the project is consistent with all applicable goals and policies of the General Plan, including those related to biological resources.

Oak Woodland Management Plan

El Dorado County has in place an Oak Woodland Management Plan (OWMP), finalized in May 2008 (El Dorado County 2008). The purpose of the OWMP is to outline the County’s strategy for conservation of valuable oak woodland resources. Through the OWMP, the County identifies areas where conservation easements may be acquired from willing sellers as a means to offset and mitigate the loss of fragmentation of oak woodlands in other areas as a result of the implementation of the

2004 El Dorado County General Plan. Additionally, the OWMP provides guidance for voluntary conservation and management efforts by landowners and land managers. Lastly, the OWMP sets forth further guidance on General Plan Policy 7.4.4.4 Option A, which includes measures designed to encourage retention of existing oak canopy in areas planned for development.

General Plan Policy 7.4.4.4 applies to all new development projects that would result in soil disturbance on parcels that are less than or equal to one acre with at least 10 percent total oak woodland canopy cover, or greater than one acre with at least 1 percent oak woodland canopy cover. Replacement objectives of the OWMP may be achieved by (1) replacement planting onsite at a 1:1 canopy surface area ratio, (2) contributing to the County's Conservation fund at a 2:1 ratio, (3) acquiring an onsite conservation easement on oak woodlands at a 2:1 ratio, or (4) through a combination of 1, 2, and 3.

4.4.4 - Project Impact Analysis

This section discusses potential impacts associated with the construction and operation of the project and provides mitigation measures where appropriate. The MC&FP EIR impact assessment and mitigation measures are included where appropriate, since the proposed project must comply with regulations set forth by the prior programmatic programmatic-level EIR. Further analysis or mitigation required beyond that of the MC&FP EIR is included where necessary. Potential cumulative effects are discussed in Section 6, Other CEQA Required Conclusions, of this EIR.

Methodology for Analysis

MBA analyzed the proposed project's potential to cause adverse impacts to the biological resources based on the technical documentation summarized above. In addition to this technical documentation, MBA biologists made numerous field visits to the project study area to evaluate biological resources and jurisdictional delineation of waters of the U.S., including wetlands.

Thresholds of Significance

According to the CEQA Guidelines' Appendix G Environmental Checklist, to determine whether impacts to biological resources are significant environmental effects, the following questions are analyzed and evaluated. Would the project:

- a.) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?
- b.) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Biological Resources

- c.) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
- d.) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?
- e.) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
- f.) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Impact Statements and Mitigation Discussions

Effect on Species

Impact 4.4-1:	The project has the potential to result in a substantial adverse effect, either directly or through habitat modifications, on a species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service. (Potentially Significant)
----------------------	--

Impact Analysis

This impact addresses potential impacts on special-status plant and wildlife species from project implementation. No special-status plant species were identified within the project study area. Eleven special-status wildlife species were determined to potentially occur within the project study area. Discussion of the special-status wildlife species are discussed below in two categories: California red-legged frog and nesting birds/roosting bats.

California Red-Legged Frog

Construction and operation of the project has the potential to impact California red-legged frog. Although no suitable breeding habitat is present within the project study area, the drainage located in the central portion of the area (Exhibit 4.4-2) may act as a dispersal corridor from adjacent aquatic habitats north of the study area. If California red-legged frog occurs in the vicinity of the project, direct impacts may occur if construction occurs during the wet season when frogs are dispersing. Impacts to California red-legged frog are considered potentially significant.

Nesting Birds/Roosting Bats

Construction of the project has the potential to impact special-status nesting birds and bats, including sharp-shinned hawk, long-eared owl, yellow warbler, white-tailed kite, merlin, yellow-breasted chat, loggerhead shrike, purple martin, pallid bat, and silver-haired bat. Other nesting raptors and migratory songbirds protected under the MBTA may also be affected should construction occur during the nesting season. Impacts to these species are considered potentially significant.

Significance Determination Before Mitigation

Potentially significant impact.

Mitigation Measures from the MC&FP EIR

The following mitigation measures were included in the MC&FP EIR (EDAW 1998):

MC&FP Mitigation Measure 4.9-2: Loss of Habitat for the California Red-legged Frog

- a) Prior to issuance of a grading permit for any MC&FP retail development or roadway improvement projects, a qualified biologist will consult with USFWS to determine whether red-legged frogs could potentially occur within the project study area.
- b) If the USFWS determines that there is no potential for the occurrence of red-legged frog on the project study area, the species may be assumed absent and no further mitigation is necessary.
- c) If USFWS determines that surveys are necessary to determine whether red-legged frogs could occur on the project study area, a survey will be conducted in accordance with the methods outlined in Guidance on Site Assessment and Field Surveys for California Red-legged Frogs (USFWS 1997).
- d) {Not relevant to this project}
- e) The results of the red-legged frog survey will be summarized in a report to be provided to the USFWS Ecological Services Division, Sacramento Field Office. This report will also include additional information related to survey as described under USFWS protocol (USFWS 1997).
- f) If no red-legged frogs are found during the survey, and the survey results are acceptable to USFWS, this species will be presumed absent, and no further mitigation will be necessary.
- g) If red-legged frogs are found, the project proponent will consult with USFWS under Section 7 or Section 10 to determine a future course of action, including whether incidental take authorization is needed. Through consultation and negotiations with USFWS, appropriate mitigation and avoidance measures will be determined and required to be implemented for the take authorizations.

MC&FP Mitigation Measure 4.9-8a: Raptor Nest Disturbance

- a) Prior to issuance of a grading permit for any MC&FP retail development or roadway improvement projects, and Sundance Plaza and El Dorado Villages Shopping Center, it will be determined whether grading or tree removal is proposed during the raptor nesting season (March 1 to October 1).
- b) If no grading or tree removal will occur during the raptor nesting season, no further mitigation will be necessary.

Biological Resources

- c) If grading or tree removal is proposed during the raptor nesting season, a focused survey for raptor nests shall be conducted by a qualified biologist during the nesting season to identify active nests on the project study area. The survey will be conducted no less than 14 days, and no more than 30 days, prior to the beginning of grading or tree removal. The results of the survey will be summarized in a written report to be submitted to CDFG prior to the beginning of grading.
- d) If nesting raptors are found during the focused survey, no grading or tree removal will occur within 500 feet of an active nest until the young have fledged (as determined by a qualified biologist) or until the project applicant receives written authorization from CDFG to proceed. If nest trees are unavoidable, they shall be removed during the non-breeding season.

Significance Determination After MC&FP Mitigation, and Supporting Rationale

Potentially significant.

The MC&FP EIR mitigation measure pertaining to the California red-legged frog is now outdated. Since preparation of the MC&FP EIR, the USFWS has determined that the 1997 Guidance is less likely to accurately detect California red-legged frog than previously believed, particularly where the species exists in low numbers. In response to the need for new guidance, USFWS created and released the Revised Guidance on Site Assessment and Field Surveys for the California Red-Legged Frog (2005). Based on informal consultation with the SFWO, MBA conducted protocol-level surveys of Bray Reservoir for the CRLF in accordance with the 2005 Guidance (Appendix D). The SFWO representative recommended that appropriate mitigation measures be implemented to prevent frogs dispersing from Weber Creek from entering the project site during construction (refer to Appendix D). Replacement mitigation that supersedes MC&FP Mitigation Measure 4.9-2 is provided below to reduce this potential impact to a less than significant level.

MC&FP EIR Mitigation Measure 4.9-8a incorrectly characterizes the current County procedure for granting approval to grading and other construction activities. The DOT construction plan for the Parkway would be prepared in accordance with all County requirements and would be reviewed and ultimately approved by the County Board of Supervisors.

In addition, implementation of MC&FP EIR Mitigation Measure 4.9-8a would not reduce impacts to nesting raptors and migratory songbirds to a less-than-significant level. A timeframe of 30 days between nesting bird surveys and start of construction may allow for new nests to be established, particularly early in the nesting season. Replacement mitigation that supersedes MC&FP Mitigation Measure 4.9-8a is therefore provided below in order to reduce this potential impact to a less than significant level.

Mitigation measures protecting special-status bat species were not included in the MC&FP EIR. Removal of trees supporting active pallid bat and silver-haired bat maternity roosts would be

considered a significant impact. Additional mitigation is provided below to reduce this potential impact to a less than significant level.

Additional Mitigation Measures

MM 4.4-1a A qualified biologist shall conduct a California red-legged frog (CRLF) survey of the project site 48 hours before the onset of work activities. If any life stage of CRLF is found, and these individuals are likely to be killed or injured by work activities, the approved biologist shall be allowed sufficient time to move them from the site before work activities begin. The biologist shall relocate CRLF(s) the shortest distance possible to a location that contains suitable habitat and that will not be affected by activities associated with the proposed project.

Exclusion fencing shall be installed to prevent frogs from entering the project site during construction. The exclusion fence shall be made of a fine mesh material with openings small enough to prevent passage of CRLF. The exclusion fence shall be a minimum of 18 inches tall above ground, and buried a minimum of six inches below ground. Prior to initiation of construction activities, the fencing shall be placed to the north of construction activities to prevent frogs that may disperse from Weber Creek from entering the project site. The fence shall extend no less than 100 feet beyond the limits of active construction, including any staging areas. The exclusion fencing shall be regularly monitored and repaired as needed. As construction progresses, fencing may be removed and re-installed in areas of active construction; however, fencing shall not be removed from those areas with active construction until all construction-related activities are completed.

During project activities, all trash that may attract predators shall be properly contained, removed from the work site, and disposed of regularly. Following construction, all trash and construction debris shall be removed from work areas.

MM 4.4-1b Nesting Bird and Bat Surveys Associated with Vegetation Clearing and Other construction Activities: Removal of any trees and shrubs (multi-stemmed woody plants ≥ 6 feet in height) shall be conducted outside of the breeding season (typically March 1 through October 1). If no tree and shrub removal will occur during the breeding season, no further mitigation will be necessary.

If removal of trees and shrubs must occur during the breeding season, nesting bird surveys shall be conducted by a qualified biologist within 250 of where removal would occur, no more than 14 days prior to removal. Concurrently, the biologist shall also survey for trees capable of supporting a sizeable bat maternity roost. If no active nests or roost trees are identified, then no additional mitigation is necessary.

Biological Resources

If an active nest or potential maternity roost is identified, the nest shall be mapped and photographed. No tree removal shall occur within 250 feet of the active nest/roost unless approved by CDFG. For trees removed that are located more than 250 feet but less than 500 feet from an active nest, a biological monitor shall be present to observe the nest/roost during tree removal.

MM 4.4-1c Nesting Bird Surveys Associated with Project Construction: During the breeding season (February through August), a nesting bird and bat survey shall be conducted in suitable habitat within 250 feet of construction activities prior to construction initiation. The survey shall be conducted no more than 14 days prior to initiation of construction activities. If an active nest/roost is observed in this area, all construction activities shall be halted, and CDFG shall be consulted to determine the appropriate mitigation measure. Nest/roost disturbance is dependent on a number of site-specific and activity-specific factors, including the sensitivity of the species, proximity to work activity, amount of noise or frequency of the work activity, and intervening topography, vegetation, structures, etc. Mitigation may be required to minimize disturbance nests/roosts, such as allowing nesting activity to conclude before continuing construction in an area, restricting certain types of construction practices/activities, creating screening devices to shield nest sites from construction activity, and establishing buffer areas around active nest/roost sites.

Significance Determination After Additional Mitigation, and Supporting Rationale

Less than significant.

Protocol-level surveys described in Mitigation Measure 4.4-1a would determine the presence/absence of California red-legged frog near the project study area. Based upon these results, and with implementation of any mitigation measures required by SFWO, direct and indirect impacts to this species would be avoided through Implementation of Mitigation Measure 4.4-1a.

Implementation of Mitigation Measures 4.4-1b and 4.4-1c would ensure that project construction would not result in direct or indirect disturbance to nesting raptors and songbirds, or loss of active nests from nest abandonment.

EID Intertie Improvements

The proposed EID Intertie Improvements would not result in any additional direct or indirect impacts to special-status species beyond those described above. For the Intertie Improvements that extend from Bradley/SR-49 north to Finch/SR-49, it is less likely that construction would affect the California red-legged frog. Based on recent conversations with SFWO, any frogs attempting to cross SR-49 are already affected by existing traffic, and construction would not result in additional impacts because it would be limited to the existing SR-49 ROW (Karuzas, pers. comm., 2008).

Implementation of Mitigation Measure 4.4-1a would reduce potential impacts to California red-legged frog to a less than significant level.

For portions of the Intertie Improvements to be placed within areas that would be cleared for new roadway construction / the Parkway, no additional tree removal is anticipated to be required for the Intertie Improvements alone; all trees would be removed during clearing and grading for Parkway-related construction. Therefore, construction of the Intertie Improvements would have the same potential for impacts to nesting birds and roosting bats as described above for the Parkway. Installation of the Intertie Improvements that extend from Bradley/SR-49 north to Finch/SR-49 is not anticipated to require removal of any additional trees. Should tree removal be required for that portion of the Intertie Improvements, implementation of Mitigation Measure 4.4-1b would reduce impacts to a less than significant level.

Installation of the Intertie Improvements has the potential to impact birds nesting within 250 feet of construction activities, similar to the proposed Parkway. Implementation of Mitigation Measure 4.4-1c would reduce these effects to a less than significant level.

Riparian Habitat

Impact 4.4-2:	The project has the potential to result in a substantial adverse effect on riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service. (Potentially Significant)
----------------------	--

Impact Analysis

There are 2.74 acres of valley foothill riparian habitat within the project study area, approximately 2.22 acres of which is located within the project footprint shown in Exhibits 3-5a and 3-5b. Clearing and grading activities required for construction of the Parkway within the project footprint could result in the temporary removal of up to 2.22 acres of valley foothill riparian habitat. Loss of this riparian habitat is considered a potentially significant impact.

The MC&FP EIR states in Impact 4.9-10 (Loss of Jurisdictional Waters of the United States, Including Wetlands) that the retail projects and roadway improvements would result in the loss of riparian habitat. The discussion of impacts to riparian habitat is limited to potential jurisdictional waters of the U.S. and wetlands. Upland/non-wetland riparian habitat is not discussed, and there is no quantification of impacts or proposed mitigation for impacts to non-wetland riparian habitat. There are no additional impacts that address non-wetland riparian habitat.

Significance Determination Before Mitigation

Potentially significant impact.

Mitigation Measures from the MC&FP EIR

N/A

Biological Resources

Significance Determination After MC&FP Mitigation, and Supporting Rationale

The MC&FP EIR did not provide any mitigation measures for loss of riparian habitat. Loss of riparian habitat is considered a potentially significant impact.

Additional Mitigation Measures

MM 4.4-2 Riparian habitat would be avoided to the maximum extent feasible. Prior to initiation of any ground clearing or other construction activities, a CDFG Section 1602 Lake and Streambed Alteration Agreement shall be prepared and approved by CDFG. Mitigation required for direct and indirect impacts to all riparian habitat under CDFG jurisdiction will be carried out in accordance with the conditions of the Lake and Streambed Alteration Agreement.

Mitigation for impacts to riparian habitat shall include the following:

- 1) Prior to project construction, a riparian habitat restoration and enhancement mitigation and monitoring plan for shall be prepared and submitted to CDFG for approval. The plan shall include the following:
 - a) The plan shall identify those portions of the onsite drainage (ED3) and other riparian habitats within the project study area that would benefit most from riparian restoration and enhancement activities. This includes removal of trash, removal of noxious weed species, identification of areas requiring bank stabilization, and identification of areas most suitable for revegetation and a list of plants suitable for those areas.
 - b) The plan shall stipulate a vegetated setback along drainages, where feasible, of not less than 50 feet from the bank, in accordance with General Plan policies. The plan shall stipulate that, where vegetation is not present within the 50-foot buffer, suitable native plants shall be installed in order to create a vegetated buffer that will improve water quality and create wildlife habitat.
 - c) Restoration: Immediately following completion of construction, trash within the drainage shall be removed and suppression of noxious weed species shall be implemented. This shall be completed prior to planting of any additional plants.
 - d) Replacement: Replacement of all permanently affected riparian habitat (including that along ED3 and the three riparian inclusions) shall occur at a minimum ratio of 1:1 per woody riparian species removed. Species suitable for areas outside of but adjacent to the drainage include, but are not limited to, valley oak, coyote brush, and

California sycamore. Species suitable for wetter portion of the channel and bank include, but are not limited to, Fremont cottonwood, California blackberry, black willow, arroyo willow, and California pipevine.

- e) The plan shall include a timeline that identifies when activities shall occur and completion dates.
- f) The plan shall include detailed monitoring that identifies quantifiable success criteria. Monitoring shall occur for a minimum of 5 years following completion of restoration and enhancement activities.

Significance Determination After Additional Mitigation, and Supporting Rationale

Implementation of Mitigation Measure 4.4-2a would replace riparian plants removed during project construction, and would improve habitat and water quality along the onsite drainage (ED3) by creating a vegetated 50-foot setback, where feasible. Currently, habitat within the drainage is relatively degraded; implementation of MM 4.4-2a would result in an improvement to habitat associated with this drainage. With implementation of this mitigation measure, impacts to riparian habitat would be less than significant.

EID Intertie Improvements

No additional removal of riparian habitat would be required to install the Intertie Improvements. Therefore, installation of the pipeline is not anticipated to result in any additional impacts to riparian habitat.

Federally Protected Wetlands

Impact 4.4-3:	The project has the potential to result in a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. (Potentially significant)
----------------------	--

Impact Analysis

Construction of the proposed project would result in direct impacts to federally jurisdictional and non-federally jurisdictional features. A total of 0.66 acre (6,060 linear feet) of federally jurisdictional features (0.18 acre / 1,782 linear feet of ephemeral drainage, 0.07 acre / 3,422 linear feet of roadside ditch, 0.06 acre / 856 linear feet of wetland swale, and 0.35 acre of seasonal wetland) are located within the project study area. Of these jurisdictional features, 0.28 acre of federally jurisdictional wetlands and other waters of the U.S. are located within the project footprint (0.15 acre of ephemeral drainage, 0.04 acre of roadside ditch, 0.06 acre of wetland swale, and 0.03 acre of seasonal wetland). Potential direct impacts would include temporary (construction-related) impacts as well as permanent (paving) impacts to wetlands and Other Waters of the U.S., as defined below. Impacts to up to 0.28 acre of federal jurisdictional features are considered potentially significant.

Biological Resources

Significance Determination Before Mitigation

Potentially significant impact.

Mitigation Measures from the MC&FP EIR

The following mitigation measure was included in the MC&FP EIR (EDAW 1998):

MC&FP Mitigation Measure 4.9-10: Loss of Jurisdictional Waters of the United States, including Wetlands

- a) Prior to issuance of a grading permit, for the MC&FP (excluding Sundance Plaza site) or roadway improvement projects, a determination, through the formal Section 404 wetlands delineation process, shall be made by a qualified biologist whether potential jurisdictional Waters of the United States, including wetlands are present on the project site.
- b) Prior to issuance of a grading permit, a formal wetland delineation shall be completed for the El Dorado Villages Shopping Center site. {This item is site specific and therefore not applicable to this project}
- c) If wetlands on the site are determined to be jurisdictional and can be avoided, no further mitigation will be required.
- d) If potential jurisdictional Waters of the United States, including wetlands, are present and would be filled as a result of the project, authorization of a Section 404 permit shall be secured from USACE and a Section 1600 agreement shall be secured from CDFG, as appropriate.
- e) As part of the permitting process, mitigation of impacts to jurisdictional Waters of the United States, including wetlands, will be identified and implemented. The acreage will be replaced or rehabilitated on a “no-net-loss” basis in accordance with USACE regulations. Habitat restoration, rehabilitation, and/or replacement shall be at a location and by methods agreeable to USACE. Habitat compensation will also be in accordance with El Dorado County which has adopted a “no-net-loss” policy under General Plan Policy 7.3.3.2; this policy allows wetland habitat compensation on- or off-site, but at a minimum 1:1 ratio. Also in accordance with General Plan Policy 7.3.3.2, a wetland study and mitigation monitoring program will be submitted to the County and concerned state and federal agencies (i.e., USACE, CDFG) for review prior to permit approval.
- f) All grading plans will include adequate setback for preserved seasonal and perennial drainages. Measures to minimize erosion and runoff into seasonal and perennial drainages that are preserved will also be included in all grading plans. Appropriate runoff controls such as berms, storm gates, detention basins, overflow collection areas, filtration systems, and sediment traps shall be implemented to control siltation and the potential discharge of pollutants into preserved drainages.

Significance Determination After MC&FP Mitigation, and Supporting Rationale

Since preparation of the MC&FP EIR, the County has adopted a new General Plan with updated policies. Therefore, the MC&FP Mitigation Measure 4.9-10, which references the previous General Plan policies, is out of date. MC&FP Mitigation Measure 4.9-10 is also no longer compliant with USACE standards. In 2001, the USACE Sacramento District published Minimum Standards for Acceptance of Preliminary Wetlands Delineations. In 2006, USACE published the Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region. For these reasons, the following mitigation measures would supersede MC&FP Mitigation Measure 4.9-10 from the MC&FP EIR.

Additional Mitigation Measures

- MM 4.4-3a** The jurisdictional delineation prepared by MBA shall be used in preparation of USACE Section 404 permit applications. Mitigation required for direct and indirect impacts to all features will be carried out in accordance with permit requirements prior to initiation of project construction.
- a) As part of the permitting process, mitigation measures addressing impacts to jurisdictional Waters of the United States, including wetlands, will be defined and implemented. The acreage will be replaced or rehabilitated on a “no-net-loss” basis in accordance with USACE regulations. Habitat restoration, rehabilitation, and/or replacement shall be at a location and by methods agreeable to USACE.
 - b) All grading plans will include adequate setback for preserved seasonal and perennial drainages in accordance with General Plan Policy 7.3.3.4. Measures to minimize erosion and runoff into seasonal and perennial drainages that are preserved will also be included in all grading plans. Appropriate runoff controls such as berms, storm gates, detention basins, overflow collection areas, filtration systems, and sediment traps shall be implemented to control siltation and the potential discharge of pollutants into preserved drainages.
- MM 4.4-3b** Standard BMPs to protect water quality shall be implemented prior to project construction and maintained until construction, including any revegetation, is completed. These include standard erosion control BMPs that are outlined in Section 4.8, Hydrology and Water Quality.

Significance Determination After Additional Mitigation, and Supporting Rationale

Less than significant.

Implementation of Mitigation Measure 4.4-3a and 4.4-3b would ensure project compliance with all agencies regulating assessment and mitigation of impacts to wetlands. Implementation of Mitigation

Biological Resources

Measure 4.4-3b would protect water quality of avoided wetlands and other waters of the U.S. that occur inside the project study area, as well as those that occur in proximity to the project study area, such as Weber Creek. With implementation of these mitigation measures, impacts to wetlands would be less than significant.

EID Intertie Improvements

Of the total acreage of federally jurisdictional wetlands within the project footprint, up to 0.03 acre (1,108 linear feet) of roadside ditch is located within the portion of the project footprint that extends from Bradley Drive / SR-49 north to Finch Road / SR-49 that would be disturbed during construction of the Intertie Improvements. While EID is committed to working within the edge of pavement and the SR-49 ROW to the maximum extent feasible, encroachment into RD5 may be necessary during construction. Implementation of Mitigation Measure 4.4-3 would reduce these potential impacts to a less-than-significant level.

Wildlife Corridors and Nursery Sites

Impact 4.4-4:	The project has the potential to interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites. (Less than Significant)
----------------------	--

Impact Analysis

The unnamed drainage in the central portion of the project study area may function as a movement corridor for mammal and bird species. This drainage connects highly fragmented oak woodland habitat in the south with large areas of intact oak woodland habitat in the north. Construction of the project would effectively sever this corridor. According to the Biological Resources Assessment Report for the Diamond Springs Parkway Alignment Project, the unnamed drainage's aquatic habitat is degraded and surrounding industrial developments discharge runoff directly to this feature via a number of PVC pipes that enter above the ordinary high water mark. The surrounding riparian habitat is degraded by dumping; old oil bottles, 50-gallon drums, and other garbage were observed throughout the feature. Habitat to the immediate south of the drainage is also degraded due to fragmentation by Lime Kiln Road and associated commercial and industrial developments, and its proximity to industrial development to the north, SR-49 to the east, Pleasant Valley Road and associated commercial developments to the south, and residential development to the west. Accordingly, the unnamed drainage and associated habitat is considered marginal and connects to fragmented, marginal habitat to the south. Therefore, this impact is considered less than significant.

Significance Determination Before Mitigation

Less than significant impact.

Mitigation Measures from the MC&FP EIR

N/A

Significance Determination After MC&FP Mitigation, and Supporting Rationale

Less than significant.

Additional Mitigation Measures

N/A

Significance Determination After Additional Mitigation, and Supporting Rationale

N/A

EID Intertie Improvements

The proposed EID Intertie Improvements would be located within existing SR-49 ROW or would be placed within the Parkway ROW. Construction of the Intertie Improvements within the Parkway footprint would result in temporary impacts to wildlife movement similar to those of the Parkway. Unlike the Parkway, the Intertie Improvements would not permanently affect wildlife movement. These temporary impacts are considered less than significant.

Local Policies or Ordinances Protecting Biological Resources

Impact 4.4-5:	The project has the potential to conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. (Potentially Significant)
----------------------	--

Impact Analysis

Construction of the project would result in the loss of oak woodland canopy, and is, therefore, subject to the County's Oak Woodland Management Plan (OWMP). The OWMP outlines the County's strategy for conservation of oak woodlands, and implements and provides additional guidance on General Plan Policy 7.4.4.4. Direct and indirect impacts to oak woodland canopy are considered a potentially significant impact. Exemptions to the OWMP include road widening and realignments necessary to increase capacity and improve the safe movement of people and goods in existing public road rights-of-way. Therefore, improvements to SR-49, Missouri Flat Road, Truck Street, Throwita Way, Lime Kiln, and Black Rice are exempt from the OWMP.

However, removal of oak trees associated with construction of the proposed Parkway are subject to the OWMP and would require mitigation. Two categories of projects are covered by the OWMP: 1) parcels/projects 1 acre in size or less having at least 10 percent oak woodland canopy cover, and 2) parcels/projects greater than 1 acre in size with at least 1 percent oak woodland canopy cover. Oak trees are the dominant tree species within the proposed project's footprint. A qualified biologist has conducted an oak woodland survey based on aerial photography of the project site (Exhibit 4.4-4). Based on aerial photography the 56.56 acre project footprint appears to contain approximately 13.21 acres of oak woodland canopy cover. Of the 13.21 acres, 7.06 acres is exempt from the OWMP because project impacts would be the direct result of road widening or realignments. The remaining 6.15 acres of oak woodland canopy (or approximately 11 percent) is subject to the OWMP. The proposed project, therefore, meets the criteria described in the second category of the OWMP

Biological Resources

Actual impacts to the 6.15 acres of oak woodland canopy subject to the OWMP is unknown at this time. Accordingly, for conservative purposes, it is assumed that all 6.15 acres of oak woodland canopy subject to the OWMP would be removed.

As outlined by Table 1 of General Plan Policy 7.4.4.4, for projects containing between 10 and 19 percent of existing canopy cover that maintain more than 90 percent of that canopy cover, a 1:1 mitigation ratio is required. Any canopy cover removed beyond the 90 percent threshold must be mitigated at a 1:2 ratio. Since the proposed project may remove the entire 6.15 acres (267,894 square feet) of canopy, it is assumed that zero percent will be retained. Accordingly, 10 percent (26,789 square feet) of the canopy removed would require a 1:1 mitigation ratio and 90 percent (241,105 square feet) would require a 2:1 mitigation ratio. Without proper mitigation, impacts would be potentially significant.

Significance Determination Before Mitigation

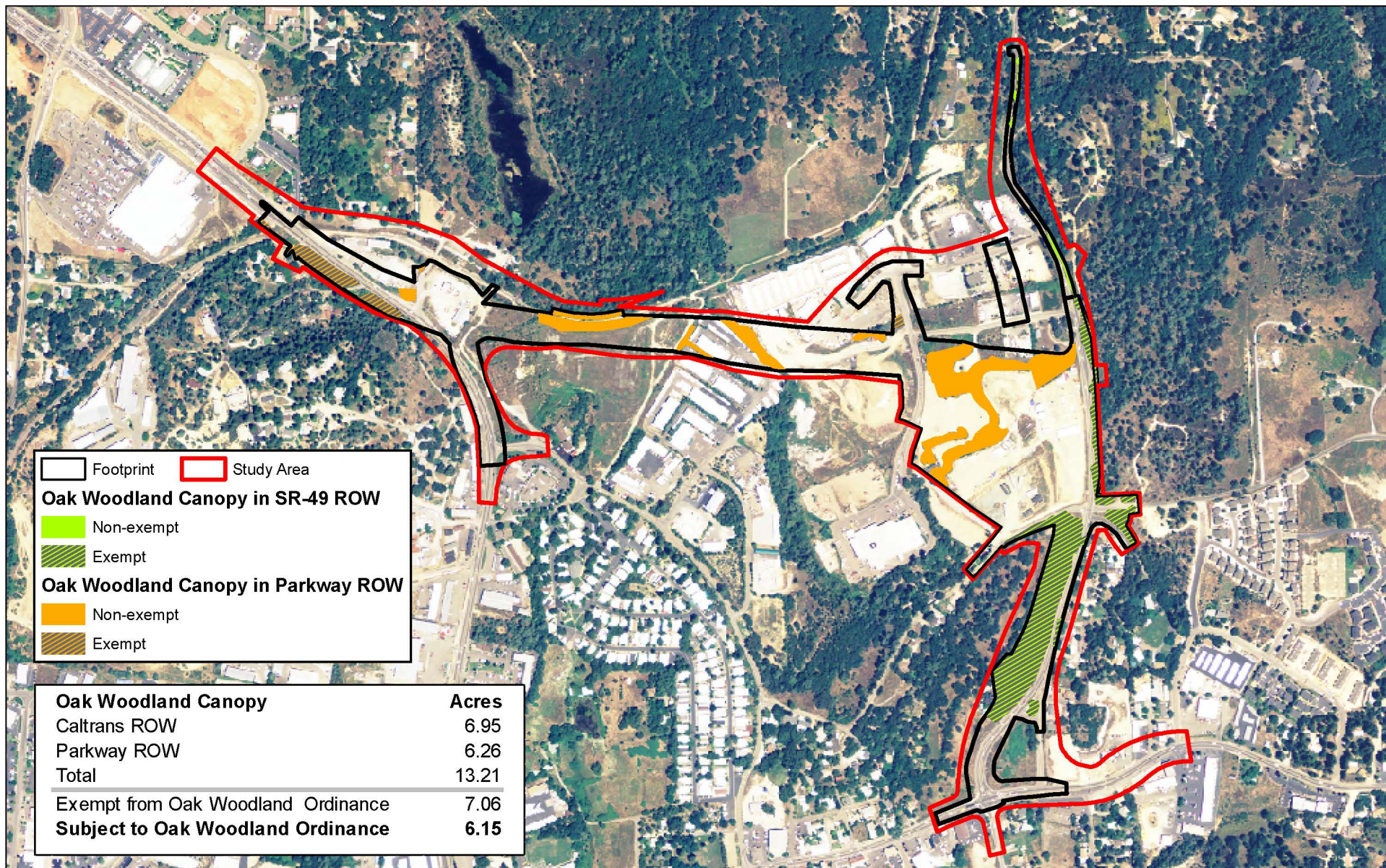
Potentially significant impact.

Mitigation Measures from the MC&FP EIR

The following mitigation measure was included in the MC&FP EIR (EDAW 1998):

MC&FP Mitigation Measure 4.9-9: Oak Woodland Degradation

- a) Prior to issuance of a grading permit for any MC&FP retail development or roadway improvements projects, and Sundance Plaza and El Dorado Villages Shopping Center, the project proponent shall submit a tree survey to the El Dorado County Planning Department for approval. A map of all oak trees to be removed or disturbed during project construction will be included with the tree survey. The tree survey will also include a determination of the existing canopy cover on the project site (as determined from base line aerial photography or by site surveys performed by a qualified licensed arborist or botanist) and a preservation and replacement plan.
- b) Oaks not approved for removal that are within 200 feet of the grading activity shall be protectively fenced 5-feet beyond the dripline and root zone of each oak tree (as determined by a certified arborist). This fence, which is meant to prevent activities that result in soil compaction beneath the canopy or over the root zone, shall be maintained until all construction activities are complete. No grading, trenching, or movement of construction equipment shall be allowed to occur within fenced areas. Protection for oak trees on slopes and hillsides will include installation of a silt fence. A silt fence shall be installed at the upslope base of the protective fence to prevent any soil drifting down over the root zone.



Source: MBA 2010.



11730025 • 01/2010 | Oakwoodland Canopy. mxd



Exhibit 4.4-4 Oak Woodland Canopy Map

COUNTY OF EL DORADO DEPARTMENT OF TRANSPORTATION
DIAMOND SPRINGS PARKWAY PROJECT
ENVIRONMENTAL IMPACT REPORT

11-0448.C.233

- c) To ensure that proposed replacement trees survive, a mitigation monitoring plan, including provisions for necessary replacement of trees, will be incorporated into the preservation and replacement plan. Detailed performance standards will be included to ensure that an 80% survival rate is achieved over a 5-year period. Annual reports identifying planting success and monitoring efforts will be submitted to the El Dorado County Planning Department and CDFG. During monitoring, the following information will be evaluated: average tree height, percent of tree cover, tree density, percent of woody shrub cover, seedling recruitment, and invasion by non-native species. Temporary irrigation equipment will be installed to facilitate sapling survival during the first several years of growth. During the revegetation process, tree survival will be maximized by using deer screens or other maintenance measures as recommended by a certified arborist.
- d) If the existing canopy cover is less than 10%, no further mitigation will be necessary.
- e) If the existing canopy cover exceeds 10%, the project will be subject to the canopy cover retention and replacement standards presented under Policy 7.4.4.4 of the El Dorado County General Plan.

Significance Determination After MC&FP Mitigation, and Supporting Rationale

Potentially significant. In the updated 2004 General Plan, the County revised some of the language found in Policy 7.4.4.4. Since certification of the MC&FP EIR, the County has also adopted an OWMP (El Dorado County 2008). Therefore, the following replacement mitigation measures are required to be implemented to ensure compliance with the updated General Plan and OWMP and to reduce impacts to oak woodlands to a less than significant level.

Additional Mitigation Measures

MM 4.4-5 The County shall comply with the Oak Woodland Management Plan (OWMP) by mitigating for oak woodland canopy removed in accordance with either Option A (On-Site Mitigation, Replanting and Replacement), Option B (Conservation Fund In-Lieu Fee), or a combination of these. As outlined in the OWMP, a 1:1 mitigation ratio shall be applied to the oak canopy removed that falls below the threshold in Table 1, while a 2:1 mitigation ratio shall be applied to the remaining oak canopy removed.

Significance Determination After Additional Mitigation, and Supporting Rationale

Implementation of Mitigation Measure 4.4-5 would ensure that oak woodlands removed as a result of project construction are adequately mitigated to a less than significant level, in accordance with the County's OWMP.

EID Intertie Improvements

The Intertie Improvements may be subject to the OWMP; however, they would take place within the roadway right-of-ways and are not expected to require removal of trees. Should tree removal be

Biological Resources

required and if the removal is subject to the OWMP, implementation of Mitigation Measure 4.4-5 would reduce these impacts to a less than significant level.

Conservation Plans

Impact 4.4-6:	The project has the potential to conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. (Less than Significant)
----------------------	---

Impact Analysis

The proposed project is not located in an area covered by any approved habitat conservation plan, natural community conservation plan, or other conservation plan. However, the County is in the process of preparing an Integrated Natural Resources Management Plan (INRMP), as required under Section 7.4.2.8 of the General Plan. The OWMP, which is discussed above under Impact 4.4-5, will be incorporated into the INRMP. Initial INRMP inventory mapping has been completed, and riparian habitat has been identified adjacent to the project study area. The County has accepted a proposal for the preparation of the INRMP and completion is anticipated to occur in late 2010. Because the INRMP is not yet approved, the proposed project would not be in conflict and impacts would be less than significant.

Significance Determination Before Mitigation

Less than significant impact.

Mitigation Measures from the MC&FP EIR

N/A

Significance Determination After MC&FP Mitigation, and Supporting Rationale

Less than significant impact.

Additional Mitigation Measures

No mitigation measures are required.

Significance Determination After Additional Mitigation, and Supporting Rationale

Less than significant impact.

EID Intertie Improvements

Similar to the Parkway project, the EID Intertie Improvements are not located in an area covered by any approved habitat conservation plan, natural community conservation plan, or other conservation plan.

4.5 - Cultural and Historical Resources

This section describes existing cultural and historical resources and potential effects from the proposed project's construction on the site and its surrounding area. Information is based on the Section 106 - Cultural Resources Assessment (CRA) for the Parkway (proposed project), dated September 2008 (MBA 2008d), and the Cultural Resources Memorandum (CRM) for EID's Highway 49 Intertie Improvements project (also part of the proposed project), dated October 2008 (MBA 2008e), both of which are included in Appendix F of this Draft Environmental Impact Report (EIR). The following includes a summary of the information included in the CRA and CRM. For a more detailed accounting of the cultural background of the project vicinity, and California in general, please refer to the CRA, as the content of this section focuses primarily on site-specific information. Information included in the Cultural Resources section of the MC&FP EIR (EDAW 1998), which programmatically addressed the proposed Parkway's previous alignment (then referred to as the Interconnector), has also been included in this section where appropriate.

4.5.1 - Summary

Significant Unavoidable Impacts

Project construction and use would not result in any significant unavoidable impacts to cultural resources.

Potentially Significant Impacts

Project construction has the potential to result in potentially significant impacts to previously undiscovered cultural resources including historical, archeological, and paleontological resources. Potentially significant impact may also occur to previously undiscovered human burial sites. Implementation of mitigation included in this section would reduce the magnitude of impacts to a less than significant level.

Less Than Significant Impacts

Two historic resources are located within the project's Area of Potential Effect (APE): the East Diamond Ditch and the tailings area south of Black Rice Road. The East Diamond Ditch has been previously disturbed by previous and surrounding land use and does not appear to be eligible for listing on the National Register of Historic Places (NRHP). Tailings affected by the proposed project are not considered a significant historical resource and are not eligible for NRHP listing. Impacts to these historic resources are considered less than significant under the criteria defined by the California Environmental Quality Act (CEQA) and the CRA.

4.5.2 - Environmental Setting

Overview

The term "cultural resources" encompasses historic, archaeological, and paleontological resources and burial sites. Below is a brief summary of each component:

- **Historic Resources:** Historic resources are associated with the relatively recent past. In California, historic resources are typically associated with the Spanish, Mexican, and American periods in the State's history and are generally less than 200 years old.
- **Archaeological Resources:** Archaeology is the study of prehistoric human activities and cultures. Archaeological resources are generally associated with Native American cultures.
- **Paleontological Resources:** Paleontology is the study of plant and animal fossils.
- **Burial Sites:** Burial sites are formal or informal locations where human remains, usually associated with indigenous cultures, are interred.

Cultural Setting

The following is a brief overview of the prehistoric and historic background that provides a context in which to understand the background and relevance of sites found in the general vicinity of the project APE. The APE for the proposed project consists of the areas and resources that could potentially be directly or indirectly affected by the proposed project. For the proposed project, the APE was determined to consist of the project area and the immediate surroundings (see Appendix F).

This section is not intended to be a comprehensive review of the current references and resources that are available; rather, it serves as a generalized overview of the cultural setting. Descriptions that are more detailed can be found in ethnographic studies, mission records, and major published sources, including Kroeber (1925), Wallace (1955), Warren (1968), Heizer (1978), Moratto (1984), and Chartkoff and Chartkoff (1984).

As mentioned previously, information from the MC&FP EIR is included herein where appropriate; however, information contained within the CRA, CRM, and this EIR supersede that of the MC&FP EIR.

Prehistory

Research during the 1930s identified temporal periods in central California prehistory and provided an initial chronological sequence (Lillard and Purves 1936; Lillard et al. 1939). In 1939, Lillard noted that each cultural period led directly to the next and that influences spread from the Delta region to other regions in central California (Lillard et al. 1939). In the late 1940s and early 1950s, Beardsley documented similarities in artifacts between sites in the San Francisco Bay region and the Delta and refined his findings into a cultural model that ultimately became known as the Central California Taxonomic System (CCTS). This system proposed a uniform, linear sequence of cultural succession (Beardsley 1948 and 1954). The CCTS system was challenged by Gerow, whose work looked at radiocarbon dating to show that Early and Middle Horizon sites were not subsequent developments but, at least partially, contemporaneous (1954; 1974; Gerow with Force 1968).

To address some of the flaws in the CCTS system, Fredrickson (1973) introduced a revision that incorporated a system of spatial and cultural integrative units. Fredrickson separated cultural, temporal, and spatial units from each other and assigned them to six chronological periods: Paleo-Indian (10000 to 6000 B.C.); Lower, Middle and Upper Archaic (6000 B.C. to A.D. 500); and Emergent (Upper and Lower, A.D. 500 to 1800). The suggested temporal ranges are similar to earlier horizons, which are broad cultural units that can be arranged in a temporal sequence (Moratto 1984). In addition, Fredrickson defined several patterns, which are a general way of life shared within a specific geographical region. These patterns include:

- Windmill Pattern or Early Horizon (3000 to 1000 B.C.)
- Berkeley Pattern or Middle Horizon (1000 B.C. to A.D. 500)
- Augustine Pattern or Late Horizon (A.D. 500 to historic period)

Brief descriptions of these temporal ranges and their unique characteristics follow.

Windmill Pattern or Early Horizon (3000 to 1000 B.C.)

Characterized by the Windmill Pattern, the Early Horizon was centered in the Cosumnes district of the Delta and emphasized hunting rather than gathering, as evidenced by the abundance of projectile points in relation to plant processing tools. Additionally, atlatl, dart, and spear technologies typically included stemmed projectile points of slate and chert but minimal obsidian. The large variety of projectile point types and faunal remains suggests exploitation of numerous types of terrestrial and aquatic species (Bennyhoff 1950; Ragir 1972). Burials occurred in cemeteries and intra-village graves. These burials typically were ventrally extended, although some dorsal extensions are known with a westerly orientation and a high number of grave goods. Trade networks focused on acquisition of ornamental and ceremonial objects in finished form rather than on raw material. The presence of artifacts made of exotic materials such as quartz, obsidian, and shell indicates an extensive trade network that may represent the arrival of Utian populations into central California. Also indicative of this period are rectangular *Halotis* and *Olivella* shell beads, and charmstones that usually were perforated.

Berkeley Pattern or Middle Horizon (1000 B.C. to A.D. 500)

The Middle Horizon is characterized by the Berkeley Pattern, which displays considerable changes from the Early Horizon. This period exhibited a strong milling technology represented by minimally shaped cobble mortars and pestles, although metates and manos were still used. Dart and atlatl technologies during this period were characterized by non-stemmed projectile points made primarily of obsidian. Fredrickson (1973) suggests that the Berkeley Pattern marked the eastward expansion of Miwok groups from the San Francisco Bay Area. Compared with the Early Horizon, there is a higher proportion of grinding implements at this time, implying an emphasis on plant resources rather than on hunting. Typical burials occurred within the village with flexed positions, variable cardinal orientation, and some cremations. As noted by Lillard, the practice of spreading ground ochre over

the burial site was common during this time (Lillard et al. 1939). Grave goods during this period are generally sparse and typically include only utilitarian items and a few ornamental objects. However, objects such as charmstones, quartz crystals, and bone whistles occasionally were present, which suggest the religious or ceremonial significance of the individual (Hughes 1994). During this period, larger populations are suggested by the number and depth of sites compared with the Windmill Pattern. According to Fredrickson (1973), the Berkeley Pattern reflects gradual expansion or assimilation of different populations rather than sudden population replacement and a gradual shift in economic emphasis.

Augustine Pattern or Late Horizon (A.D. 500 to Historic Period)

The Late Horizon is characterized by the Augustine Pattern, which represents a shift in the general subsistence pattern. Changes include the introduction of bow and arrow technology; and most importantly, acorns become the predominant food resource. Trade systems expanded to include raw resources as well as finished products. There are more baked clay artifacts and extensive use of Haliotis ornaments of many elaborate shapes and forms. Burial patterns retained the use of flexed burials with variable orientation, but there was a reduction in the use of ochre and widespread evidence of cremation (Moratto 1984). Judging from the number and types of grave goods associated with the two types of burials, cremation seems to have been reserved for individuals of higher status, whereas other individuals were buried in flexed positions. Johnson (1976) suggests that the Augustine Pattern represents expansion of the Wintuan population from the north, which resulted in combining new traits with those established during the Berkeley Pattern.

Central California research has expanded from an emphasis on defining chronological and cultural units to a more comprehensive look at settlement and subsistence systems. This shift is illustrated by the early use of burials to identify mortuary assemblages and more recent research using osteological data to determine the health of prehistoric populations (Dickel et al. 1984). Although debate continues over a single model or sequence for central California, the general framework consisting of three temporal/cultural units is generally accepted, although the identification of regional and local variation is a major goal of current archaeological research.

Native American Background

At the time of European contact, the project vicinity was occupied by the Southern Maidu (formerly known as Nisenan), who were identified by their language, which is a subgroup of the California Penutian linguistic family. The Southern Maidu, who may have occupied El Dorado County, lived in villages that ranged in population from 15 to 25 people, with the tribal centers averaging more than 500 people. Villages were typically located on ridges above major streams and rivers and were inhabited mainly in the winter months. During the hot summer months, the Southern Maidu moved to cooler temporary camps in higher elevations.

Early contact with the Spanish was limited to the southern edge of the Southern Maidu territory, and most knowledge came from early penetrations of Spanish into Plains Miwok territory and minor explorations across their land south of Maidu territory. During the late 18th century, systematic removal to the missions and resistance by the Miwok occurred along the southern border of Maidu territory. No records exist of the Maidu being removed to the missions. However, the Maidu did receive missionized Native Americans into their territory, as well as displaced Miwok villagers on their southern borders (Wilson and Towne 1978:387-97).

In 1833, a massive epidemic, believed to have been malaria, swept through the Sacramento Valley (Cook 1955). The exact number of casualties is unknown, but it is estimated that 75 percent of the Maidu population were killed, leaving only a fraction of the original number to face the intruding miners and settlers that arrived when gold was discovered in Coloma in 1848.

Historic Background

The history of the Central Valley and western Sierra Nevada foothills can be divided into several periods of influence; two pertinent historic periods are summarized below.

Spanish Period

The most drastic and permanent change came to the Native Americans' way of life with the establishment of the Spanish Mission system. By the early 1800s, the mission fathers began a process of cultural change that brought the majority of the local Native Americans into the missions, although the Maidu, especially the ones living in the mountain regions, were not as affected as the Native Americans living in the coastal regions near the missions. At the expense of traditional skills, the neophytes were taught the pastoral and horticultural skills of the Hispanic tradition. Spanish missionaries traveled into the Valley to recapture escaped neophytes and recruit inland Native Americans for the coastal missions. In 1834, the Mission system was officially secularized, and the majority of the mission Native American population dispersed to local ranches, villages, or nearby pueblos (Kroeber 1925).

Soon after establishment of the mission system, a process of granting large parcels of land to prominent individuals began. Within a few years, ranchos occupied large tracts near the missions, and a pastoral economy involving the missions, the ranchos, and native inhabitants was established (Kyle et al. 1990).

Mexican Period

With the declaration of Mexican independence in 1821, Spanish control of Alta California ended, although little change actually occurred. Political change did not take place until mission secularization in 1834, when Native Americans were released from missionary control and the mission lands were granted to private individuals. Shoup and Milliken (1999) state that mission secularization removed the social protection and support on which Native Americans had come to rely. It exposed them to further exploitation by outside interests, often forcing them into a marginal

existence as laborers for large ranchos. Following mission secularization, the Mexican population grew as the native population continued to decline. European-American settlers began to arrive in Alta California during this period and often married into Mexican families, becoming Mexican citizens, which made them eligible to receive land grants. In 1846, on the eve of the U.S.-Mexican War (1846 to 1848), the estimated population of Alta California was 8,000 non-natives and 10,000 natives. However, these estimates have been debated. Cook (1976) suggests the Native American population was 100,000 in 1850; the U.S. Census of 1880 reports the Native American population as 20,385.

Local History

History of El Dorado County

In 1848, James W. Marshall discovered gold at Coloma in modern-day El Dorado County, which started a gold rush into the region that forever altered the course of California's history. Hangtown, present-day Placerville, became one of the closest towns offering mining supplies and other necessities for the miners in Coloma.

By 1864, California's gold rush had essentially ended. Once the gold rush was over, people in towns such as Jackson, Placerville, and Diamond Springs turned to other means of commerce such as ranching, agriculture, and timber production (Beck and Haase 1974). Specifically, the Placerville region turned to, among the other trades, viticulture, thereby setting off the lucrative California wine industry. In 1869, the transcontinental railroad linked Sacramento more directly to the central and eastern United States. California's agricultural products quickly found markets throughout the country. Ranching, transportation, logging, and subsequent water diversion projects represent major historic themes for the Diamond Springs and Shingle Springs area. In addition, El Dorado County has continued to grow in importance as a residential community, with Placerville as its center of government, industry, transportation, and commerce.

City of Diamond Springs History

As with many cities in California, the promise of gold brought the first settlers to Diamond Springs. Although the area had much to offer new settlers, it was not until the late summer of 1850 that a group of settlers from Missouri realized that the abundant water sources and rich pasture land were suitable for farming and livestock and decided to settle. Once they started making a good living by gold mining, they decided to make this area their permanent place of residence and built clapboard houses, stores, churches, hotels, etc. In 1850, one of the Missouri pioneers unearthed a 25-pound gold nugget, which solidified Diamond Springs as one of the richest placer mining areas in El Dorado County.

By November of 1850, Diamond Springs was becoming a town to rival Coloma in size, and it was reported in the Alta California paper that more than 100 new homes had been built in just a few weeks in Diamond Springs. The following year saw construction of three hotels, 13 mercantile

stores, a blacksmith shop, and two butcher shops, with five permanent carpenters building homes and other structures for the burgeoning population. Throughout the 1850s and 1860s, Diamond Springs continued to grow and was considered the best stopping place between Folsom and Placerville, owing to its fine hotels and inns. In 1856, disaster struck the downtown area when a fire destroyed all but two buildings: the Wells Fargo office and the Eureka Canal Company.

The City starting rebuilding the downtown area with stone blocks from a nearby quarry, but a second fire in 1859 caused permanent damage to the town's prominence within the County (Sioli 1883). Diamond Springs lost its prominence as a mining town; however, the abundant water, rich soil, and relatively mild climate proved ideal for agriculture, and soon there were numerous orchards and crops being grown in the area.

One of the major drawbacks to the agricultural industry in Diamond Springs was transportation. The Sacramento and Placerville railroad line was completed from Sacramento to Folsom in 1856, but it was not until 1864 that the railroad lines reached Shingle Springs, which is approximately 6 miles northwest of Diamond Springs (Sioli 1883).

Diamond Springs continued to grow throughout the 1900s with vineyards, farms, and various hotels and restaurants, although it never grew as rapidly as it did during the Gold Rush era. Recently, there has been a population resurgence in Diamond Springs as a bedroom community for people working in Sacramento. In addition, many local businesses have moved into the area to provide services and goods for the new residents. In the general vicinity, local wineries have opened tasting rooms and provide locations for weddings, parties, and business celebrations. Today, Diamond Springs is typified by a population that wants the small-town feel of a local, more rural community.

Project Site History

The MC&FP EIR provided the following information regarding the history of Missouri Flat Road, which is located in the western portion of the APE.

Missouri Flat Road is said to have been a public road as early as June 1854, extending from Diamond Springs northwest to Cold Springs. The portion of Missouri Flat Road located within the APE first appeared on the 1925 El Dorado County map shown as crossing the Southern Pacific railroad tracks and curving southerly to China Garden Road. The 1950 USGS 7.5-minute Placerville topographic map shows an alignment similar to how the road appears today. The current roadway was reconstructed in 1969 and resulted in the laying of extensive fill within the right-of-way (ROW) from China Garden Road north to Forni Road (EDAW 1998).

The MC&FP EIR also includes a description of the South Fork Extension Ditch, which passed through the Missouri Flat and Diamond Springs area (EDAW 1998). The ditch was described in the MC&FP EIR as approximately 3 feet wide at the bottom to 6 feet wide at the top, and 3 to 5 feet

deep. The MC&FP EIR also indicated that the ditch is no longer in use and had been damaged in several locations.

4.5.3 - Regulatory Framework

Federal

National Historic Preservation Act

The National Historic Preservation Act of 1966 (NHPA), as amended, established the National Register of Historic Places (NRHP), which contains an inventory of the nation's significant prehistoric and historic properties. Under 36 CFR 60, a property is recommended for possible inclusion on the NRHP if it is at least 50 years old, has integrity, and meets one of the following criteria:

- It is associated with significant events in history, or broad patterns of events.
- It is associated with significant people in the past.
- It embodies the distinctive characteristics of an architectural type, period, or method of construction; or it is the work of a master or possesses high artistic value; or it represents a significant and distinguishable entity whose components may lack individual distinction.
- It has yielded, or may yield, information important in history or prehistory.

Certain types of properties are usually excluded from consideration for listing in the NRHP, but they can be considered if they meet special requirements in addition to meeting the criteria listed above. Such properties include religious sites, relocated properties, graves and cemeteries, reconstructed properties, commemorative properties, and properties that have achieved significance within the past 50 years.

State

California Register of Historical Resources

As defined by Section 15064.5(a)(3)(A-D) of the CEQA Guidelines, a resource shall be considered historically significant if the resource meets the criteria for listing on the California Register of Historical Resources (CR). The CR and many local preservation ordinances have employed the criteria for eligibility to the NRHP as a model, since the NHPA provides the highest standard for evaluating the significance of historic resources. A resource that meets the NRHP criteria is clearly significant. In addition, a resource that does not meet the NRHP standards may still be considered historically significant at a local or state level.

California Environmental Quality Act

The CEQA Guidelines state that a resource need not be listed on any register to be found historically significant. The CEQA Guidelines direct lead agencies to evaluate archaeological sites to determine

if they meet the criteria for listing in the California Register. If an archaeological site is a historical resource, in that it is listed or eligible for listing in the California Register, potential adverse impacts to it must be considered. If an archaeological site is considered not to be a historical resource but meets the definition of a “unique archeological resource” as defined in Public Resources Code Section 21083.2, then it would be treated in accordance with the provisions of that section.

Local

El Dorado County General Plan

Appendix J of this Draft EIR provides a matrix that lists the policies determined to have relevance to this proposed project and provides a summary of the County’s determination of project consistency with each relevant goal and policy. As shown in Appendix J, the project is consistent with all applicable goals and policies of the General Plan, including those related to cultural and historical resources.

El Dorado County Code

17.74.060 Historical building destruction.

- A.) No historical building in any historic design district may be torn down, demolished, destroyed, altered, removed, improved or otherwise changed in exterior appearance without first obtaining approval therefore as provided for in Section 17.74.115. (Ord. 4228, 1992)
- B.) If any historical building is damaged or destroyed by any act of God, including but not limited to earthquake or fire, the owner thereof may repair the building if he secures approval therefore as provided for in Section 17.74.115. (Ord. 4228, 1992)
- C.) “Historical building” refers to any building in an historic design district constructed prior to the year 1900 and originally intended for use of a residential, commercial or industrial nature or any use appurtenant thereto. (Ord. 3257 §5, 1982: prior code §9295.5)

4.5.4 - Project Impact Analysis

Methodology for Analysis

In 2007/2008, MBA conducted the previously discussed CRA (MBA 2008d) and CRM (MBA 2008e) for the project study area, which includes the APE. The purpose of the CRA and CRM was to determine the presence or absence of potentially significant cultural and paleontological resources that might be affected by project construction and use. This evaluation included review of record searches at the NCIC, the NAHC, and the University of California Museum of Paleontology (UCMP), as well as a field survey that was conducted within the project study area.

On September 21, 2007, staff at the NCIC in Sacramento conducted a records search for the project study area and a 0.25-mile radius. To identify any historic properties or resources, the current inventories of the NRHP, the CR, the California Historical Landmarks (CHL) list, the California Points of Historical Interest (CPHI) list, and the California State Historic Resources Inventory (HRI)

Cultural and Historical Resources

were reviewed to determine the existence of previously documented local historical resources. Results of the NCIC records review indicated that 26 historical resource sites had been previously recorded within a 0.25-mile radius of the project study area. Only 17 of these 26 sites are located within a 0.25-mile radius of the project APE.

On November 5, 2007, a request was sent to the NAHC requesting a search of its Sacred Lands File. The results of the search, which were received on November 20, 2007, failed to indicate the presence of Native American cultural resources in the immediate project area. Included with the response letter was a list of Native American representatives who may have additional knowledge of resources within the project vicinity. To ensure protection of prehistoric resources, on December 12, 2007, MBA sent letters to all 13 of the representatives on the list. As of January 29, 2008, no responses had been received. To further encourage responses from the Native American representatives, on January 30, 2008, a second letter was sent via e-mail or regular mail (depending on the addresses provided). As of December 22, 2009, no responses have been received from any of the representatives.

On December 14, 2007, MBA requested a paleontological record search of the UCMP to determine if paleontological resources were present within the project study area. The response, received on December 17, 2007, from Dr. Kenneth Finger, Ph.D., stated that the project study area was very unlikely to have significant paleontological resources; therefore, paleontological monitoring was not recommended.

On November 15, 2007, and February 8, 2008, Senior Project Archaeologist, Carrie D. Wills, conducted a reconnaissance level survey of the project APE to determine the presence or absence of historic properties that could be considered eligible for listing on the NRHP or the CR. The purpose of the reconnaissance level survey was to identify the presence or absence of potentially significant cultural resources within the project study area, and, if potentially affected by the proposed development, propose protective measures. In addition, one of the primary goals of the field survey was to determine the presence and/or condition of previously recorded sites within or immediately adjacent to the project APE that had the potential to be adversely affected by project development. Approximately 60 to 65 percent of the project study area was surveyed using 15-meter transects walked in a zigzag pattern. The remaining 35 to 40 percent was surveyed using random transect distances because of dense vegetation, structures, paved parking areas, roads, and other obstructions.

On October 15, 2008, Ms. Wills conducted a reconnaissance level survey for the portion of the EID Intertie Improvements project that extends from the intersection of Bradley Road and State Route (SR-49), north to the intersection of Finch Road and SR-49. As the Intertie Improvements would be installed within the existing SR-49 roadway, the survey corridor included the east and west shoulder areas along SR-49. The purpose of the survey was to determine the presence or absence of historic properties that could be considered eligible for listing on the NRHP or the CR.

The survey transects along the west shoulder of SR-49 included the area immediately adjacent to the road edge and west approximately 10 to 30 feet, depending on obstructions. In most cases, the survey transects averaged 15 feet, as there were fences, large blackberry bushes, and other types of vegetation preventing access. The only resource observed along the west side of SR-49 was a small drainage ditch that originates north of Bradley Drive and continues sporadically past Truck Street. The drainage is not considered historically significant and appeared to be a naturally occurring water runoff from SR-49. The drainage ditch continues via large pipes under Truck Street and the driveway for the residence at 3890 SR 49.

The survey transects along the east shoulder of SR-49 were problematic, because the shoulder is quite narrow and there are blind spots along most of the curves. Additionally, the road cut extends vertically uphill from the narrow shoulder, and at the top of the hill was a barbed wire fence with poison oak bushes on the other side, which further limited access. Therefore, much of the survey for the east shoulder was conducted by walking transects where it was possible and visually examining the areas where access was unsafe.

During the course of the reconnaissance level survey, no historic or prehistoric resources were discovered.

Thresholds of Significance

According to the CEQA Guidelines' Appendix G Environmental Checklist, to determine whether impacts to cultural resources are significant environmental effects, the following questions are analyzed and evaluated. Would the project:

- a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?
- b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?
- c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?
- d) Disturb any human remains, including those interred outside of formal cemeteries?

Impact Statements and Mitigation Discussions

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate. The MC&FP EIR impact assessment and mitigation measures are included where appropriate, since the proposed project must comply with regulations set forth by the prior programmatic level EIR. Further analysis or mitigation required beyond that of the MC&FP EIR is included where necessary.

Historic Resources

Impact 4.5-1: **The project has the potential to cause a substantial adverse change in the significance of a known historical resource as defined in Section 15064.5 of the CEQA Guidelines. Subsurface construction activities associated with the project may damage or destroy previously undiscovered historic resources. (Potentially Significant)**

Impact Analysis

The record search conducted for the MC&FP EIR (EDAW 1998) revealed the potential for historic resources and recorded historic resources to occur within or adjacent to the previously proposed alignment. The recorded and potential resources identified were:

- The Southern Pacific Railroad/Sacramento Placerville Railroad ROW
- Historic buildings and remnants of historic activities; quarrying mining, farming/industrial
- Historic mining sites PA-93-30 (Peak); MRF-1 (Starns)
- Potential for Chinese historic sites
- Remnants of Caldoor Railroad berm
- Historic water conveyance ditches: Diamond, East Diamond, Old Diamond Ridge, Squaw Hollow
- Diamond Springs Limestone Plant
- Bray Residence - Adjacent to identified project area

Under the revised proposed alignment that is the subject of this Draft EIR, some of the above-mentioned historic resources or potential historic resources would not be affected.

Mitigation Measure 4.10-1 from the 1998 MC&FP EIR (EDAW 1998) required a site-specific study to be conducted prior to the proposed project's construction. MBA conducted a site-specific assessment in 2007/2008, and the results from the NCIC record search indicated that 22 surveys and 26 cultural resource sites had been recorded within a 0.25-mile radius of the project study area. However, only 17 of the 26 sites had the potential to be affected by project construction based on their proximity to the project APE. Relocating each of the 17 sites in relation to the proposed project indicated that two sites (both historic resources) would be affected by project construction and 15 sites would be avoided. One resource (P-9-1889 CA-ELD-1371H) is a portion of the historic East Diamond Ditch that was noted as running almost parallel to SR-49, approximately halfway between Pleasant Valley Road and Black Rice Road. The portion observed within the project APE is approximately 200 feet in length, ranges from 4 to 5 feet in width and 3 to 4 feet deep, and is in fair condition. The second resource (P-9-1864 CA-ELD-1361H) is an area of mine tailings and portions of ditches located south of Black Rice Road and east of SR-49.

The proposed project would have a minimal effect on the East Diamond Ditch (Ditch) because the Ditch is currently bisected by SR-49, and project construction would merely extend the width of the portion of SR-49 that currently bisects the Ditch. This would not be a new adverse effect on the resource but is viewed as an extension into an already disturbed area of the resource. In addition, as the Ditch does not appear to meet any of the four criteria for listing on the NRHP, there will be no effect on a historic resource for purposes of Section 106 of the NHPA.

The proposed project would have an effect on the tailings area south of Black Rice Road. However, because the tailings area is not considered a significant resource and does not appear to meet any of the four criteria for listing on the NRHP, there would be no effect on a historic resource for purposes of Section 106 of the NHPA.

Evaluation of the two historic resources revealed that neither one appears to qualify for the NRHP under any of the four criteria, as they are not associated with a historic trend significant to the broad patterns of our history (Criterion A), are not associated with the life of a significant person (Criterion B), do not represent the work of a master or possess high artistic values (Criterion C), and are not likely to yield important information about prehistory or history (Criterion D). As such, impacts to these resources would be considered less than significant. Nonetheless, the possibility exists that subsurface construction activities may encounter undiscovered historic resources. Accordingly, this is a potentially significant impact.

Significance Determination Before Mitigation

Potentially significant impact.

Mitigation Measures from the MC&FP EIR

The following mitigation measures were included in the MC&FP EIR (EDAW 1998):

MC&FP Mitigation Measure 4.10-1: Disturbance of Cultural Resources

- (a) Prior to the approval of roadway improvements in accordance with the 1998 MC&FP, the project applicant shall submit a cultural resource study that is conducted by a qualified archaeologist. The cultural resources study shall conform with the requirements of El Dorado County General Plan Policy 7.5.1.3, and shall include, but not be limited to, record searches through the NCIC at California State University, Sacramento, field surveys, subsurface testing, and/or salvage excavations. The cultural resource study shall identify “important archaeological resources,” as defined in Appendix K of the State CEQA Guidelines and “historical resources,” as defined in Public Resources Code 21084.1, and evaluate the project’s potential to disturb such resources.
- (b) Important archaeological resources or historical resources shall be avoided or protected where feasible. Where avoidance or protection of such resources is not feasible, the project applicant shall submit, for approval by El Dorado County, an excavation plan, to be prepared

by a qualified archaeologist, that conforms with the requirements of Appendix K of the State CEQA Guidelines. Field excavation pursuant to an approved excavation plan shall be completed in accordance with the time frames and guidelines identified in Appendix K.

- (c) If any prehistoric or historic artifacts, or other indications of cultural resources are found once project construction is underway, all work must stop within 20 meters (66 feet) of the find. A qualified archaeologist shall be consulted for an immediate evaluation of the find before resuming ground-breaking construction activities within 20 meters of the find. If the find is determined to be an important archaeological resource, the resource shall be either avoided, if feasible, or recovered consistent with the requirements of Appendix K of the State CEQA Guidelines.
- (d) In the event of discovery or recognition of human remains in any location other than a dedicated cemetery, no further excavation or disturbance of a project site or any nearby area reasonably suspected to overlie adjacent human remains can occur until the County Coroner has been informed and determines that no investigation of the cause of death is required. If the remains are of Native American origin, the agency must solicit the NAHC to see whether that agency can identify descendants of the deceased Native American(s). If, within 24 hours of being notified by the NAHC, such descendants offer the lead agency recommendations for treating or disposing of the remains and any associated grave goods, such recommendations should be followed, unless the landowner disagrees with the recommendation, in which case the NAHC shall mediate the dispute. If the NAHC was unable to identify a descendant, or the descendant fails to offer a recommendation within 24 hours after being notified by the NAHC, or the NAHC could not mediate a dispute between the descendants and the landowner to the latter's satisfaction, further work on the project may proceed, but the landowner must rebury the remains and any grave goods "with appropriate dignity on the property in a location not subject to subsurface disturbance."

Significance Determination After MC&FP Mitigation, and Supporting Rationale

Potentially significant impact. MC&FP Mitigation Measure 4.10-1 is now outdated. Appendix K of the CEQA Guidelines, as quoted in MC&FP mitigation measure 4.10-1, has changed since the completion of the MC&FP EIR. Appendix K previously included CEQA's definition of archaeological resources. Appendix K now discusses the criteria for a shortened Clearinghouse review and the previous archaeological resources content has been superseded by Section 15064.5 of the Guidelines. Accordingly, the mitigation is outdated and potential impacts to previously undiscovered impacts would not be properly mitigated.

Additional Mitigation Measures

- MM 4.5-1** If a potentially significant cultural resource is encountered during subsurface earthwork activities for the project, standard County practice will be implemented and all construction activities within a 100-foot radius of the find will be stopped

until a qualified archaeologist determines whether the resource requires further study. Potentially significant cultural resources consist of but are not limited to stone, bone, glass, ceramic, wood, or shell artifacts; fossils; or features including hearths, structural remains, or historic dumpsites. Furthermore, El Dorado County DOT will include a standard inadvertent discovery clause in every construction contract. Any previously undiscovered resources found during construction will be recorded on appropriate Department of Parks and Recreation (DPR) forms and evaluated for significance in terms of CEQA and Section 106 of the NHPA criteria by a qualified archaeologist. If the resource is determined significant under CEQA or the NHPA, the archaeologist will prepare and implement a research design and archaeological data recovery plan that captures those categories of data for which the site is significant. The archaeologist will also perform appropriate technical analyses, prepare a comprehensive report and file it with the appropriate Information Center, and provide for the permanent curation of the recovered materials. Construction activities within the 100-foot radius may continue once all appropriate recovery measures have been completed.

Significance Determination After Additional Mitigation, and Supporting Rationale

Less than significant impact. The proposed mitigation would ensure that any previously undiscovered historical resource encountered during the proposed project's construction is properly identified, recorded, and curated.

EID Intertie Improvements

MBA conducted a CRM for the EID Intertie Improvements project and concluded that the proposed EID Intertie Improvements would not directly impact any known historical resources. The likelihood of discovering a historical resource within the EID Intertie Improvements area is highly unlikely, since replacement activities would take place within a pre-existing roadway. However, similar to the Parkway portion of the proposed project, inadvertent damage to previously undiscovered historical resources still has the potential to occur. Implementation of MM 4.5-1 regarding inadvertent discovery practices will ensure that effects are less than significant.

Archaeological Resources

Impact 4.5-2:	The project has the potential to cause a substantial adverse change in the significance of a known archaeological resource pursuant to Section 15064.5. Subsurface construction activities associated with the project may damage or destroy previously undiscovered archaeological resources. (Potentially Significant)
----------------------	---

Impact Analysis

The MC&FP EIR (EDAW 1998) indicates that known prehistoric locations are somewhat rare in the project vicinity, probably due to the early and extensive mining activity, but the presence of numerous creeks (Hangtown, Weber, and especially those with names such as Indian Creek and Mound Springs Creek) suggests an original potential for prehistoric sites in this area. In addition to the potential for

Cultural and Historical Resources

buried or unknown prehistoric resources, the record search conducted under the MC&FP EIR identified the following prehistoric resource:

- Bedrock mortar (BRM) site with midden (PC-91-2/H) located in the vicinity of the proposed Pleasant Valley Connector road

The 2008 record search conducted for the proposed project (MBA 2008d) considered in this Draft EIR identified a site with prehistoric midden and 10 mortar stations (P-9-1825 CA-ELD-1341/H); however, this site was determined to be outside the proposed project's APE. Furthermore, the reconnaissance level survey conducted by MBA did not identify any additional prehistoric resources. As such, no impacts to known prehistoric resources would occur. Nonetheless, the possibility exists that subsurface construction activities may encounter undiscovered archaeological resources. Implementation of mitigation measure 4.5-1 would require inadvertently discovery practices to be implemented should previously undiscovered archeological resources be located. Furthermore, El Dorado County requires that a standard inadvertent discovery clause be included in every construction contract. As such, impacts to undiscovered archeological resources would be less than significant.

Significance Determination Before Mitigation

Potentially significant impact.

Mitigation Measures from the MC&FP EIR

N/A

Significance Determination After MC&FP Mitigation, and Supporting Rationale

Potentially Significant Impact. As discussed under Impact 4.5-1, cultural resource mitigation from the MC&FP EIR is outdated and would not fully reduce potential impacts to a less than significant level.

Additional Mitigation Measures

Refer to Mitigation Measure 4.5-1.

Significance Determination After Additional Mitigation, and Supporting Rationale

Less than significant impact. The proposed mitigation would ensure that any previously undiscovered archeological resource encountered during the proposed project's construction is properly identified, recorded, and curated.

EID Intertie Improvements

The proposed EID Intertie Improvements would not directly impact any known archaeological resources (MBA 2008e). The likelihood of discovering such a resource within the EID Intertie Improvements area is highly unlikely, since improvement activities will take place within a pre-existing roadway. However, similar to the Parkway portion of the proposed project, inadvertent

damage to previously undiscovered archeological resources still has the potential to occur. Implementation of MM 4.5-1 regarding inadvertent discovery practices will ensure that effects are less than significant.

Paleontological Resources or Geologic Features

Impact 4.5-3: The project has the potential to directly destroy a unique paleontological resource or site or unique geologic feature. (Potentially Significant)

Impact Analysis

Similar to prehistoric locations, the MC&FP EIR indicated that known paleontological locations are somewhat rare in the project area, and no paleontological sites were identified. Correspondingly, the CRA (MBA 2008d) did not find any evidence suggesting that paleontological or unique geologic resources would be present onsite. The results of the vertebrate paleontology database search at the UCMP indicated that it is highly unlikely that significant paleontological resources would be unearthed during project development and paleontological monitoring was not recommended. Nonetheless, the possibility exists that subsurface construction activities may encounter undiscovered paleontological resources. Accordingly, impacts would be potentially significant.

Significance Determination Before Mitigation

Potentially significant impact.

Mitigation Measures from the MC&FP EIR

There are no mitigation measures proposed in the MC&FP EIR that are applicable to the proposed project for impacts to paleontological resources or geologic features.

Significance Determination After MC&FP Mitigation, and Supporting Rationale

Potentially significant impact.

Additional Mitigation Measures

MM 4.5-3 El Dorado County shall require that a standard inadvertent discovery clause be included in every construction contract. In the event a fossil is discovered during any earthwork activities for the proposed project (including those occurring at depths of less than 10 feet), all excavations within 100 feet of the find shall be temporarily halted or delayed until the discovery is examined by a qualified paleontologist, in accordance with Society of Vertebrate Paleontology standards. The paleontologist shall determine the procedures to be followed before construction is allowed to resume at the location of the find. If the find is determined to be significant and DOT determines that avoidance is not feasible, the paleontologist shall design and carry out a data recovery plan consistent with the Society of Vertebrate Paleontology standards. The plan shall be incorporated into the project.

Cultural and Historical Resources

Significance Determination After Additional Mitigation, and Supporting Rationale

Less than significant impact. Implementation of Mitigation Measure 4.5-3 would ensure that any paleontological resources unearthed during project construction would be properly handled, thereby reducing potential impacts to less than significant.

EID Intertie Improvements

The proposed EID Intertie Improvements would not directly impact any known paleontological resource or unique geologic feature (MBA 2008e). The likelihood of discovering such a resource within the EID Intertie Improvements area is highly unlikely, since improvement activities would take place within a pre-existing roadway. However, similar to the Parkway portion of the proposed project, inadvertent damage to previously undiscovered resources still has the potential to occur. Implementation of MM 4.5-3 regarding inadvertent discovery practices would ensure that these potential effects are less than significant.

Human Remains

Impact 4.5-4: The project has the potential to disturb human remains, including those interred outside of formal cemeteries. (Potentially Significant)

Impact Analysis

The MC&FP EIR did not identify any cemeteries or other sites anticipated to have the potential to include human remains within the vicinity of the Interconnector. Correspondingly, the CRA conducted for this EIR (MBA 2008d) did not find any evidence suggesting that human remains would be present within the APE. Nonetheless, there is always the possibility that earth-disturbing activities may uncover previously unknown human remains. Accordingly, this is a potentially significant impact.

Significance Determination Before Mitigation

Potentially significant impact.

Mitigation Measures from the MC&FP EIR

N/A

Significance Determination After MC&FP Mitigation, and Supporting Rationale

Potentially significant impact.

Additional Mitigation Measures

MM 4.5-4 If human remains are encountered during earth-disturbing activities for the project, all work in the adjacent area shall stop immediately and the El Dorado County Coroner's office shall be notified. If the remains are determined to be Native American in origin, the Native American Heritage Commission shall be notified and will identify the Most Likely Descendent, who will be consulted for recommendations for treatment of the discovered remains.

Significance Determination After Additional Mitigation, and Supporting Rationale

Less than significant impact. Implementation of Mitigation Measure 4.5-4 would ensure that any human remains unearthed during project construction would be properly handled, thereby reducing potential impacts to less than significant.

EID Intertie Improvements

The proposed EID Intertie Improvements would not directly impact any known cemetery sites (MBA 2008e). The likelihood of discovering human remains within the EID Intertie Improvements area is highly unlikely, since replacement activities will take place within a pre-existing roadway. However, similar to the Parkway project, inadvertent discovery of human remains has the potential to occur. Implementation of the standard practices described above will ensure that potential effects are less than significant.

4.6 - Geology and Soils

This section describes the geology, soils, and seismicity of the project area as well as the potential for construction and implementation of the project to result in effects on these resources. Descriptions and analyses in this section incorporate information from the Preliminary Geotechnical Engineering Study, prepared in February 2008 by Youngdahl Consulting Group (YCG 2008), which is included in this EIR as Appendix G. Additional information was taken from the MC&FP EIR (EDAW 1998), the El Dorado County General Plan, and the El Dorado County General Plan Draft EIR.

4.6.1 - Summary

Significant Unavoidable Impacts

Project construction and use would not result in any significant unavoidable impacts related to geology and soils.

Potentially Significant Impacts

Project construction and use may result in potentially significant impacts related to the presence of undocumented fill and tailings, and expansive soils. Implementation of mitigation included in this section would reduce the magnitude of impacts to a less than significant level.

Less Than Significant Impacts

Impacts related to fault rupture, strong seismic ground shaking, seismic-related ground failure and landslides would be less than significant due to the low seismicity of the project area. Impacts related to erosion would be less than significant due to the implementation of a SWPPP and incorporated BMPs.

4.6.2 - Environmental Setting

Regional Geology

El Dorado County is located within the Sierra Nevada geomorphic province of California. Steep-sided hills and narrow, rocky, east-to-west-oriented stream channels dominate the Sierra Nevada province (El Dorado County 2003). Tectonic activity related to Sierra Nevada mountains uplift resulted in a rock fabric consisting of northeast-to-northwest-trending fracturing and foliation. The regional structure and tectonic framework are dominated by the Foothills Fault system, which transverses the western side of the Sierra Nevada tectonic block. This fault system developed in the early Mesozoic during several episodes of continental accretion involving island arc belts (Youngdahl 2008).

The project is located in Sections 24 and 25, Township 10 North, Range 10 East, and in Sections 19 and 30, Township 10 North, Range 11 East (Mount Diablo Baseline and Principal Meridian) on the U.S. Geological Survey (USGS) Placerville 7.5-minute quadrangle (Exhibit 3-3). Mesozoic-age granitic rocks underlay the majority of the project site except for the southern portion of the proposed

Diamond Road (State Route 49 [SR-49]) realignment, which is underlain by Auriferous Gravels (Youngdahl 2008).

The MC&FP EIR characterizes the project's region as a gently sloping plateau with a few low, rolling hills. Weber Creek is located to the northeast of the area, and several small tributary drainages trend northward through the central portion of the area (EDAW 1998).

Regional Seismicity

Seismicity describes the effects of seismic waves that radiate from an earthquake as it ruptures. While most of the energy released during an earthquake results in the permanent displacement of the ground, as much as 10 percent of the energy may dissipate immediately in the form of seismic waves. To describe the implications of seismic events, a discussion of faulting and seismic hazards is provided below.

Faulting

Faults form in rocks when stresses overcome the internal strength of the rock, resulting in a fracture. Large faults develop in response to large regional stresses operating over a long time, such as those stresses caused by the relative displacement between tectonic plates. According to the elastic rebound theory, these stresses cause strain to build up in the earth's crust until enough strain has built up to exceed the strength along a fault and cause a brittle failure. The slip between the two stuck plates or coherent blocks generates an earthquake. Following an earthquake, strain will build once again until the occurrence of another earthquake. The magnitude of slip is related to the maximum allowable strain that can be built up along a particular fault segment. The greatest buildup in strain due to the largest relative motion between tectonic plates or fault blocks over the longest period of time will generally produce the largest earthquakes. The distribution of these earthquakes is a study of much interest for both hazard prediction and the study of active deformation of the earth's crust. Deformation is a complex process, and strain caused by tectonic forces is not only accommodated through faulting, but also by folding, uplift, and subsidence, which can be gradual or in direct response to earthquakes.

Faults are mapped to determine earthquake hazards, since they occur where earthquakes tend to recur. A historic plane of weakness is more likely to fail under stress than a previously unbroken block of crust. Faults are, therefore, a prime indicator of past seismic activity, and faults with recent activity are presumed to be the best candidates for future earthquakes. However, since slip is not always accommodated by faults that intersect the surface along traces, and since the orientation of stresses in the crust can shift, predicting the location of future earthquakes is complicated. Earthquakes sometimes occur in areas with previously undetected faults or along faults previously thought inactive.

Local Faulting

The project site lies in a region that has historically experienced relatively little seismic activity. The Bear Mountain Fault Zone in El Dorado Hills and the Melones Fault Zone in Placerville are approximately 3.5 miles west and 1.0 mile east of the project study area, respectively. Both faults trend north-northwest, dipping steeply to the east, and they are part of the Foothills Fault system. The nearest known active faults are the North Tahoe fault, located approximately 48 miles northeast of the site, and the Dunnigan Hills fault, located approximately 55 miles west-northwest of the project site. According to the Fault Activity Map of California and Adjacent Areas and the Peak Acceleration from Maximum Credible Earthquakes in California, no active faults or Earthquake Fault Zones (Special Studies Zones) are located in the project study area. Additionally, no evidence of recent or active faulting was observed during Youngdahl's site evaluation (Youngdahl 2008).

Seismic Hazards

Seismic hazards pose a substantial danger to property and human safety and are present because of the risk of naturally occurring geologic events and processes impacting human development. Therefore, the hazard is as influenced by the conditions of human development as by the frequency and distribution of major geologic events. Seismic hazards present in California include ground rupture along faults, strong seismic shaking, liquefaction, ground failure, landsliding, and slope failure.

Fault Rupture

Fault rupture is a seismic hazard that affects structures sited above an active fault. The hazard from fault rupture is the movement of the ground surface along a fault during an earthquake. Typically, this movement takes place during the short time of an earthquake, but it also can occur slowly over many years in a process known as creep. Most structures and underground utilities cannot accommodate the surface displacements of several inches to several feet commonly associated with fault rupture or creep.

According to the El Dorado County General Plan EIR (EDAW 2003), no portion of the County is located within an Alquist-Priolo Earthquake Fault Zone, making the risk of fault rupture negligible.

Ground Shaking

The severity of ground shaking depends on several variables such as earthquake magnitude, epicenter distance, local geology, thickness, and seismic wave-propagation properties of unconsolidated materials, groundwater conditions, and topographic setting. Ground shaking hazards are most pronounced in areas near faults or with unconsolidated alluvium.

The most common type of damage from ground shaking is structural damage to buildings, which can range from cosmetic stucco cracks to total collapse. The overall level of structural damage from a nearby large earthquake would likely be moderate to heavy, depending on the characteristics of the earthquake, the type of ground, and the condition of the building. Besides damage to buildings,

strong ground shaking can cause severe damage from falling objects or broken utility lines. Fire and explosions are also hazards associated with strong ground shaking.

While Richter magnitude provides a useful measure of comparison between earthquakes, the moment magnitude is more widely used for scientific comparison, since it accounts for the actual slip that generated the earthquake. Actual damage is due to the propagation of seismic or ground waves as a result of initial failure, and the intensity of shaking is as much related to earthquake magnitude as to the condition of underlying materials. Loose materials tend to amplify ground waves, while hard rock can quickly attenuate them, causing little damage to overlying structures. For this reason, the Modified Mercalli Intensity (MMI) Scale provides a useful qualitative assessment of ground shaking. The MMI Scale is a 12-point scale of earthquake intensity that is based on local effects experienced by people, structures, and earth materials. Each succeeding step on the scale describes a progressively greater amount of damage at a given point of observation. The MMI Scale is shown in Table 4.6-1, along with relative ground velocity and acceleration. According to the El Dorado County General Plan EIR, potential ground shaking intensities vary across the County, increasing from west to east (EDAW 2003).

Table 4.6-1: Modified Mercalli Intensity Scale

Richter Magnitude	Modified Mercalli Intensity	Effects	Average Peak Ground Velocity (centimeters/seconds)	Average Peak Acceleration
0.1–0.9	I	Not felt. Marginal and long-period effects of large earthquakes	—	—
1.0–2.9	II	Felt by only a few persons at rest, especially on upper floors of building. Delicately suspended objects may swing.	—	—
3.0–3.9	III	Felt quite noticeable in doors, especially on upper floors of building, but many people do not recognize it as an earthquake. Standing cars may rock slightly. Vibration like passing a truck. Duration estimated.	—	0.0035–0.007 g
4.0–4.5	IV	During the day, felt indoors by many, outdoors by few. At night, some awakened. Dishes, windows, doors disturbed; walls make creaking sound. Sensations like heavy truck striking building. Standing cars rocked noticeably.	1–3	0.015–0.035 g

Table 4.6-1 (cont.): Modified Mercalli Intensity Scale

Richter Magnitude	Modified Mercalli Intensity	Effects	Average Peak Ground Velocity (centimeters/seconds)	Average Peak Acceleration
4.6–4.9	V	Felt by nearly everyone, many awakened. Some dishes, windows, broken; cracked plaster in a few places; unstable objects overturned. Disturbances of trees, poles, and other tall objects sometimes noticed. Pendulum clocks may stop.	3–7	0.035–0.07 g
5.0–5.5	VI	Felt by all, many frightened and run outdoors. Some heavy furniture moved; a few instances of falling plaster and damaged chimneys. Damage slight.	7–20	0.07–0.15 g
5.6–6.4	VII	Everyone runs outdoors. Damage negligible in buildings of good design and construction; slight to moderate in well built, ordinary structures; considerable in poorly built or badly designed structures; some chimneys broken. Noticed by persons driving cars.	20–60	0.15–0.35 g
6.5–6.9	VIII	Damage slight in specially designed structures; considerable in ordinary substantial buildings with partial collapse; great in poorly built structures. Panel walls thrown out of frame structures. Fall of chimneys, factory stacks, columns, monument walls, and heavy furniture overturned. Sand and mud ejected in small amounts. Changes in well water. Persons driving in cars disturbed.	60–200	0.35–0.7 g
7.0–7.4	IX	Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb; great in substantial buildings, with partial collapse. Buildings shifted off foundations. Ground cracked conspicuously. Underground pipes broken.	200–500	0.7–1.2 g

Table 4.6-1 (cont.): Modified Mercalli Intensity Scale

Richter Magnitude	Modified Mercalli Intensity	Effects	Average Peak Ground Velocity (centimeters/seconds)	Average Peak Acceleration
7.5–7.9	X	Some well-built structures destroyed; most masonry and frame structures destroyed with foundations; ground badly cracked. Railway lines bent. Landslides considerable from riverbanks and steep slopes. Shifted sand and mud. Water splashed, slopped over banks.	≥ 500	>1.2 g
8.0–8.4	XI	Few, if any masonry structures remain standing. Bridges destroyed. Broad fissures in ground. Underground pipelines completely out of service. Earth slumps and land slips in soft ground. Rails bent greatly.	≥ 500	>1.2 g
≥ 8.5	XII	Total damage. Waves seen on ground. Lines of sight and level distorted. Objects thrown into the air.	≥ 500	>1.2 g
Source: United States Geologic Survey.				

Ground Failure

Ground failure includes liquefaction and the liquefaction-induced phenomena of lateral spreading and lurching.

Liquefaction is a process by which sediments below the water table temporarily lose strength during an earthquake and behave as a viscous liquid rather than a solid. Liquefaction is restricted to certain geologic and hydrologic environments, primarily recently deposited sand and silt in areas with high groundwater levels. The process of liquefaction involves seismic waves passing through saturated granular layers, distorting the granular structure and causing the particles to collapse. This causes the granular layer to behave temporarily as a viscous liquid rather than a solid, resulting in liquefaction.

Liquefaction can cause the soil beneath a structure to lose strength, which may result in the loss of foundation-bearing capacity. This loss of strength commonly causes the structure to settle or tip. Loss of bearing strength can also cause light buildings with basements, buried tanks, and foundation piles to rise buoyantly through the liquefied soil.

Lateral spreading is lateral ground movement, with some vertical component, as a result of liquefaction. In effect, the soil rides on top of the liquefied layer. Lateral spreading can occur on

relatively flat sites with slopes less than 2 percent, under certain circumstances, and can cause ground cracking and settlement.

Lurching is the movement of the ground surface toward an open face when the soil liquefies. An open face could be a graded slope, stream bank, canal face, gully, or other similar feature.

El Dorado County's General Plan EIR indicates that the County is not considered to be at risk from liquefaction, lateral spreading, or other ground failure hazards because of the low likelihood of seismic activity.

Landslides and Slope Failure

Landslides and other forms of slope failure form in response to the long-term geologic cycle of uplift, mass wasting, and disturbance of slopes. Mass wasting refers to a variety of erosional processes from gradual downhill soil creep to mudslides, debris flows, landslides and rock fall—processes that are commonly triggered by intense precipitation, which varies according to climactic shifts. Often, various forms of mass wasting are grouped together as landslides, which are generally used to describe the downhill movement of rock and soil.

Geologists classify landslides into several different types that reflect differences in the type of material and type of movement. The four most common types of landslides are translational, rotational, earth flow, and rock fall. Debris flows are another common type of landslide similar to earth flows, except that the soil and rock particles are coarser. Mudslide is a term that appears in non-technical literature to describe a variety of shallow, rapidly moving earth flows.

Project Site Conditions

Surface Conditions

The project crosses numerous parcels (refer to Section 3.2 for a full list of assessor's parcel numbers), with land uses ranging from undeveloped and vacant parcels to fully improved industrial/commercial facilities. Several soil material stockpiles are located within the project study area, particularly along the proposed Parkway alignment near Missouri Flat Road. These stockpiles appeared to be, on average, 20 feet in height. In addition to the stockpiles, several previous grading operations (cuts and fills) were observed throughout the proposed Parkway alignment, as well as along the roadways proposed for improvement (Missouri Flat Road and SR-49). Many of the existing cut slopes were observed to have bedrock exposed beneath the surface soils (Youngdahl 2008). Elevations within the vicinity of the project range from approximately 1,770 feet to 1,830 feet above mean sea level.

Soils

According to the Soil Survey of El Dorado County (United States Department of Agriculture [USDA] Soil Conservation Service 1974), soils in the project study area consist of Placer diggings (PrD); Diamond Springs, very fine sandy loam (DfB and DfC); and Tailings (TaD) soil types. The majority of the project area soils are classified as Placer diggings. Placer diggings consist of areas of stony,

Geology and Soils

cobbly, and gravelly material, commonly in beds of creeks and other streams, or of areas that have been placer mined. The Diamond Springs series (DfB and DfC) consists of well-drained soils that are underlain by fine-grained acid igneous rocks at a depth of 24 to 50 inches. A small portion of the project area where Missouri Flat Road intersects with the Southern Pacific Railroad (SPRR) is identified as Tailings (TaD), which consist of cobbly and stony tailings generated from dredge mining, hydraulic mining, and hard-rock mine dumps (Youngdahl 2008).

Subsurface Conditions

Several previous geotechnical reports covering areas in the project vicinity were reviewed by Youngdahl and utilized to determine the likely subsurface conditions of the project alignment. These reports covered locations at the northern corner of Golden Center Drive and Missouri Flat Road (north boundary of the proposed Missouri Flat Road alignment), the north end of Stage Court (south side of the proposed Parkway alignment), and the realignment of SR-49 at the intersection of Pleasant Valley Road (south end of the proposed SR-49 realignment). Additionally, the Geotechnical Report for the El Dorado Materials Recovery Facility, which is located adjacent and southwest of the project area, was reviewed.

The literature review indicates that relatively variable subsurface conditions have been encountered in the vicinity of and along the proposed project alignment. The subsurface explorations typically encountered surface soils composed of native silty sands/sandy silts overlying weathered metavolcanic bedrock. Several of the previous test pit and boring logs encountered undocumented fill materials consisting of silty sands/sandy silts, varying in thickness from 3- to 17-feet and overlying the native soils described previously. Some of the deepest fill materials previously encountered are linked with sludge pond materials associated with the former lime processing operation located west of Diamond Road (SR-49) (Youngdahl 2008).

Groundwater

The Earth Resources Section of the MC&FP EIR included an extensive summary of the groundwater setting within the MC&FP area:

In fluvial formed valleys, such as the Sacramento Valley, groundwater surfaces, “tables,” and aquifer characteristics are predictable because of the presence of thick saturated granular aquifers. In mountainous areas, groundwater characteristics are difficult to predict and quantify because bedrock fractures, rather than a saturated strata, serve as the primary transportation mechanism. In the project vicinity, the occurrence and quantity of groundwater available for domestic or limited agricultural use is dependent upon the nature of the bedrock, fracture distribution and density, and interconnection of the fractures.

A general assessment of the hydrogeology characterizes areas as either groundwater recharge or groundwater discharge areas. Groundwater discharge occurs in areas

lower in elevation than the water surface in flowing streams. In portions of the MC&FP Area where water bearing bedrock fracture zones intersect the ground surface, springs and seeps occur. These areas may be generally characterized as a groundwater discharge areas. Groundwater recharge occurs as infiltration due to precipitation and surface water in areas higher in elevation from streams. Groundwater recharge in the vicinity occurs primarily from the direct infiltration of precipitation and losses from ephemeral streams. The downward migration of rainwater is impeded by and filtered through clay-filled fractures in the weathered bedrock zone. Groundwater generally follows surface topography, and is assumed to flow to the northeast, southwest and west beneath the MC&FP Area. Away from groundwater discharge areas, depth to groundwater within the fracture zones is generally greater than 100 feet below the ground surface. (EDAW 1998)

Youngdahl's more recent explorations in the vicinity of the Parkway project did not encounter a permanent groundwater table. However, subsurface water conditions typically vary in the foothill region. According to Youngdahl (2008), water may be perched on less weathered rock and present in the fractures and seams of the weathered rock found beneath the site at varying times of the year. Shallow groundwater was encountered during the most recent realignment of SR-49 at the intersection of Pleasant Valley Road, necessitating the installation of subdrains.

Asbestos Minerals

Naturally occurring asbestos (NOA) minerals are commonly associated with ultramafic and serpentine rock units, and within associated amphibolite mineral zones (EDAW 1998). When rock containing naturally occurring asbestos is broken or crushed, asbestos may be released from the rock, becoming airborne. Asbestos is classified by the EPA as a known human carcinogen, and NOA has been identified as a potential health hazard. According to available materials and field reconnaissance mapping completed during the MC&FP EIR, there are no mapped or observed ultramafic or serpentine rock units exposed within the project vicinity (EDAW 1998). Additionally, there are no soils series mapped in the project vicinity determined by the USDA Natural Resource Conservation Service to be developed on serpentine rock units (Serpentine Rock Land series SaF, or Delpiedra series DeE) (EDAW 1998). The El Dorado County map depicting Asbestos Review Areas of the Western Slope (which was derived from a California Geological Survey map from Open File Report 2000-02) does not portray the project site as located within a review area or in an area likely to contain asbestos materials. Research conducted under Sections 4.3, Air Quality, and 4.7, Hazards and Hazardous Materials, confirm that NOA is not likely to be present within the project study area.

4.6.3 - Regulatory Framework

State

Alquist-Priolo Earthquake Fault Zoning Act

In response to the severe fault rupture damage of structures by the 1971 San Fernando earthquake, the State of California enacted the Alquist-Priolo Earthquake Fault Zoning Act in 1972. This act required the State Geologist to delineate Earthquake Fault Zones along known active faults that have a relatively high potential for ground rupture. Faults that are zoned under the Alquist-Priolo Act must meet the strict definition of being “sufficiently active” and “well-defined” for inclusion as an Earthquake Fault Zones. The Earthquake Fault Zones are revised periodically, and they extend 200 to 500 feet on either side of identified fault traces. No structures for human occupancy may be built across an identified active fault trace. An area of 50 feet on either side of an active fault trace is assumed to be underlain by the fault, unless proven otherwise. Proposed construction in an Earthquake Fault Zone is permitted only following the completion of a fault location report prepared by a California Registered Geologist.

California Department of Transportation

The California Department of Transportation’s Highway Design Manual, 6th edition, provides policies, procedures and standards regarding highway and street design. These standards include engineering practices, which reduce impacts from potential geologic hazards.

Local

El Dorado County Highway Design Manual

The El Dorado County Highway design manual provides design criteria, policies and procedures for use as a guide for engineers to exercise sound judgment in the design of streets and highways in El Dorado County. It is intended to provide guidance in the design of new and major reconstruction projects.

El Dorado County General Plan

Appendix J of this Draft EIR provides a matrix that lists the policies determined to have relevance to this proposed project and provides a summary of the County’s determination of project consistency with each relevant goal and policy. As shown in Appendix J, the project is consistent with all applicable goals and policies of the General Plan, including those related to geology and soils.

4.6.4 - Project Impact Analysis

Methodology for Analysis

Youngdahl Consulting Group, Inc., prepared a Preliminary Geotechnical Engineering Study, dated February 19, 2008, in which the surface conditions of the project area were evaluated (Appendix G). The scope of the study consisted of reviewing existing geotechnical and geologic documents, conducting a reconnaissance-level field study, and performing an engineering analysis of the data and

information obtained. Data from this document and information contained in the MC&FP EIR were used to evaluate project-related impacts to geology and soils.

Thresholds of Significance

According to the CEQA Guidelines' Appendix G Environmental Checklist, to determine whether impacts to geology and soils are significant environmental effects, the following questions are analyzed and evaluated. Would the project:

- a.) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:
 - i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.
 - ii. Strong seismic ground shaking?
 - iii. Seismic-related ground failure, including liquefaction?
 - iv. Landslides?
- b.) Result in substantial soil erosion or the loss of topsoil?
- c.) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?
- d.) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?
- e.) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

Impact Statements and Mitigation Discussions

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate. The MC&FP EIR included a general analysis of the geologic setting of the MC&FP area, but a site-specific study of the project area was not conducted. The MC&FP EIR impact assessment and mitigation measures are included where appropriate, since the proposed project must comply with regulations set forth by the prior programmatic-level EIR. Further analysis or mitigation required beyond that of the MC&FP EIR is included where necessary. Potential cumulative effects are discussed in Section 6.0 of this report.

Earthquakes

Impact 4.6-1:	The project has the potential to expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:
	i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. (Less than Significant)
	ii) Strong seismic ground shaking. (Less than Significant)
	iii) Seismic-related ground failure, including liquefaction. (Less than Significant)
	iv) Landslides. (Less than Significant)

Impact Analysis

Fault Rupture

The MC&FP EIR concluded that fault rupture (referred to as ground rupture in the MC&FP EIR) is considered to be unlikely, due to the distance from the mapped locations of the Melones fault and the Bear Mountain fault zones. The California Division of Mines and Geology has not classified the Foothills Fault System (in which the Melones and Bear Mountain fault zones are located) as active, and special seismic zoning related to ground rupture potential has been determined to be unnecessary. Therefore, the impact from ground rupture caused by a known earthquake fault was considered to be less than significant under the MC&FP EIR.

As indicated in the Preliminary Geotechnical Engineering Report (Youngdahl 2008) and according to the Fault Activity Map of California and Adjacent Areas and the Peak Acceleration from Maximum Credible Earthquakes in California, no active faults or Earthquake Fault Zones (Special Studies Zones) are located within the project area. As described previously, no known surface expression of active faults is believed to cross the site, and the region has historically experienced relatively little seismic activity. The occurrence of fault rupture through the project area is not anticipated. As such, the potential for substantial adverse effects to occur as a result of fault rupture would be less than significant.

Strong Ground Shaking

The MC&FP EIR concluded that the potential exists for ground accelerations as high as 0.4g from strong earthquakes along the Foothills Fault Zone, resulting in a moderate to low potential for severe ground shaking within the project area.

The California Geological Survey maintains a web-based computer model that estimates probabilistic seismic ground motions for any location within California. The computer model estimates the “Design Basis Earthquake” ground motion, which is defined as the peak ground acceleration with a 10-percent chance of exceedance in 50 years (475-year return period). For a firm rock soil type, the project site’s estimated Peak Ground Acceleration is approximately 0.103g. As such, the project site may be exposed to strong ground shaking during an earthquake. However, the proposed roadways would be designed in accordance with the American Association of State Highway and

Transportation Officials (AASHTO) Policy on Geometric Design of Highways and Streets. Proper design would reduce damages resulting from strong ground shaking. As such, impacts would be reduced to a less than significant level.

Ground Failure/Liquefaction

The MC&FP EIR included the following discussion regarding liquefaction:

Liquefaction is not likely to occur within the general MC&FP Area due to the presence of a thin mantle of soil developed upon firm bedrock and the depth of groundwater. This impact is considered less than significant. In general, the undisturbed firm native surficial material present in the MC&FP Area should not be susceptible to liquefaction. While individual sites or portions of such sites may exhibit some of the significant liquefaction factors, overall they are not dominant in the MC&FP Area. Individual site characteristics would need to be evaluated on a project-by-project basis. The surficial material that generally characterizes the MC&FP Area does not meet the significant factors for liquefaction potential and, therefore, this impact is considered less than significant. (EDAW 1998)

The MC&FP EIR also indicates that seismic settlement is not likely to occur because of the presence of the thin mantle of soil developed on bedrock of relatively strong slightly weathered material, and considering that the anticipated Maximum Credible earthquake for faults along the Foothills fault system is between M 6.3 and M 6.5. As such, the MC&FP EIR concludes that impacts from liquefaction or seismic settlement are considered to be less than significant (EDAW 1998).

Similarly, Youngdahl's Preliminary Geotechnical Engineering Study (2008) for the proposed project concluded that, because of the relatively low seismicity of the area and the relatively shallow depth to bedrock, the potential for site liquefaction and ground failure is considered negligible. As such, the potential for substantial adverse effects resulting from liquefaction or ground failure is less than significant.

Landslides

According to the MC&FP EIR, no areas of suspected or potential landsliding were noted in the MC&FP Area. Moreover, because of the gentle to moderate topography characteristic of the project area and the relative strength of the soil and bedrock in the MC&FP Area, landslide impacts are considered to be less than significant (EDAW 1998).

The project study area consists of gentle sloping areas, the steepest of which would be smoothed through engineered earthwork performed during grading of the site. The project would result in manufactured slopes between 0 and 12 percent, with the majority of slopes between 0 and 5 percent (CTA 2008). As such, the potential for substantial adverse effects resulting from landslides is less than significant.

Geology and Soils

Significance Determination Before Mitigation

Less than significant impact. The potential for fault rupture, ground failure or liquefaction and landslides, and their resulting effects are considered less than significant. Damages resulting from strong ground shaking would be reduced to a less than significant impact due to incorporation of appropriate design standards.

Mitigation Measures from the MC&FP EIR

Measures addressing ground shaking are included in the MC&FP EIR under Mitigation Measure 4.7-6: Ground Shaking. However, the mitigation measure references the Uniform Building Code, which does not provide design standards or guidance regarding the construction of roadways. Accordingly, the mitigation measure is not applicable to the proposed Parkway project.

Significance Determination After MC&FP Mitigation, and Supporting Rationale

Less than significant impact.

Additional Mitigation Measures

No additional mitigation is necessary.

Significant Determination After Additional Mitigation, and Supporting Rationale

The potential for fault rupture, strong ground shaking, ground failure or liquefaction and landslides, and their resulting effects are considered less than significant.

EID Intertie Improvements

Impacts resulting from the EID Intertie Improvements regarding fault rupture, strong ground shaking, ground failure, liquefaction, and landslides would be similar to those for the Parkway project, as described above. A geotechnical report for the EID Intertie Improvements will be completed during the design phase and any recommendations pertaining to seismic design will be included in the project design to ensure that impacts remain less than significant.

Soil Erosion or Topsoil Loss

Impact 4.6-2:	The project has the potential to result in substantial soil erosion or the loss of topsoil. (Less than Significant)
----------------------	--

Impact Analysis

The MC&FP EIR concludes that construction activities resulting in ground disturbance could result in a moderate potential for ground instability on properties with steeper slopes (e.g., 20 percent and greater), and a high potential for erosion of unprotected slopes and soil surfaces during one-half of the year (the rainy season). In general, grading activities such as those that would be required for roadway development in the MC&FP area could create the potential for erosion. Although no areas of suspected erosion were noted within the MC&FP area, construction activities resulting in ground disturbance could result in a moderate potential for erosion to occur. This impact is considered potentially significant in the MC&FP EIR.

Construction activities associated with the proposed project would involve vegetation removal, grading, and excavation activities that could expose barren soils to sources of wind or water, resulting in the potential for erosion and sedimentation on and off the project site.

Erosion from water would be controlled by the proposed project's National Pollutant Discharge Elimination System (NPDES) permit and associated Stormwater Pollution Prevention Plan (SWPPP) as referenced in Section 4.8, Hydrology and Water Quality under Impact 4.8-5. Stormwater permitting programs regulate stormwater quality from construction sites, which includes erosion and sedimentation. Under the NPDES permitting program, the preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP) is required for construction activities that would disturb an area of 1 acre or more. The SWPPP must identify potential sources of erosion or sedimentation that may be reasonably expected to affect the quality of stormwater discharges as well as identify and implement Best Management Practices (BMPs) that ensure the reduction of these pollutants during stormwater discharges. Typical BMPs intended to control erosion include sand bags, detention basins, silt fencing, storm drain inlet protection, street sweeping, and monitoring of water bodies. As discussed in Impact 4.8-5, the DOT's contract provisions would require compliance with BMPs identified by the NPDES permit and SWPPP as well as policies and regulations regarding erosion and ground instability included in the County's Storm Water Management Plan for Western El Dorado County. Accordingly, potential erosion impacts from water erosion would be less than significant.

Erosion from wind within the project area would be minimal. The Natural Resource Conservation Service categorizes soils into wind erodibility groups (WEGs) 1 through 8. Group 1 soils are the most susceptible to wind erosion while Group 8 soils are least susceptible to wind erosion. Soils within the project site are categorized as WEG 5 (Dfb and DfC), and 8 (TaD and PrD). The majority of earth disturbance would take place within the TaD and PrD soils, which have a WEG of 8 and are least susceptible to wind erosion. Therefore, wind erosion and topsoil loss resulting from the proposed project would be less than significant.

In summary, as noted in the MC&FP EIR, ground disturbance could result in a moderate potential for erosion to occur. However, the proposed project includes a SWPPP, under which BMPs would be implemented to control erosion from water and soils within the project site are not highly susceptible to wind erosion. Impacts would be less than significant.

Significance Determination Before Mitigation

Less than significant impact.

Mitigation Measures from the MC&FP EIR

Measures addressing soil erosion and topsoil loss were included in the MC&FP EIR under Mitigation Measure 4.7-10: Slope Stability and Erosion Control. However, the mitigation measure references the Uniform Building Code, which does not provide design standards or guidance regarding the

Geology and Soils

construction of roadways and was designed to regulate compliance should an entity other than the DOT undertake construction of the Parkway. Accordingly, this mitigation measure is not applicable to the proposed project.

Significance Determination After MC&FP Mitigation, and Supporting Rationale

Under the proposed project, construction activities would adhere to County policies and regulations, specifically the County's Grading Ordinance and Storm Water Management Plan for Western El Dorado County, regarding erosion and ground instability. To minimize erosion and the transport of foreign materials and topsoil during construction, the County will be required to prepare a Stormwater Pollution Prevention Plan (SWPPP) in accordance with SWRCB's General Permit for Discharges of Storm Water Associated with Construction Activity. As such, the County would implement best management practices (BMPs) for controlling the introduction of materials to stormwater and the flow of stormwater from within the construction area to off-site areas. Adherence to these requirements would ensure that the proposed project would not result in substantial soil erosion or the loss of topsoil. Impacts would be less than significant.

Additional Mitigation Measures

No additional mitigation is necessary.

Significance Determination after Additional Mitigation, and Supporting Rationale

Less than significant impact.

EID Intertie Improvements

Impacts resulting from the construction of the EID Intertie Improvements related to soil erosion and topsoil loss would be similar to those described above for the proposed project. Similarly, EID's contract provisions would require compliance with BMPs identified by the NPDES permit and SWPPP. Impacts would be less than significant.

Unstable Geologic Location

Impact 4.6-3:	The project has the potential to be located on a geologic unit or soil that could become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse. (Potentially Significant)
----------------------	--

Impact Analysis

The MC&FP EIR indicated that, in general, the MC&FP EIR area is not susceptible to liquefaction; however, individual sites or portions of such sites might contain soils characteristically associated with liquefaction. As such, individual site characteristics would need to be evaluated on a project-by-project basis. No areas of suspected or potential landsliding were identified in the MC&FP EIR. Furthermore, risks regarding unstable geologic locations related to collapsible and expansive soils or subsidence were identified as less than significant, due to the thin mantle of developed soils and shallow bedrock conditions (EDAW 1998). While the MC&FP EIR did identify mitigation measures

regarding liquefaction, collapsible and expansive soils, or subsidence for some areas, no mitigation measures were included specific to the proposed project .

The Parkway study area consists of gentle sloping areas, the steepest of which would be smoothed through engineered earthwork performed during grading of the site. The project would result in manufactured slopes between 0 and 12 percent, with the majority of slopes between 0 and 5 percent (CTA 2008). As such, the potential for substantial adverse effects resulting from landslides is less than significant.

The proposed Parkway is located in an area observed to contain multiple generations of fill placement and site development. Based on the available information included in the Preliminary Geotechnical Engineering Study, it is assumed that stockpiles up to 20 feet high are present along the proposed roadway alignments. Additional deep fill areas should be anticipated along the proposed Parkway alignment where it crosses the boundary of the historical lime processing area, where up to 17 feet of non-engineered fills associated with a previous sludge pond may still be present (Youngdahl 2008). It is assumed that this area corresponds with the parcel (APN 051-250-12) that would be used as a soil borrow site and for staging and construction storage. A majority of the project area is classified as Placer diggings. Placer diggings consist of stony, cobbly, and gravelly material, commonly in beds of creeks and streams, or in areas that have been placer mined. A small portion of the project area, where Missouri Flat Road intersects with SPRR, is identified as Tailings, consisting of cobbly and stony tailings from dredge mining, hydraulic mining, and hard-rock mine dumps. These types of soils may be or become unstable if not properly excavated or engineered (Youngdahl 2008).

While both the Preliminary Geotechnical Engineering Study and the MC&FP EIR concluded that the potential for liquefaction and related land subsidence activities is not likely to occur within the project area, the presence of undocumented fills and tailings may result in unstable soil conditions if not properly excavated. Accordingly, potentially significant impacts may occur.

Significance Determination Before Mitigation

Potentially significant impact.

Mitigation Measures from the MC&FP EIR

N/A

Significance Determination After MC&FP Mitigation, and Supporting Rationale

Potentially significant impact.

Additional Mitigation Measures

- MM 4.6-3** Prior to project construction a final geotechnical report will be prepared in order to assess, among other things, the location and depth of expansive materials, undocumented fills, and tailings, including those located within the parcel to be used

Geology and Soils

as a borrow, staging and storage site. Recommended soil stabilization procedures provided in the report (i.e., excavation, engineered fill replacement, moisture barrier, drainage improvements) will be incorporated into the project design.

Significance Determination After Additional Mitigation, and Supporting Rationale

Less than significant impact. The proposed mitigation would ensure that proper soil stabilization procedures would be implemented where undocumented fill and tailings are present.

EID Intertie Improvements

Impacts resulting from the EID Intertie Improvements related to unstable geologic locations would be similar to those described above for the Parkway. Implementation of MM 4.6-3 would ensure that effects are reduced to a less than significant level.

Expansive Soil

Impact 4.6-4:	The project has the potential to be located on expansive soils, as defined in Table 18-1-B of the Uniform Building Code (1994), and may create substantial risks to life or property. (Potentially Significant)
----------------------	--

Impact Analysis

Expansive soils tend to increase or decrease in volume with the addition of water and generally consist of clay. When dry, clay soils are extremely strong; when exposed to water, clay soils have the potential to expand and soften, thereby losing their structural integrity. The repeated exposure of expansive soils to alternating dry and wet conditions can cause shrinking and swelling of soils, resulting in potential damage to roadways constructed upon them. Damage to roadways may include cracks, depressions, and buckling.

The MC&FP EIR concluded that the thin mantle of soil developed within the MC&FP area appears to have a low potential to expand or collapse. Therefore, this impact was considered less than significant for the proposed projects under in the MC&FP EIR (EDAW 1998). However, the Preliminary Geotechnical Engineering Study conducted specifically for the proposed Parkway indicates that clay layers may be present in low-lying areas and above the bedrock horizons. In addition, there is the potential to have concentrated pockets of expansive clay materials within the Auriferous gravel deposits located beneath the south portion of the proposed Diamond Road (SR-49) re-alignment. Accordingly, impacts from expansive soils would be potentially significant.

Significance Determination Before Mitigation

Potentially significant impact.

Mitigation Measures from the MC&FP EIR

N/A

Significance Determination After MC&FP Mitigation, and Supporting Rationale

Potentially significant impact.

Additional Mitigation Measures

Refer to Mitigation Measure 4.6-3.

Significance Determination After Additional Mitigation, and Supporting Rationale

Less than significant impact. The proposed mitigation would ensure that proper soil stabilization procedures would be implemented where expansive soils are present.

EID Intertie Improvements

Impacts resulting from the EID Intertie Improvements on expansive soils would be similar to those described above for the Parkway. Implementation of Mitigation Measure 4.6-3 would ensure that effects are reduced to a less than significant level.

Wastewater Disposal Systems

Impact 4.6-5:	The project has the potential to include soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater. (No Impact)
----------------------	--

Impact Analysis

The proposed project does not include the installation of septic tanks or alternative wastewater disposal systems. Therefore, no impacts would occur as a result of project implementation.

Significance Determination Before Mitigation

No impact.

Mitigation Measures from the MC&FP EIR

N/A

Significance Determination After MC&FP Mitigation, and Supporting Rationale

No impact.

Additional Mitigation Measures

No additional mitigation is necessary.

Significance Determination After Additional Mitigation, and Supporting Rationale

No impact.

EID Intertie Improvements

No impact.

4.7 - Hazards and Hazardous Materials

This section describes the existing hazards and hazardous materials conditions in the project area and potential impacts from hazards and hazardous materials due to project construction and use. Descriptions and analyses in this section are based on information contained in the Phase I Environmental Site Assessment (ESA) for the Diamond Springs Parkway Project (Youngdahl Consulting Group 2009), which is included in this EIR as Appendix H. Information was also obtained by MBA's site reconnaissance and from the El Dorado Irrigation District. This section summarizes the information included in the Phase I ESA.

Significant Unavoidable Impacts

Project construction and use would not result in any significant unavoidable impacts to the public by release or exposure to hazards or hazardous materials.

Potentially Significant Impacts

Construction and use of the proposed project could have substantial adverse effects on the safety to the public from release of or exposure to hazardous materials. These impacts are potentially significant and require mitigation. Implementation of mitigation included in this section would reduce the magnitude of impacts to a less than significant level.

Less Than Significant Impacts

Construction and use of the proposed project would have less than significant effects related to the routine transport, use, or disposal of hazardous materials; upset and accident conditions involving hazardous materials; and implementation of adopted emergency response or evacuation plans.

4.7.1 - Environmental Setting

Hazardous Materials

Hazardous materials, as defined by the California Code of Regulations, are substances with certain physical properties that could pose a substantial present or future hazard to human health or the environment when improperly handled, disposed, or otherwise managed. Hazardous materials are grouped into the following four categories, based on their properties:

- Toxic - causes human health effects
- Ignitable - has the ability to burn
- Corrosive - causes severe burns or damage to materials
- Reactive - causes explosions or generates toxic gases

A hazardous waste is any hazardous material that is discarded, abandoned, or slated to be recycled. The criteria that define a material as hazardous also define a waste as hazardous. If improperly handled, hazardous materials and hazardous waste can result in public health hazards if released into

the soil or groundwater or through airborne releases in vapors, fumes, or dust. Soil and groundwater having concentrations of hazardous constituents higher than specific regulatory levels must be handled and disposed of as hazardous waste when excavated or pumped from an aquifer. The California Code of Regulations, Title 22, Sections 66261.20-24 contain technical descriptions of toxic characteristics that could cause soil or groundwater to be classified as hazardous waste. In addition, the El Dorado County Environmental Management Department maintains records for toxic or hazardous material incidents, and the Central Valley Regional Water Quality Control Board (RWQCB) maintains files on hazardous material sites.

Most hazardous materials regulations and enforcement in El Dorado County is overseen by the El Dorado County Environmental Management Department, which refers larger cases of hazardous materials contamination or violations to the Central Valley RWQCB and the State Department of Toxic Substances Control (DTSC). Other agencies, such as the El Dorado County Air Quality Management District (AQMD) and the Federal and State Occupational Safety and Health Administrations (OSHA), may also be involved when issues related to hazardous materials arise.

Phase I Environmental Site Assessment

As discussed above, a Phase I Environmental Site Assessment was prepared by Youngdahl Consulting Group, Inc. to determine the presence or absence of hazardous materials within a study area that included 63 parcels: 18 parcels located along the existing State Route 49 (SR-49) right-of-way (ROW) (SR-49 parcels), and 45 parcels located along the proposed Parkway ROW (DSP parcels). A complete list of the parcels investigated is included in Appendix H of this Draft EIR.

The proposed project is located in a setting that includes active commercial, industrial, residential, and vacant properties. The area includes parcels that were formerly used for agricultural purposes, as part of a railroad depot and yard, and as a lime plant. Existing and future SR-49 (Diamond Springs Road) parcels are noted separately in this analysis because work within Caltrans' ROW is subject to Caltrans regulations and authority regarding hazardous materials. The findings of the Phase I Environmental Site Assessment are summarized below.

Records Search

Under the direction of Youngdahl, Environmental Data Resources, Inc. (EDR) performed a search of federal, tribal, State, and local databases listing contaminated sites, Brownfield sites (a development site having the presence or potential presence of a hazardous substance, pollutant, or contaminant), underground storage tank (UST) sites, waste storage sites, toxic chemical sites, contaminated well sites, and other sites containing hazardous materials. The record search covered an area much larger than the project study area (refer to Appendix B of the Phase I ESA). The records search results are discussed below.

Project Study Area

Of the 63 parcels investigated, 10 sites were listed on hazardous materials databases, one of which (APN 051-461-11) is an SR-49 parcel (i.e., is located within SR-49 ROW). All DSP parcels that appeared on a list were reviewed at the El Dorado County Environmental Management Department (EDCEMD). Table 4.7-1 summarizes the listed parcels within the study area.

Table 4.7-1: Project Study Area Record Search Summary

Assessor's Parcel Number (APN)	Name and Address	Database(s)
(051-461-10)	El Dorado Disposal 3940 Highway 49	CERC-NFRAP; RCRA-NonGen; FINDS; CA WDS; SWRCY; HIST UST; SWEEPS UST
(051-460-10)	Rack It 521 Truck Street	RCRA-SQG; FINDS; HAZNET
(327-270-18)	Beauty Points International 4048 Stage Court Unit H1	RCRA-SQG; FINDS; HAZNET
(327-270-18)	Sierra Design 4060 Stage Court Bldg G	RCRA-SQG; FINDS
(327-270-18)	Arens Bros Environ. 4066 Stage Court	RCRA-NonGen; HAZNET
(327-270-26)	Mother Lode School District 4429 Missouri Flat Road	FINDS
(327-270-18)	EM Recycling 4040 A-2 Stage Court	SWRCY
(327-270-08)	Missouri Station 4535 Missouri Flat Road	UST; SWEEPS UST
(051-461-11) ¹	Symeist Auto Body 3948 Highway 49	HAZNET
(327-270-46)	Teters Auto Wrecker 4487 Missouri Flat Road	ENVIROSTOR

CA WDS = California Waste Discharge System database includes sites which have been issued waste discharge permits by the State Water Resources Control Board.

CERC-NFRAP = Comprehensive Environmental Response, Compensation and Liability Information System database of archived sites that have No Further Remedial Action Planned.

ENVIROSTOR = The Department of Toxic Substance's Site Mitigation and Brownfield Reuse Program's database of sites that have known contamination or sites for which there may be reasons to investigate possible contamination.

FINDS = Facility Index System/Facility Registry System. Contains both facility information and pointers to other sources that provide more information about hazardous materials usage.

HAZNET = Facility Manifest Data. Data extracted from copies of hazardous waste manifests.

HIST UST= Hazardous Substance Storage Container Database. Historical listing of underground storage tank sites.

RCRA-NonGen = Resource Conservation and Recovery Act. EPA database of sites which transport, store, and/or dispose of hazardous waste, but do not generate hazardous waste.

RCRA-SQG = Resource Conservation and Recovery Act Small Quantity Generator. Small quantity generator of hazardous wastes governed by RCRA

SWEEPS UST = Statewide Environmental Evaluation and Planning System. Lists underground storage tank locations. No longer updated.

SWRCY = Recycler Database. A listing of recycling facilities in California.

UST= Underground Storage Tank

¹ APN 051-461-11 is located within SR-49 right-of-way. All other listed parcels are located along the Diamond Springs Parkway (DSP) corridor.

Source: Youngdahl Consulting Group, Inc. 2009.

Surrounding Land Uses

EDR also searched for listed parcels surrounding the project study area. The record search yielded 7 sites within 1 mile of the project study area, all of which are located near the proposed Parkway corridor. All adjacent parcels that appeared on a list were reviewed at the EDCEMD. Table 4.7-2 provides a summary of the adjacent listed parcels.

Table 4.7-2: Surrounding Land Uses Record Search Summary

Name and Address	Database(s) (Search Radius in Miles if provided)
Pac Bell 281 Industrial Drive	RCRA-SQG (0.25); RCRA-NonGen (0.25); FINDS; Cortese (0.5); LUST (0.50); CA FID UST (0.25); SWEEPS UST (0.25); HAZNET
Celebrity Inc 4512 Missouri Flat Road	RCRA- SQG (0.25); FINDS
Celebrity Plating 4502 Missouri Flat Road	ENVIROSTOR (1.0)
El Dorado Disposal 4100 Throwita Way	SWF/LF (0.5); CA WDS
Sierra Door 4415 Missouri Flat Road	Cortese (0.50); LUST (0.50); CA FID UST (0.25); SWEEPS UST (0.25)
Former Service Station 493 Main Street	Cortese (0.50) LUST (0.50)
Old Caldor Lumber Co 180 Industrial Drive	ENVIROSTOR (1.0)
<p>CA FID UST= Facility Inventory Database. Contains a historic listing of active and inactive underground storage tank locations from the State Water Resources Control Board.</p> <p>CA WDS = California Waste Discharge System database includes sites which have been issued waste discharge permits by the State Water Resources Control Board.</p> <p>Cortese = Database identifies public drinking water wells with detectable levels of contamination, hazardous substance sites selected for remedial action, sites with known toxic material identified through the abandoned site assessment program, sites with underground storage tanks (USTs) having a reportable release, and all solid waste disposal facilities from which there is known migration.</p> <p>ENVIROSTOR = The Department of Toxic Substance's Site Mitigation and Brownfield Reuse Program's database of sites that have known contamination or sites for which there may be reasons to investigate possible contamination.</p> <p>FINDS = Facility Index System/Facility Registry System. Contains both facility information and pointers to other sources that provide more information about hazardous materials usage.</p> <p>HAZNET = Facility Manifest Data. Data extracted from copies of hazardous waste manifests.</p> <p>LUSt = The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents.</p> <p>RCRA-NonGen = Resource Conservation and Recovery Act. EPA database of sites which transport, store, treat and/or dispose of hazardous waste, but do not generate hazardous waste.</p> <p>RCRA-SQG = Resource Conservation and Recovery Act Small Quantity Generator. Small quantity generator of hazardous wastes governed by RCRA</p> <p>SWF/LF = Solid Waste Information System (SWIS). Lists active, closed, and inactive solid waste disposal facilities or landfills.</p> <p>SWEEPS UST = Statewide Environmental Evaluation and Planning System. Lists underground storage tank locations. No longer updated.</p> <p>Source: Youngdahl Consulting Group, Inc. 2009.</p>	

EDCEMD File Review

All listed parcels were reviewed at the EDCMD. Due to the large volume of listed sites, only selected files are listed in the Phase I ESA. Portions of these files were copied and are provided in an appendix to the Phase I ESA (Appendix H). The following provides a discussion of selected EDCMD files, all of which provide information regarding parcels along the proposed Parkway corridor.

Project Study Area Parcels

Teters Auto Wreckers (APN 327-270-46)

The EDCMD file for Teters Auto Wreckers indicated that a Preliminary Assessment was recommended for this low priority site in 1987. Potential contaminants of concern include: lead, PCBs, oil containing waste, waste oil and mixed oil, and contaminated soil. EDCMD file reviews for adjacent properties noted that soil sampling and excavation work on the Teters property began in approximately 1994 and initially focused on surface stains from auto dismantling activities on the property. Widespread contamination was found on the property beneath the soil surface at depths of up to 5 feet. Approximately 5,000 cubic yards of soil was excavated from the site, including soils contaminated with copper. Soil contaminated with hydrocarbons was left on-site and was successfully bioremediated. According to the EDCMD, a closure letter was issued in December 1991. On October 1, 2008, the EDCMD issued a no further action letter for the Teters Auto Wreckers parcel.

El Dorado Disposal/Waste Connections (APN 051-461-10)

The EDCMD file for the El Dorado Disposal/Waste Connections property at 3940 Highway 49 identified that the site is a maintenance facility for a fleet of vehicles and equipment related to solid waste pick-up and disposal. The facility includes one 8,000-gallon aboveground diesel fuel tank. The facility generated the following hazardous waste materials: used motor oil, used oil filters, used absorbent, used solvent, used batteries, and used coolant. No violations were identified in the file.

Bahlman Property (APN 327-270-04)

The Bahlman property was not listed in the EDR report's summary of listed sites. However, the EDCMD file for the Bahlman property at 4451 Missouri Flat Road (at Old Depot Road) identified the existence of subsurface contamination at the site. Snow Cap Ice Company once operated on the property and included the use of Freon in refrigeration equipment. Other portions of the property were also used by Crystal Distribution and Mountain Crane & Windmills, which performed delivery vehicle maintenance on-site. Other tenants included Diamond Electrical Supply, Placerville Truss, and Harper Equipment Rental. According to the EDCMD file, free-phase viscous oil and stained soil was identified in the sidewalls of test pits dug in 1999 by McLaren Hart, Inc. The stained soil showed low levels of toluene, ethylbenzene, and xylenes in the oil and low-level diesel range hydrocarbons in the soil. Heavy metals were not identified during these tests. In October 1999, EDCMD requested further investigation and remediation of the free-phase oil contamination on the

property. EDCEMD did not request cleanup of the stained soil. In 2006, JD Smith Consulting (JDS) was retained to conduct a site investigation to evaluate the extent and volume of soil containing free-phase oil. JDS concluded that the oil was best described as a combination of immobile, strongly weathered motor oil and grease related to historic railroad uses at the site. During the investigation, an El Dorado Irrigation District (EID) water leak was identified on the north side of the property. The EID water leak reportedly acted to mobilize the oil observed in 1999. JDS recommended to EDCEMD that the site be issued a no further action letter since elevated levels of toxic compounds were not detected. The EDCEMD did not agree, and in 2006 they requested that the lateral extent of the oil-impacted soil be removed. A work plan to address EDCEMD's request was prepared by JDS and submitted on June 26, 2007. JDS proposed to remove the upper 2 to 3 feet of soil and stockpile it on-site for later use as backfill. The lower 3 to 4 feet of soil was to be excavated, transported, and disposed of at an approved Class II landfill facility. To date, these proposed activities have not occurred and the contaminated soils remain on-site.

Surrounding Properties

Pacific Bell (281 Industrial Drive)

The EDCEMD file for the Pacific Bell (AT&T/SBC) facility, located at 281 Industrial Drive (southwest of APN 327-260-25) indicated that in 1986, a 1,000-gallon waste oil UST was removed after failing a tightness test. Petroleum hydrocarbons were detected at a concentration of 2,900 parts per million (ppm) beneath the tank. Since the discovery of the contamination in 1986, 15 monitoring wells have been installed at the facility. Remediation attempts have included the use of oxygen-releasing compounds to enhance natural biodegradation. Ongoing groundwater monitoring and remediation to removed MTBE is in progress according to the most recent quarterly report dated December 2007. TPH-D and MTBE were detected in the groundwater samples analyzed in October 2007. Groundwater elevation studies of the site show the groundwater to be between 10 and 25 feet below ground surface and traveling in a southwesterly direction, away from the project study area. According to EDCEMD, the groundwater plume has not extended beyond the boundary of Pacific Bell's property line.

Former Service Station (493 Main Street)

The EDCEMD file for the former service station at 493 Main Street, Diamond Springs, contained a no further action closure letter from EDCEMD dated June 22, 1992. It is assumed that all necessary corrective actions were completed.

Celebrity Plating (4502 Missouri Flat Road)

The EDCEMD file for the Celebrity Plating facility at 4502 and 4504 Missouri Flat Road noted that the facility is closed and litigation is ongoing. The most recent documents in the file were dated 2005. A Preliminary Endangerment Assessment (PEA) was recommended. Contaminants identified at the facility are: cadmium, chromium, lead, nickel, zinc, and cyanide. The Phase I ESA indicated that the site does not appear to present a potential to impact the project parcels.

Foothill Auto Repair (6566-C Commerce Way)

The Foothill Auto Repair facility and associated hazardous materials have been relocated to Durock Road in Shingle Springs and are no longer located within the minimum search distance from the DSP parcels.

Old Caldor Lumber Company Mill and Yard (180 Industrial Drive)

The file for the Old Caldor (California Door) Lumber Company stated that the facility started as a lumber mill and box factory in the late 1800s on a parcel located south of the western portion of the project study area. Fire destroyed the Caldor mill in 1923. A new sawmill was constructed and included an engine house, machine shop, oil storage, and service areas for the locomotives. The mill operated at full scale from 1935 until it was shut down in 1952. In 1966, a fire broke out at the mill facility, which was being used as a storage area for Sacramento Municipal Utility District (SMUD) equipment. Reportedly, approximately 8,000 gallons of possible polychlorinated biphenyls (PCBs)-containing oil from a damaged transformer was used for dust control on the yard and nearby roads. In 1974, Pacific Southeast Forest Products bought much of the Caldor site and constructed new buildings on the old foundations. In December 1986, soil testing by California Department of Health Services revealed no evidence of PCB or pesticide contamination. The U.S. Environmental Protection Agency (EPA) signed off on the site in February 1988 and indicated no further action was necessary.

El Dorado Disposal/Waste Connections Materials Recovery Facility (MRF) (4100 Throwita Way)

This property is an active CUPA (Certified Unified Program Agency) site. The El Dorado Disposal/Waste Connection property is identified in the EDR Report as a solid waste transfer/processing facility handling construction/demolition, inert metal, and wood waste. This site is also listed as the Western El Dorado Recycling Service (WEDRS) Green Waste Recycling Center as a chipping, grinding and composting facility. The site contains facilities that serve as a large volume transfer and processing facility for liquid or semisolid wastes from industrial facilities.

This site is identified as having a minor threat to water quality, with a primary waste stream of stormwater runoff. EDCEMD oversees the household hazardous waste collection processes at the WEDRS facility. According to the EDCEMD, Placer County is the Lead Enforcement Agency (LEA) for the MRF. According to Mr. Lem Estolas, with Placer County Solid Waste Department, the WEDRS facility has three operating permits: one for green waste, one for construction and demolition waste, and one for municipal solid waste (MSW). Mr. Estolas also indicated that there are no existing violations or enforcement actions for the Waste Connections property.

Sierra Door (4415 Missouri Flat Road)

According to EDCEMD, Sierra Door at 4415 Missouri Flat Road is located within the Diamond Springs Parkway corridor and is identified in the EDR Report as containing gasoline contaminated groundwater. The gasoline release was originally reported in 1991. In 1997, three groundwater monitoring wells (MW) were installed on-site. Soil samples were collected during drilling activities.

Total petroleum hydrocarbons (TPH) as diesel and motor oil and BTEX (benzene, toluene, ethylbenzene, xylenes) were not detected in two of the three wells (MW-1 and MW-2) sampled. The groundwater sample from MW-3 indicated the presence of 76 µg/L TPH as a hydrocarbon mixture in the diesel hydrocarbon range (C₁₀ to C₂₄). Ethylbenzene and xylenes were detected at 0.58 µg/L and 5.3 µg/L in MW-3, but benzene and toluene were not detected. The contaminated groundwater reportedly flows to the northwest. According to the EDCEMD file, Environmental Resource Management prepared a work plan for soil and groundwater investigation at this site on June 21, 2006. The most recent document in the EDCEMD file is a June 2006 letter from the Regional Water Quality Control Board requesting additional soil and groundwater investigations.

There is a potential for contaminated groundwater and/or hydrocarbon soil vapors to migrate from the Sierra Door site to the northwest and towards the Parkway project study area, specifically towards parcel 327-300-08.

Aerial Photographs

Aerial photographs of the project study area were provided in the EDR Aerial Photo Decade Package (included in Appendix B of the Phase I ESA), which included photographs dating from 1935, 1952, 1962, 1984, 1993, and 1998. In addition, photographs from 1971, 1977, and 2006 were reviewed using digital images from terraserver.com. In an effort to evaluate former uses of the project study area, professional interpretations were made by Youngdahl Consulting Group to determine if any significant topographic or cultural changes have occurred. Summaries of the aerial photographs reviewed for both the Parkway and SR-49 corridors are provided in Table 4.7-3 and Table 4.7-4.

Table 4.7-3: SR-49 Parcels - Aerial Photograph Summary

Date	Property Comments	Surrounding Area Comments
1935 (Limited coverage)	No Coverage	Diamond Lime Mineral Plant and orchards are shown to the west.
1952 and 1962	SR-49 is present.	Diamond Lime Mineral Plant and orchards are shown to the west of SR-49. Undeveloped wooded and rural residential property is shown to the east of the northern portion of SR-49. Rural residential property and undeveloped property is shown to the east and west of southern portion of SR-49.
1971 and 1977	SR-49 is present. Orchards have been removed.	Diamond Lime Mineral Plant structures are present. Orchards are no longer present. Undeveloped wooded and rural residential property is shown to the east of SR-49. Rural residential property and undeveloped property is shown to the east and west of southern portion of SR-49.
1984, 1993, and 1998	SR-49 is present.	Industrial/commercial properties are shown to the west of SR-49 and undeveloped property is shown to the west of SR-49. Undeveloped wooded and rural residential property is shown to the east of the northern portion of SR-49. Rural residential and undeveloped property is shown to the east and west of the southern portion of SR-49.
Source: Youngdahl Consulting Group, 2009.		

Table 4.7-4: Diamond Springs Parkway Parcels - Aerial Photograph Summary

Date	Property Comments	Surrounding Area Comments
1935 (Limited coverage)	A railroad spur extends eastward from the Sacramento-Placer Transportation Corridor (SPTC) line to the west. Orchards are to the south of the railroad. The railroad spur appears to service the Diamond Lime Mineral Plant.	Orchards are present to the north of the Diamond Lime Mineral Plant. Limited aerial coverage only shows undeveloped land to the southwest and southeast of the project area.
1952 and 1962	The project area includes two areas of orchards, the Diamond Lime Mineral Plant and D&C Railway railroad yard spurs. Property to the east and west of the Diamond Lime Mineral Plant appear to be vacant land or orchards.	Adjacent property is industrial (Diamond Lime Mineral Plant), agricultural (orchards), rural residential, and undeveloped land.
1971 and 1977	Orchards have been removed. D&CRR depot structures and Diamond Lime Mineral Plant structures are present.	Adjacent property is industrial, commercial, rural residential and undeveloped land.
1984	The project area includes industrial and commercial property. The Diamond Lime Mineral Plant does not appear to be in operation.	Adjacent property is industrial, commercial, rural residential and undeveloped land. The building currently occupied by the Waste Connections material recovery facility (MRF) is present to the south.
1993	The project area includes industrial and commercial property.	Adjacent property includes increased development of industrial and commercial properties when compared to the 1984 photograph. Rural residential and undeveloped land is shown to the north and east of the project area.
1998	The project area includes industrial and commercial property.	Adjacent property includes industrial and commercial properties. Rural residential and undeveloped land is shown to the north and east of the project area.
Source: Youngdahl Consulting Group, 2009.		

Site Reconnaissance

Site reconnaissance of the project study area was conducted by Youngdahl Consulting Group in September and October 2008. The reconnaissance visits consisted of visual and physical observations of the project footprint and surrounding areas. In accordance with the All Appropriate Inquires (AAI) rule, visual inspection of adjoining properties was performed from the each of the DSP parcel property lines, public rights-of-way, or other vantage points. The site visits consisted of visual and physical observations of the periphery of the properties and traverses throughout the properties on foot, where accessible. The reconnaissance documented any structure(s) located on the project study area that was not obstructed by bodies of water, adjacent buildings, or other obstacles. Current and past uses of adjoining properties and properties in the surrounding area were identified if they were likely to indicate recognized environmental conditions in connection with the adjoining

properties or the property. The topographic conditions were also noted to the extent visually and/or physically obvious, to evaluate whether hazardous substances or petroleum products would be likely to migrate to parcel, or within or from a parcel, into groundwater or soil (Youngdahl Consulting Group 2009). Table 4.9-1, Project Land Use and Zoning Designations, in Section 4.9, Land Use and Planning, provides the existing land use of each parcel.

SR-49 Parcels ("SR-49 Parcels")

The SR-49 parcels consisted of those parcels within the SR-49 corridor. These are parcels along SR-49 between Truck Street and Pleasant Valley Road. There are 18 parcels within the SR-49 corridor. As requested by DOT, an Initial Site Assessment (ISA) Checklist (Caltrans, Project Development Procedure Manual, DD-5) was completed for each SR-49 parcel. Copies of the ISA Checklists are provided in Appendix D of the Phase I ESA.

Non-SR-49 Parcels ("DSP Parcels")

The 45 DSP parcels are located along the proposed DSP alignment, from Missouri Flat Road to SR-49 and along local roadways including Old Depot Road, Throwita Way, Truck Street, Bradley Drive, Lime Kiln, Happy Lane, and Black Rice Road. Land use includes residential, commercial, industrial, vacant, and public land.

Interviews

Prior to the site visit, the DOT contacted the 63 parcel owners for permission to access each parcel and to identify a person with good knowledge of the parcel (the key site manager). A Phase I ESA Questionnaire was provided to each parcel owner to facilitate the collection of information. The AAI rule requires that interviews be conducted with the current owner(s) and occupant(s) of each parcel. The AAI rule also requires that additional interviews be conducted with current and past facility managers, past owners, operators or occupants of each parcel, and past employees, as necessary to meet the objectives of the AAI rule. The ESA questionnaire asks whether there are any above or underground storage tanks on the property, which includes heating oil tanks.

As previously noted, the parcels located along SR-49 are subject to Caltrans regulations. Accordingly, an Initial Site Assessment (ISA) Checklist (Caltrans, Project Development Procedure Manual, DD-5) was completed for these parcels in addition to the questionnaire. ISA Checklists are required for projects involving improvements within Caltrans jurisdiction. Copies of the ISA Checklists are provided in Appendix D of the Phase I ESA.

Hazards and Hazardous Materials

The findings of the site reconnaissance, interviews and additional project specific hazards are provided below.

Lead

Lead-Based Paint

Lead oxide and lead chromate were commonly used in paints until 1978, when regulations limited the allowable lead content in paint. Therefore, interior and/or exterior painted surfaces at buildings constructed prior to 1978 have the potential to contain lead-based paint. Yellow thermoplastic and yellow paint, used for traffic striping and pavement marking throughout the project area, may also contain elevated concentrations of lead, regardless of manufacture date. Therefore, pavement markings and interior and/or exterior painted surfaces at buildings constructed prior to 1978 likely contain lead-based paint.

Aerially Deposited Lead

Aerially deposited lead may occur in roadside soils as the result of lead deposition from vehicle exhaust. This lead is attributed to the use of lead in gasoline, which was phased out beginning in the mid-1970s.

Historical maps and aerial photographs show that SR-49 and other roadways in the project area were constructed in the 1930s and 1940s, prior to the phase-out of lead in gasoline. As a result, it is likely that soils adjacent or within the project area may contain lead amounts above the Total Threshold Limit Concentration (TTLC), which is 1,000 mg/kg. Soils that exceed the TTLC would be classified as a hazardous waste and, if excavated, would require special handling and disposal procedures. Caltrans' experience is that soils within 30 feet of a roadway have the potential to be affected by aerially-deposited lead. All lead-affected soils with a pH less than 5.0 must be covered with pavement or similar impervious surface. Therefore, it is Caltrans' policy that all shallow soils near highways potentially contain elevated concentrations of aerially-deposited lead, and soils within Caltrans' ROWs that will be disturbed during construction are routinely tested for total and/or soluble lead to properly classify the soils and ensure that all necessary soil management and disposal procedures are followed.

Asbestos-Containing Materials

Asbestos was commonly used in construction materials until the 1980s, when its use was phased out. Accordingly, building materials manufactured prior to the 1980s have the potential to contain asbestos fibers, which could be released during demolition activities. Airborne asbestos is a known human carcinogen.

According to the California Department of Mines and Geology report "Areas More Likely to Contain Natural Occurrences of Asbestos in Western El Dorado County, 2000," the project site is not likely to contain any naturally occurring asbestos hazards. In addition, the El Dorado County Department of Environmental Management Asbestos Review Areas Map indicates that the project site is not likely to contain naturally occurring asbestos. Project construction could potentially require the demolition of several structures, which include a commercial lot and associated outbuildings, that were

constructed prior to 1980. Demolition of structures constructed prior to 1980 has the potential to expose construction workers and the public to lead and/or asbestos hazards.

Polychlorinated Biphenyls (PCBs)

Polychlorinated biphenyls (PCBs) are mixtures of man-made chemicals with similar chemical structures. PCBs can range from oily liquids to waxy solids. Because of their non-flammability, chemical stability, high boiling point, and electrical insulating properties, PCBs were used in hundreds of industrial and commercial applications, including electrical, heat transfer, and hydraulic equipment; as plasticizers in paints, plastics, and rubber products; in pigments, dyes, and carbonless copy paper; and many other applications. More than 1.5 billion pounds of PCBs were manufactured in the United States prior to cessation of production in 1977.

According to Pacific Gas and Electric (PG&E), there are six transformers within the project study area that were installed prior to July 1979 and, therefore, may contain PCBs at levels greater than 50 parts per million (ppm). Removal and relocation of these transformers has the potential to expose construction workers and the public to PCB hazards.

Historical Chemical Usage

Historical chemical usage in the project study area is believed to have been associated with three main activities: 1) The Diamond & Caldor Railway, 2) Diamond Lime Mineral Plant, and 3) Historical agricultural practices.

Industrial Chemical Hazards

Historically the Diamond & Caldor (D&C) Railway and the Diamond Lime Mineral Plant were located within the footprint of the proposed Parkway. Diamond Springs Station was part of the D&C Railway yard. The station was located at Old Depot Road to the north and south of the Southern Pacific Railroad line. In 1904, the D&C Railway line connected the Caldor Mill and Diamond Springs. The Diamond Springs Station depot included an engine house, machine shop, car shop, truck shop, oil storage and several warehouses. The D&C Railroad yard was historically located on the following parcels within the Parkway corridor: APNs 327-270-03, 327-270-04, 327-270-26, 327-270-27, 327-270-46, 327-270-48, and 327-270-49.

The Diamond Lime Mineral Plant operated for over 50 years. In that time, rocks were crushed into aggregate and other mineral products for use in construction, road building, and concrete manufacturing. The facility closed in the 1970s. The Diamond Lime Mineral Plant was historically located on the following parcels located in the Parkway corridor: APNs 051-250-46 and 051-250-54.

Subsequent resident businesses utilized paints, solvents, motor oils, spray cleaners, compressed gases, lubricants, and general facility maintenance chemicals. No other industrial chemicals were identified in the record review or from on-site visits. No physical evidence of a spill was observed at the time of the site inspection.

Agriculture Chemical Hazards

Historically, agriculture within the Diamond Springs area consisted of fruit trees, vineyards and pastureland. Based on the El Dorado County Soil Survey, deciduous crops typically grown in the soils located within the project area included apples and pears. Chlorinated and lead arsenate pesticides were typically applied to orchards for pest control. Smudge pots were also locally utilized to create a layer of warm air and smoke at night to protect the crops from seasonal winter frost. Smoke produced from the smudge pots was created by burning liquid fuel including kerosene, diesel fuel or oil. Additionally, fuel tanks were typically stored on agricultural properties to fuel the farming equipment. Hydrocarbon soil contamination has the potential to result from both smudge pot and fuel tank use. The El Dorado County Agricultural Commission only retains records of pesticide use for the previous 3 years. Since orchard production historically occurred within the project area, there is a potential for the existence of agricultural chemicals in the soils, including but not limited to, chlorinated pesticides, lead, arsenic, and hydrocarbons.

Historical deciduous orchard use was identified on several parcels within the study area, as previously noted in aerial photographic review. Orchard use was observed on parcel 327-300-08, which currently consists of the Diamond Springs Professional Center, on the 1962 aerial photograph and 1971 aerial photographs and on the 1973 (photorevised from 1949) topographic map.

Orchards were also historically located south of the railroad tracks, west of SR-49 and northeast of the former Diamond Lime Mineral Plant. This area currently consists of one residential parcel, vacant land, commercial/industrial properties and El Dorado Disposal/Waste Connections associated parcels. Parcels along SR-49 with historical orchard use include: APNs 051-250-11, 051-250-12, 051-250-13, 051-250-31, 051-250-22, 051-250-23, 051-250-39, 051-250-42, 051-250-46, 051-254-54, 051-250-55, 051-461-46, 051-250-30, 051-250-32, 051-250-33, 051-250-48, 051-461-05 and 051-461-10. Parcels within the Parkway corridor with historical orchard use include: APNs 051-250-19, 051-250-20 and 051-250-21, 051-250-16, 051-250-17, 051-250-18, 051-250-30, 051-250-32, 051-250-33, 051-250-48, 051-461-05 and 051-461-10. Orchard use on these parcels was observed on the 1935, 1952, and 1962 aerial photographs. All orchards were absent from the area on the 1971 aerial photograph.

Aboveground and Underground Storage Tanks

Petroleum hydrocarbons are derived from crude oil, which is refined into various petroleum products such as diesel, gasoline, kerosene, lubricants, and heavy fuel oils. Hydrocarbons constituents include benzene, N-heptane, and toluene, and they generate health effects such as cancer, leukemia, asthmatic bronchitis, kidney damage, and eye irritation. Hydrocarbon containing petroleum products are stored in aboveground storage tanks (ASTs) and USTs. Leaking ASTs and USTs can result in contamination of groundwater sources or fire and explosion.

One aboveground heating oil tank was identified within the proposed Parkway corridor on parcel 327-250-35, and the majority of residences in the study area appear to use propane as the fuel source for heat. No obvious signs of product staining were noted during the site visits. In addition, approximately five large volume propane tanks of approximately 25,000 to 30,000 gallons are located within the project study area near Bradley Drive and Truck Street.

Radon

Radon is a carcinogenic, radioactive gas resulting from the natural decay of uranium in soil, rock, and water. Radon gas enters a building through cracks in foundations and walls. Once inside the building, radon decay products may become attached to dust particles and inhaled, or the decayed radioactive particles alone may be inhaled and cause damage to lung tissue. Radon exposure is the leading cause of lung cancer among nonsmokers in the United States. The U.S. Environmental Protection Agency (EPA) has established a safe radon exposure threshold of 4-picocuries-per liter of air (pCi/L).

The EPA has rated El Dorado County as a moderate potential radon zone (Zone 2), with an average indoor screening level of between 2 and 4 pCi/L.

The California Department of Health Services Radon Database, dated October 2002, indicates that radon test results for the 95667 zip code, in which the project site is located, yielded 2 of 26 samples (7.7 percent) containing radon concentrations above 4.0 pCi/L. Given the low percentage of concentrations above 4.0 pCi/L and that the proposed project is not developing any residential housing units, soil gas concentrations of radon are not anticipated to be a significant concern to human health on the project site parcels.

Review of Previously Conducted Environmental Studies

Youngdahl Consulting Group, Inc. prepared Phase I Environmental Site Assessments (ESAs) for three of the DSP parcels in September, November, and December 2007. The Lindeman Property (APN 051-250-54), Murray Property (APN 051-250-46), and Abel Property (APN 051-250-12) Phase I ESAs did not identify recognized environmental conditions (RECs) on the three parcels. The reports did conclude that because portions of the properties may have been part of the Diamond Lime Mineral Plant, the properties should be observed for the potential indication of hazardous materials releases or disposal areas during construction activities. Information obtained during from three previously-conducted Phase I ESAs has been incorporated into the Phase I ESA for the Parkway.

Padre Associates, Inc. prepared a Phase I Environmental Site Assessment for the El Dorado Trail Improvement Project in November 2007. This study area included 2.7 miles of unpaved trail along the former Southern Pacific Railroad alignment from Missouri Flat Road to Forni Road in Placerville, California. The report concluded that petroleum hydrocarbons were present in the soil at the former

Diamond Springs Station (currently identified as the Bahlman property) and at the Sierra Door property, both near Old Depot Road.

ERM-West, Inc. prepared a Remedial Action Report for the Union Pacific Railroad Company, Placerville Corridor, Sacramento and El Dorado Counties for the Union Pacific Railroad Company in November 1997. The former Diamond Springs Station, at 4415 Missouri Flat Road, was discussed in the document. This property is located adjacent and to the north of the Bahlman property. Samples of soil excavated from several test pits on the property identified concentrations of arsenic, cadmium, chromium, lead, zinc, benzene, toluene, ethylbenzene, and xylenes (BTEX) present in the stockpiled material. The stockpiled soil was transported to BFI Vasco Road Landfill in Livermore, California for disposal in October 1997. This site has been listed as closed.

4.7.2 - Regulatory Framework

Federal

Resource Conservation and Recovery Act

The 1976 Federal Resource Conservation and Recovery Act (RCRA) and the 1984 RCRA Amendments regulate the treatment, storage, and disposal of hazardous and non-hazardous wastes. The legislation mandated that hazardous wastes be tracked from the point of generation to their ultimate fate in the environment. This includes detailed tracking of hazardous materials during transport and permitting of hazardous material handling facilities.

The 1984 RCRA amendments provided the framework for a regulatory program designed to prevent releases from USTs. The program establishes tank and leak detection standards, including spill and overflow protection devices for new tanks. The tanks must also meet performance standards to ensure that the stored material will not corrode the tanks. Owners and operators of USTs had until December 1998 to meet the new tank standards. As of 2001, an estimated 85 percent of USTs were in compliance with the required standards.

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 introduced active federal involvement to emergency response, site remediation, and spill prevention, most notably the Superfund program. CERCLA was intended to be comprehensive in encompassing both the prevention of, and response to, uncontrolled hazardous substances releases. The act deals with environmental response, providing mechanisms for reacting to emergencies and to chronic hazardous material releases. In addition to establishing procedures to prevent and remedy problems, CERCLA establishes a system for compensating appropriate individuals and assigning appropriate liability. It is designed to plan for and respond to failure in other regulatory programs and to remedy problems resulting from action taken before the era of comprehensive regulatory protection.

State

California Health and Safety Code

The California Environmental Protection Agency (Cal-EPA) has established rules governing the use of hazardous materials and the management of hazardous wastes. California Health and Safety Code Sections 25531, et seq. incorporate the requirements of Superfund Amendments and Reauthorization Act and the Clean Air Act as they pertain to hazardous materials. Health and Safety Code Section 25534 directs facility owners storing or handling acutely hazardous materials in reportable quantities to develop a Risk Management Plan (RMP). The RMP must be submitted to the appropriate local authorities, the designated local administering agency, and the Cal-EPA for review and approval.

CalOSHA Lead in Construction Standard

The CalOSHA Lead in Construction Standard requires the use of special work practices during the disturbance of paint with any detectable amounts of lead. Waste materials with a concentration greater than 0.1 percent or 1,000 parts per million (ppm) for total lead are considered hazardous waste in California. Waste materials with a total lead concentration between 0.005 percent (50 ppm) and 0.10 percent (1,000 ppm) must be re-analyzed using the waste extraction test method to determine the soluble lead content for waste disposal requirements. Additionally, waste material containing greater than 0.035 percent (350 ppm) lead is subject to disposal restrictions according to California Health and Safety Code Section 2515 7.8.

Contractors are also required to notify the Division of Occupational Safety and Health (DOSH) prior to disturbing greater than 100 square feet or 100 linear feet of material containing lead greater than 0.5 percent by weight, 5,000 ppm, or 1.0 milligram per square centimeter.

Local

El Dorado County General Plan

Appendix J of this Draft EIR provides a matrix that lists the policies determined to have relevance to this project and provides a summary of the County's determination of project consistency with each relevant goal and policy. As shown in Appendix J, the project is consistent with all applicable goals and policies of the General Plan, including those related to hazards and hazardous materials.

El Dorado Air Quality Management District

All friable asbestos containing materials (ACM), or non-friable ACM subject to damage, must be abated prior to demolition in accordance with El Dorado Air Quality Management District requirements. Friable ACM must be disposed of as an asbestos waste at an approved facility. Non friable ACM may be disposed of as non hazardous waste at landfills that will accept such wastes.

4.7.3 - Project Impact Analysis

Methodology for Analysis

All Phase I ESA and ISA activities were performed in accordance with the Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, established by the American Society for Testing and Materials in Method E1527-05, and in accordance with Appendix DD of the Caltrans Project Development Procedures Manual, "Preparation Guidelines for Initial Site Assessment (ISA) Checklist for Hazardous Waste" (Caltrans 1999).

Evaluation of the impacts in this section are based on professional standards and the results of technical reports prepared for the project. This impact analysis assumes that the DOT will conform to all of their own roadway design standards, grading requirements, erosion control requirements, Federal environmental regulations, and applicable American Association of State Highway and Transportation (AASHTO) Policies.

Youngdahl Consulting Group, Inc. prepared a Phase I ESA for the Diamond Springs Parkway Project in January 2009 to document potential hazardous conditions on the project parcels and surrounding land uses. The Phase I ESA consisted of a review of local, state, and federal regulatory agency lists as compiled by EDR; a review of historic aerial photographs and topographic maps; completion of questionnaires by the current landowners and the project civil engineer; and site reconnaissance.

Thresholds of Significance

According to Appendix G of the CEQA Guidelines, the following questions are analyzed and evaluated to determine whether hazards and hazardous materials impacts are significant environmental effects. Would the project:

- a.) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- b.) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
- c.) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
- d.) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?
- e.) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?
- f.) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

- g.) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
- h.) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

Impact Statements and Mitigation Discussions

This section discusses potential impacts associated with the construction and use of the proposed project and provides mitigation measures where appropriate. The MC&FP EIR impact assessment and mitigation measures are included where appropriate. Further analysis or mitigation required beyond that of the MC&FP EIR is included where necessary. Potential cumulative effects are discussed in Section 6 of this EIR.

Routine Use

Impact 4.7-1	The project has the potential to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. (Less than Significant)
---------------------	--

Impact Analysis

Small amounts of hazardous materials would be used during construction activities (i.e., equipment maintenance, fuel, solvents, roadway resurfacing and striping materials). Hazardous materials would only be used during construction of the proposed project, and any hazardous material users would be required to comply with all applicable local, state and federal standards associated with the handling and storage of hazardous materials.

Significance Determination Before Mitigation

Less than significant impact.

Mitigation Measures from MC&FP EIR

There are no mitigation measures proposed in the MC&FP EIR that are applicable to the proposed project for routine use of hazardous materials.

Significance Determination After Mitigation and Supporting Rationale

Less than significant impact.

EID Intertie Improvements

Impacts related to routine transport, use, or disposal of hazardous materials resulting from the construction of the EID Intertie Improvements would be similar to those described above. Upon completion, the transport, use, or disposal of hazardous materials is not necessary for ongoing operation of the water distribution system. No permanent impacts would occur.

Accident Conditions

Impact 4.7-2	The project has the potential to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. (Less than Significant)
---------------------	--

Impact Analysis

All trucks transporting hazardous wastes and materials are required to comply with applicable state and federal laws. The California Highway Patrol (CHP) is responsible for ensuring compliance with these laws. The proposed project is designed as an alternative route to alleviate congestion in Diamond Springs. As such, trucks traveling along the proposed Parkway and surrounding roadways could transport hazardous materials and wastes. This creates the potential for an accidental release of hazardous materials or wastes along the new alignment, rather than along SR-49 or other alternative routes. Although the proposed project would expose a new area to this potential impact, the proposed project would have beneficial effects by also reducing the probability and severity of such an incident on SR-49 through reduction of congestion on SR-49 and, thereby would reduce the probability of an accident. Furthermore, the proposed project would move potential effects from more residential areas to an area of commercial and industrial development.

Significance Determination Before Mitigation

Less than significant impact.

Mitigation Measures from the MC&FP EIR

There are no mitigation measures proposed in the MC&FP EIR that are applicable to the proposed project for hazards related to accident conditions.

Additional Mitigation Measures

No mitigation is necessary.

Significance Determination After Mitigation and Supporting Rationale

Less than significant impact.

EID Intertie Improvements

Impacts related to reasonably foreseeable upset and accident conditions resulting from the construction of the EID Intertie Improvements would be limited to safety hazards associated with temporary ponding, flooding and the release of pressurized water associated with broken, fractured, or cracked waterlines. Upon completion, the Intertie Improvements would be located beneath SR-49 and the Parkway and, therefore, protected from exposure. Furthermore, the Intertie Improvements would be designed with emergency shut-off vales, preventing any permanent and ongoing impact-related accident conditions. No permanent impacts would occur.

Schools

Impact 4.7-3	The project has the potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. (No Impact)
---------------------	--

Impact Analysis

The proposed project is located within the Mother Lode Union School District (for grades kindergarten [K] through 8) and the El Dorado Union High School District (for grades 9 through 12) (EDAW 1998). Herbert Green Middle School, Diamond Springs Christian School and Placerville Christian are all located within 1 mile of project parcels. However, the proposed project is not located within one-quarter mile of an existing or proposed school. As noted above, the proposed project would temporarily involve the handling and storage of hazardous materials during construction of the proposed project, and all materials handling would occur in compliance with applicable local, state, and federal regulations. Furthermore, because the type and level of vehicle use is not expected to change from the existing condition, the proposed project is also not expected to result in long-term vehicle-related emissions that may be hazardous (see Section 4.3, Air Quality, for additional discussion of vehicular emissions).

Significance Determination Before Mitigation

No impact.

Mitigation Measures from the MC&FP EIR

There are no mitigation measures proposed in the MC&FP EIR that are applicable to the proposed project for hazards associated to schools.

Significance Determination After Mitigation and Supporting Rationale

No impact.

EID Intertie Improvements

EID Intertie Improvements are not located within one-quarter mile of an existing or proposed school. Impacts related to hazardous emissions or handling hazardous waste within one-quarter mile of an existing or proposed school would be similar to those described above for the proposed project. As noted above, handling and storage of hazardous materials during project construction would occur in compliance with all applicable local, state, and federal regulations. No permanent impacts would occur.

Hazardous Materials Site Listing

Impact 4.7-4	The project has the potential to be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, may create a significant hazard to the public or the environment. (Potentially Significant)
---------------------	--

Impact Analysis

As discussed under Section 4.7.1, Environmental Setting, a database search of federal, tribal, State, and local regulatory lists was conducted in order to assess whether documented environmental conditions exist on parcels within the Phase I study area. In an effort to fulfill due diligence requirements, a database search was also conducted for parcels adjacent to the Phase I study area to investigate the potential of nearby existing environmental problems. The EDR report provides a list of properties both within and adjacent to the Phase I study area that can be found on 41 Federal, 29 State and Local, and 5 Tribal lists. Due to the large volume of information and limits to time and budget to perform a Phase I ESA, professional judgment was used to select which EDR listed sites were further researched and presented in the Phase I ESA (Appendix H).

Study area parcels within the Phase I study area that required further research included three DSP parcels(as defined above): the Teter Auto Wreckers parcel (APN 327-270-46), the Bahlman parcel (APN 327-270-04) and the El Dorado Disposal/Waste Connections parcel (APN 051-461-10). As discussed above, both the Teters Auto Wreckers and El Dorado Disposal/Waste Connections properties would not present any hazardous material danger to the project site and are therefore not discussed further. However, the Bahlman property (APN 327-270-04) contains oil-contaminated soils that have been recommended for removal by EDCEMD. Accordingly, Mitigation Measure MM 4.7-4a, below, requires DOT to implement EDCEMD's recommended action in order to reduce the potential of impacts related to contaminated soils exposure.

Parcels adjacent to the Phase I study area that required further research included the Sierra Door, Pacific Bell, Former Service Station, Celebrity Plating, Foothill Auto Repair, Old Caldor Lumber Company Yard, and El Dorado Disposal/Waste Connections MRF properties. The only property that exhibits potential hazards to the project study area is the Sierra Door property, from which contaminated groundwater and/or hydrocarbon soil vapors could be encountered during the proposed project's construction activities, specifically in and adjacent to APN 327-300-08 (a DSP parcel). Accordingly, mitigation is proposed that would require soil vapor survey and/or groundwater sampling within APN 327-300-08 where soil disturbance activities related to project construction may occur.

In summary, the Bahlman and Sierra Door properties, both along the Diamond Springs Parkway segment, were identified in EDR's database search and subsequent research of EDCEMD files. EDCEMD's files indicate that these sites contain potentially hazardous material. Construction activities may disturb soils containing hazardous materials that could have the potential to pose a hazard to construction workers and the public at large, and may result in significant impacts.

Significance Determination Before Mitigation

Potentially significant impact.

Mitigation Measures from MC&FP EIR

The following mitigation measures were included in the MC&FP EIR (EDAW 1998) to reduce this potentially significant impact to a level of less than significant.

MC&FP Mitigation Measure 4.17-1: Potential for Exposure to Existing Contamination (Edited as Appropriate)

- a.) If the Phase I site assessment report indicates the presence of existing or potential on-site contamination, the project applicant shall contact the appropriate local, state, and/or federal agencies. The project applicant (in this case, El Dorado County Transportation) shall coordinate with the agency to prepare a remediation plan in accordance with applicable local, state, and federal regulations, requirements, and/or guidelines.
- b.) The remediation plan shall be approved by the El Dorado County Environmental Management Department, and made a condition of approval of a tentative map for retail projects in the MC&FP Area (if one is sought), with full remediation to be completed prior to issuance of a final map. If a tentative map is not part of the application request, then the remediation plan shall be approved by the El Dorado County Environmental Management Department prior to issuance of a grading permit, with remediation to be completed prior to issuance of a building permit.

Significance Determination After Mitigation and Supporting Rationale

Potentially significant impact. The MC&FP EIR concluded that construction of roadway improvements could result in the exposure of workers to hazardous materials during construction activities that involve earthwork or demolition. For example, several of the sites identified in the MC&FP EIR are located along Missouri Flat Road, which would undergo widening as part of the proposed project's roadway improvements. Because potential contamination hazards are located throughout the study area, further site-specific analysis is needed to determine the extent and level of contamination prior to the commencement of construction activities for future roadway improvements. The MC&FP EIR noted that until further analysis is completed, impacts associated with hazardous materials in the project study area are considered potentially significant.

Given that the MC&FP EIR did not adequately analyze the proposed project's specific impacts related to hazards and the Phase I ESA that was prepared for the Parkway (Youngdahl 2009) has identified recognized environmental conditions, this is a potentially significant impact. Implementation of Mitigation Measure 4.7-4 would reduce these impacts to a less than significant level.

Additional Mitigation Measures

MM 4.7-4a El Dorado County Department of Transportation will work with the EDCEMD to create an approved work plan that would evaluate the lateral and vertical extent of contamination associated with oil-impacted soil on the Bahlman Parcel, APN 327-

270-04. The work plan will include the removal of the upper 2 to 3 feet of soil for later use as on-site backfill and the excavation, transportation, and proper disposal of the lower 3 to 4 feet of on-site soil, or other remedial actions as agreed upon by the El Dorado County Department of Transportation and the EDCEMD. The work plan will be implemented prior to the commencement of the Diamond Springs Parkway construction activities.

MM 4.7-4b El Dorado County Department of Transportation will conduct a soil vapor survey and/or groundwater testing within the Sierra Door property, APN 327-300-08, where construction activities related to the proposed project would occur. If the survey and tests indicate that contaminated soil and/or groundwater are present, El Dorado County Department of Transportation will coordinate with the EDCEMD and implement agreed upon remediation measures in areas disturbed by the proposed project prior to the commencement of the Diamond Springs Parkway construction activities.

Significance Determination After Mitigation and Supporting Rationale

Less than significant. Implementation of Mitigation Measures 4.7-4a and 4.7-4b would ensure that any contaminated soils or groundwater located within APNs 327-270-04 and 327-300-08 would be properly handled, thereby reducing the impact to less than significant.

EID Intertie Improvements

EID Intertie Improvements within the SR-49 and Missouri Flat Road ROWs are not located on land specifically defined as a “parcel”; therefore, it would not be listed on the Cortese List pursuant to Government Code Section 65962.5. However, the Phase I ESA that was performed for the proposed project covered the EID Intertie Improvements project area and no additional hazardous materials sites were identified in the vicinity of the Intertie Improvements. EID Intertie Improvements located within the Parkway ROW may occur within APN 327-270-04, as described above for the proposed project. Implementation of Mitigation Measure 4.7-4a would ensure that impacts would be less than significant as described above for the proposed project.

Past and Present Site Usage

Impact 4.7-5	The proposed project has the potential to result in the exposure of persons or the environment to hazardous materials associated with past and current uses of the project site. (Potentially Significant)
---------------------	---

The Phase I ESA identified several issues associated with past and present uses of the proposed project study area that could potentially result in the exposure of persons and the environment to hazardous materials including lead, asbestos, PCBs, industrial chemicals, agricultural chemicals, and ASTs.

Lead

Lead Based Paint

Pavement marking and painted surfaces constructed prior to 1978 within the project study area likely contain lead-based paint. Therefore, construction activities related to the proposed project could result in exposure to lead-containing materials. Exposure and potential contamination related to lead containing materials are considered to be potentially significant impacts. Mitigation Measure 4.7-5a would require a lead-based paint survey and implementation of Caltrans standard special provisions for removal of existing yellow thermoplastic and yellow paint used for pavement markings.

Aerially Deposited Lead

Aerially deposited lead may occur in roadside soils as the result of lead deposition from past vehicle exhaust. The disturbance of lead containing soils has the potential to create health hazards and could further spread the contaminated soils. Construction activities, such as demolition, grading and the unearthing of soils, could disturb lead-affected soils, dispersing lead particles through the air where they may affect construction workers, the general public, and the environment. Parcels that may contain aerially-deposited lead within 30 feet of SR-49 include: 051-250-04, 051-250-06, 051-250-11, 051-250-12, 051-250-13, 051-250-31, 051-461-11, 051-461-12, 051-461-37, 051-461-51, 051-550-47, 054-342-15, 051-342-20, 051-342-23, 054-342-35, 054-342-36, 054-342-27, and 054-351-19. Mitigation Measure 4.7-5b would require a preliminary site investigation to identify the levels of aerially deposited lead in locations along SR-49 and Missouri Flat Road where construction activities would require soil disturbance.

Asbestos-Containing Materials

Buildings or structures constructed prior to 1980 within the project study area may have the potential to contain asbestos fibers, which could be released during demolition activities, creating a harmful environment to construction workers and others near the project vicinity. Mitigation Measure 4.7-5c would require an asbestos survey to be performed for any building or structure constructed prior to 1980 that would be demolished as part of the proposed project.

PCBs

According to PG&E, there are six transformers within the project study area that were installed prior to July 1979 and, therefore, may contain PCBs at levels greater than 50 parts per million (ppm). The proposed project would require relocation of the utility poles on which the transformers are mounted. The utility poles, associated utility lines, and transformers would either be moved to new locations or placed underground as part of a newly created underground utility district (UUD). In either case, the PCB-containing transformers would be removed and replaced according to PG&E's standard handling procedures that include safety measures to contain PCBs substances and properly dispose of them. Accordingly, impacts related to PCBs would be less than significant.

Industrial Chemicals

The Phase I ESA concluded that the parcels formerly part of the Diamond and Caldor Railway depot and engine house (APNs 327-270-03, 327-270-26, 327-270-27, 327-270-46, 327-270-48, 327-270-49, 051-250-46, 051-250-54) have the potential to contain hazardous materials or disposal areas as a result of past industrial chemical usage. Inadvertent exposure of hazardous materials, disposal areas, or contaminated soils may cause harmful effects to construction workers and others in the project vicinity. Mitigation Measure 4.7-5d would require monitoring to take place during any soil disturbing activities on these parcels.

Agricultural Chemicals

The Phase I ESA indicates that 35 parcels within the study area historically contained agricultural activities and may contain remnant agricultural chemicals or soils contaminated with hydrocarbons. Four parcels (APNs 051-250-11, 051-250-12, 051-250-13, and 051-250-31) are SR-49 parcels located adjacent to the SR-49 corridor, and 20 parcels (APNs 051-250-16, 051-250-17, 051-250-18, 051-250-19, 051-250-20, 051-250-21, 051-250-22, 051-250-23, 051-250-30, 051-250-32, 051-250-33, 051-250-39, 051-250-42, 051-250-46, 051-250-48, 051-250-54, 051-250-55, 051-461-05, 051-461-10, and 051-461-46) are DSP parcels located along the Parkway corridor. Mitigation Measure 4.7-5e would require the DOT to conduct preconstruction sampling for all agricultural chemicals and hydrocarbons in areas where soil would be disturbed as a result of project construction.

Aboveground Storage Tanks

One AST used for heating oil was identified on APN 327-250-35 (a DSP parcel). The AST is located adjacent to the residence located on the APN. Neither the tank nor the residence would be disturbed during project construction. Approximately five large volume propane tanks are located within the project study area. These propane tanks would not need to be relocated as a result of the proposed project. However, construction of the proposed project would place the Truck Street/Bradley Street connector within approximately 20 feet of two of the large volume propane tanks and the proposed Parkway within approximately 80 feet of the southern most propane tank (also located off Bradley Drive). Proximity to roads would remain the same for the northern propane tanks. Operators of the propane tanks are required to comply with the National Fire Protection Association's Liquefied Petroleum Gas Code 58, 6.6.1.2, which indicates that, "LP-Gas Containers or systems shall be protected from damage from vehicles." Furthermore, the El Dorado County Ordinance Code requires a minimum property line set back of 10 feet, or as required by the Uniform Fire Code. The proposed project would not place a roadway within 10 feet of any of the propane tanks; however, it would increase the level of traffic near the propane tanks located north and south of Bradley Drive, thereby increase the risk of damage from vehicles. Impacts would be potentially significant.

Summary

The project site has to the potential to contain lead based paint, soils contaminated with aerially-deposited lead, asbestos-containing materials, and soils contaminated with agricultural or industrial

Hazards and Hazardous Materials

chemicals. Accordingly, the proposed project's demolition, grading, and construction activities have the potential to expose persons or the environment to hazardous materials. Furthermore, the proposed project would increase vehicle circulation near three propane tanks located near Bradley Drive, thereby increasing disturbance risk. Accordingly, the proposed project may result in potentially significant impacts.

Significance Determination Before Mitigation

Potentially significant impact.

Mitigation Measures from MC&FP EIR

Refer to MC&FP Mitigation Measure 4.17-1: Potential for Exposure to Existing Contamination under Impact 4.7-4.

Significance Determination After Mitigation and Supporting Rationale

Potentially significant impact. The MC&FP EIR concluded that construction of roadway improvements could result in the exposure of workers to hazardous materials during construction activities that involve earthwork or demolition. The MC&FP EIR noted that, until further analysis is completed, impacts associated with hazardous materials in the project study area are considered potentially significant.

Given that the MC&FP EIR did not adequately analyze the proposed project's specific impacts related to hazards, and the Phase I ESA that was prepared for the Parkway (Youngdahl 2009) has identified recognized environmental conditions, this is a potentially significant impact.

Implementation of Mitigation Measure 4.7-5 would reduce impacts to a less than significant level.

Additional Mitigation Measures

MM 4.7-5a If lead is found during construction, El Dorado County Department of Transportation shall either abate the lead or provide special construction worker health and safety procedures during demolition activities. A lead-based paint survey shall be performed for all structures constructed prior to 1980 that will be demolished during project construction activities. Caltrans standard special provisions for removal of the existing yellow thermoplastic and yellow paint used for pavement markings throughout the project area shall be implemented. Disposal of any lead containing materials will occur at a Class 1 disposal facility in accordance with DTSC hazardous materials laws and regulations. All work shall be conducted in accordance with applicable construction worker health and safety requirements, including CalOSHA Construction Safety Orders for lead (Title 8 CCR Section 1532.1). These requirements may include air monitoring during construction, worker training, and preparation of a Lead Compliance Plan prior to construction.

MM 4.7-5b A preliminary site investigation will be conducted prior to construction to identify levels of aerially deposited lead (ADL) in soils within 30 feet of SR-49 that are to be disturbed during project construction. Soil samples shall be tested prior to construction for total and/or soluble lead to properly classify the soils and ensure that all necessary soil management and disposal procedures are followed for the following APNs: 051-250-04, 051-250-06, 051-250-11, 051-250-12, 051-250-13, 051-250-31, 051-461-11, 051-461-12, 051-461-37, 051-461-51, 051-550-47, 054-342-15, 051-342-20, 051-342-23, 054-342-35, 054-342-36, 054-342-27, and 054-351-19.

If ADL is encountered, earthwork involving materials containing ADL shall conform to the provisions in Section 19, "Earthwork," of Caltrans Standard Specifications and of Special Provisions for "Aerially Deposited Lead." According to Caltrans requirements, the El Dorado County Department of Transportation or its contractor will prepare and implement a project-specific Lead Compliance Plan to prevent or minimize worker exposure to ADL while handling material containing ADL. The Lead Compliance Plan will be prepared in compliance with Title 8, California Code of Regulations, Section 1532.1 "Lead." The Plan will include monitoring, and average ADL concentrations shall not exceed 1.5 microgram per cubic meter of air per day. If concentrations exceed this level, the contractor shall stop work and modify the work to prevent release of ADL. The Plan will also include safety training for construction personnel. Excavation, reuse, and disposal of material with ADL shall be in conformance with all rules and regulations of responsible state and federal agencies.

MM 4.7-5c If asbestos is found during construction, the asbestos shall be abated or DOT or EID shall provide special construction work health and safety procedures during demolition activities. An asbestos survey shall be performed for all structures constructed prior to 1980 that will be demolished or disturbed during project construction activities. If asbestos-containing materials are determined to be present, the materials shall be abated by a certified asbestos abatement contractor. All work shall be conducted in accordance with applicable construction worker health and safety requirements, including CalOSHA Construction Safety Orders for asbestos (Title 8 CCR Section 1529). These requirements may include air monitoring during construction, worker training, and preparation of an Asbestos Compliance Plan prior to construction. Furthermore, demolition and disposal shall be conducted in accordance with the El Dorado Air Quality Management District requirements.

MM 4.7-5d Department of Transportation will provide on-site monitoring, by a qualified environmental professional, of construction activities for parcels formerly part of the Diamond & Caldor Railway depot and engine house on APNs 327-300-08, 327-270-

03, 327-270-26, 327-270-27, 327-270-46, 327-270-48, and 327-270-49, and the Diamond Lime Mineral Plant (051-250-46 and 051-250-54) to observe for the potential indication of any hazardous materials releases, disposal areas or contaminated soils. If suspected or recognized environmental conditions are identified during project construction activities, the Department of Transportation will stop construction and consult with a qualified environmental remediation consultant to determine the appropriate course of action

MM 4.7-5e Department of Transportation will conduct preconstruction sampling for all agricultural chemicals and hydrocarbons where soil is to be disturbed as a result of project activities. If contaminated soils are determined to be present, Department of Transportation will consult with a qualified environmental remediation consultant to determine the appropriate course of action according. Recommend remediation actions shall be approved by the EDCEMD and implemented prior to the start of construction.

MM 4.7-5f Department of Transportation, in coordination with the El Dorado County Fire District shall conduct a risk management program (according to 40 CRF Part 68) specific to risks resulting from the proximity of vehicle traffic to existing large-volume propane tanks located near Bradley Drive. Should protection from vehicle traffic for the propane tanks be required the Department of Transportation will construct protection barriers in compliance with the Uniform Fire Code, the National Fire Protection Association's Liquefied Petroleum Gas Code 58 and any other applicable regulations.

Significance Determination After Mitigation and Supporting Rationale

Less than significant. Implementation of Mitigation Measures 4.7-5a, 4.7-5b, 4.7-5c, 4.7-5d, 4.7-5e, and 4.7-5f would ensure that hazardous materials including lead, asbestos, PCBs, industrial chemicals and agricultural chemicals would be properly tested for and, should they be present, properly handled and disposed of, thereby reducing potential impacts to less than significant.

EID Intertie Improvements

Impacts related to hazardous materials resulting from the construction of the EID Intertie Improvements would be similar to those described above for the proposed project. Furthermore, existing EID waterlines that would be removed or disturbed during project construction may contain asbestos (pers. comm., Andy Urtega, EID, 2010). Implementation of Mitigation Measures 4.7-5a, MM 4.7-5b, MM 4.7-5c, MM 4.7-5d, MM 4.7-5e and 4.7-5f will ensure safe working conditions for construction workers. Upon completion, the proposed Intertie Improvements would be located beneath SR-49 and the Parkway, preventing any permanent and ongoing impacts related to the hazardous materials. Impacts would be less than significant.

Airport Hazards

Impact 4.7-6	The project has the potential to be located within an airport land use plan or within two miles of a public airport, public use airport or private airstrip and would not result in a safety hazard for people residing or working in the project area. (No Impact)
---------------------	--

Impact Analysis

The nearest public-use airport and private airstrip to the project site are the Placerville Airport and the Perryman Airport. The Placerville Airport, Airport Identification Number PVF, is approximately 3 miles east of the project site with a northeast-southwest flight line orientation. The Placerville Airport is a public use Regional General Aviation airport that serves the Placerville and surrounding communities and is also used by the military and other governmental agencies for training, search and rescue missions, medical evacuation, and fire support. The Perryman Airport, Airport Identification Number 7CL9, is approximately 4.2 miles southeast of the project site with an east-west flight line orientation. The Perryman Airport is a private use airstrip with a 2,000-foot by 100-foot turf runway.

The project site is not within any flight lines or within any flight hazard zones established around the Placerville or Perryman Airport. Therefore, no impacts related to airport hazards would occur.

Significance Determination Before Mitigation

No impact.

Mitigation Measures from the MC&FP EIR

There are no mitigation measures proposed in the MC&FP EIR that are applicable to the proposed project for airport hazards.

Significance Determination After Mitigation and Supporting Rationale

No impact.

EID Intertie Improvements

EID Intertie Improvements would be located completely with the Parkway and SR-49 ROWs. Accordingly, impacts related to Airport hazards resulting from the construction of the EID Intertie Improvements would be similar to those described above for the proposed project. No impacts would occur.

Emergency Plans

Impact 4.7-7	The project has the potential to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. (Less than Significant)
---------------------	--

Impact Analysis

The majority of the activities associated with constructing the proposed project would take place in an area where motor vehicle travel does not presently occur. However, construction activities on SR-49/Diamond Road and at the terminating ends of the Parkway (Missouri Flat Road, SR-49) and along

Throwita Way, Old Depot Road, Truck Street, and SR-49 may require traffic controls, temporary lane closures, and/or traffic lane diversions to ensure safe and efficient movement of vehicles, bicyclists and pedestrians through intersections and/or use of alternative routes during construction.

Traffic on Throwita Way would be diverted during construction of a portion of the Parkway; an alternate access route to the MRF will be provided during that stage of construction. Upon completion of the Parkway, MRF traffic would resume access via Throwita Way.

The Operational Area Multi-Hazard Functional Emergency Operations Plan for El Dorado County identifies that SR-49 is a major emergency response route within the County. DOT anticipates that during construction activities on SR-49, the construction contractor would close one lane of traffic. Traffic would be re-routed to use the portion of the right-of-way not being affected. Lane configurations would be changed as necessary to accommodate construction activity locations. Short-term closures would occur during K-rail installation and striping, during which a detour would be provided. Diversions of traffic would be signed; and traffic control devices would be used as necessary to guide traffic and delineate temporary lanes.

Operation of the proposed project, including the reconfiguration of the SR-49/Lime Kiln Road intersection and construction of a new SR-49/Diamond Springs Parkway intersection, would result in a changed traffic operation pattern on SR-49. However, mitigation has been included in Section 4.12, Traffic and Transportation, that would ensure that proper roadway design and signal timing would allow for the efficient movement of traffic, including emergency vehicles. Furthermore, construction and operation of the Parkway and improved SR-49 would help to increase circulation and alleviate congestion in the Diamond Springs area. This would benefit the ability of local law enforcement and emergency service providers to efficiently reach emergencies in the Diamond Springs area and assist in area evacuation if needed.

Any traffic diversions, lane closures or detours would be properly signed; and barriers, striping, and cones would be used as necessary to guide traffic and delineate temporary routes. Flagpersons would monitor and guide traffic during periods of equipment movement or when construction activities were occurring near traffic lanes to ensure public and worker safety. Project construction activities would be coordinated with local law enforcement and emergency services providers. As a result of this coordination, law enforcement and emergency service providers would be aware of project construction and the potential for any emergency vehicle movement delays within the project area and measures to avoid such delays would be determined. The proposed project's construction and operation would not affect the provision of emergency services or area evacuation in the event of a major emergency. This impact is considered less than significant.

Significance Determination Before Mitigation

Less than significant impact

Mitigation Measures from the MC&FP EIR

There are no mitigation measures proposed in the MC&FP EIR that are applicable to the proposed project in regards to emergency plans or response.

Significance Determination After Mitigation and Supporting Rationale

Less than significant impact

EID Intertie Improvements

Lane closures on SR-49 may be required during installation of the EID Intertie Improvements. Lane closures effected during construction of the Intertie Improvements would occur in a manner similar to that described above order to ensure that emergency access is provided at all times. This impact is considered less than significant.

Upon completion, the proposed Intertie Improvements would be located beneath SR-49 and the Parkway, preventing any permanent and ongoing impacts related to emergency response plans. No permanent impacts would occur.

Wildland Fires

Impact 4.7-8	The project has the potential to expose people or structures to a significant risk of loss, injury or death involving wildland fires. (No Impact)
---------------------	--

Impact Analysis

This impact analysis addresses the potential for the proposed project to expose people or structures to a significant risk of loss, injury, or death involving wildland fires.

The proposed project would not expose people or structures to significant risk of loss, injury, or death involving fire. The project site is not located within or adjacent to a State Responsibility Area (SRA) managed by the CDF, and therefore, the site is not ranked by the CDF. Following construction, the project site would consist primarily of asphalt concrete paving, which is not associated with the generation or spread of wildland fire. According to the California Fire Alliance's Fire Planning and Mapping Tools database, the proposed project is in an area dominated by fuels classified as "low" in terms of wildland fire risk (California Fire Alliance 2004). In addition, because the proposed project involves placement of impervious surface and would not introduce a fuel source, project construction and operation is not anticipated to result in a new or increased exposure of people or structures to a significant risk of loss, injury or death involving wildland fires. No mitigation is required.

Significance Determination Before Mitigation

No impact.

Mitigation Measures from the MC&FP EIR

There are no mitigation measures proposed in the MC&FP EIR that are applicable to the proposed project for wildland fires.

Hazards and Hazardous Materials

Significance Determination After Mitigation and Supporting Rationale

No impact.

EID Intertie Improvements

Impacts related to wildland fire hazards resulting from the construction of the EID Intertie Improvements would be similar to those described above. Upon completion, the proposed Intertie Improvements would be located beneath SR-49 and the Parkway, preventing any permanent and ongoing impacts related to wildland fire hazards from occurring.

4.8 - Hydrology and Water Quality

This section describes the existing hydrology and water quality of the project area as well as the potential for construction and use of the proposed project to result in effects on these resources. Descriptions and analyses in this section are based on information contained in the Preliminary Drainage Report for Diamond Springs Parkway (CTA 2009; Appendix I), Preliminary Geotechnical Engineering Study (Youngdahl 2008; Appendix G); Phase I Environmental Site Assessment (Youngdahl 2009; Appendix H) and information provided by the California Department Water Resources, the North Coast Regional Water Quality Control Board, the El Dorado County General Plan, and the MC&FP EIR (EDAW 1998).

4.8.1 - Summary

Significant Unavoidable Impacts

Construction and use of the proposed project would not result in any significant unavoidable impact to hydrology or water quality.

Potentially Significant Impacts

Construction and use of the proposed project would not result in any potentially significant impact to hydrology or water quality.

Less Than Significant Impacts

The proposed project would not violate any water quality standards or waste discharge requirements, substantially alter the existing drainage pattern of the area, increase the rate or amount of surface runoff in a manner that would result in flooding or provide substantial additional sources of polluted runoff, or substantially degrade water quality. Therefore, these impacts are considered less than significant.

4.8.2 - Environmental Setting

Climate

The climate of the Diamond Springs area is characterized by dry, warm summers and cool, wet winters. Temperatures in the Diamond Springs area range from an average high of 90 degrees Fahrenheit (°F) in August to an average low of 38 °F in January. Rainfall averages 38.88 inches annually, which is slightly higher than the nation's average. General meteorological data for the Diamond Springs area are presented in Table 4.8-1.

Table 4.8-1: Diamond Springs Meteorological Summary

Month	Temperature (°F)		Average Precipitation (inches)
	Average High	Average Low	
January	53	38	7.42
February	56	39	5.79
March	58	40	5.58
April	64	43	3.52
May	72	50	1.40
June	83	58	0.45
July	91	64	0.18
August	90	63	0.20
September	84	60	0.79
October	74	52	2.35
November	60	43	5.36
December	54	39	5.82
Annual Average	69.8	49.0	38.88
Notes: Averages derived from measurements taken between 1955 and 2001. Source: Western Regional Climate Center, 2008.			

Surface Hydrology

The project study area is within the Sacramento River Hydrologic Region, in the American River Hydrologic Unit in the South Fork American River watershed, which is divided into sub-areas. The project study area is almost entirely encompassed in the Weber Creek Hydrologic sub-area, except for a small portion (the southernmost State Route 49 [SR-49] portion at its intersection with Pleasant Valley Road) which is located in the Cosumnes River Hydrologic area.

South Fork American River Watershed

The South Fork American River watershed encompasses the central region of the County, extending from the headwaters of the Sierra crest (9,900-foot elevation), west to the terminus at Folsom Lake (480-foot elevation). Folsom Lake is a source of drinking water for El Dorado County, Sacramento County, and the City of Folsom. Downstream of Folsom Lake, flows from the American River discharge into the Sacramento River in the City of Sacramento. Major tributaries contributing flow directly into the South Fork of the American River include the North Fork of the American River, Silver Creek, Slab Creek, Rock Creek, and Weber Creek. Upstream tributaries are Caples Creek, South Fork Silver Creek, and Jones Fork Silver Creek.

Other water features within the watershed are Caples Lake, Silver Lake, Lake Aloha, Weber Reservoir (EID), Ice House Reservoir, Union Valley Reservoir, Junction Reservoir, Camino

Reservoir, Bush Creek Reservoir, Slab Creek Reservoir (Sacramento Municipal Utility District) and Chili Bar Reservoir (PG&E) (EDAW, 2003).

Weber Creek Sub-Area

The Weber Creek sub-area is approximately 55.74 square miles, with the highest point being an elevation of 4,625 feet. Weber Creek (intermittent stream) begins at the confluence of the North and South Weber Creeks and Flows west, merging with the South Fork American River. The Southfork American River flows south to Folsom lake with outfalls to the American River joining the Sacramento River. The Sacramento River continues southwest into the San Francisco Bay and Pacific Ocean. (Jones and Stokes 2003)

Cosumnes River Watershed

The Cosumnes River watershed encompasses the southern region of El Dorado County and the northwest region of Amador County. The watershed extends from the headwaters along the Iron Mountain Ridge west to where the Cosumnes River enters Sacramento County. The major tributaries flowing directly into the Cosumnes River are the South, Middle, and North Fork Cosumnes Rivers and the Canyon Creek. Both Deer Creek and Carson Creek are also tributaries to the Cosumnes. The creeks drain a significant portion of western El Dorado County in the Cameron Park and El Dorado Hill/Latrobe areas, respectively. Bass Lake and Sly Park Reservoirs are located in the Carson Creek watershed (EDAW 2003).

North Fork Cosumnes Sub-Area

The North Fork Cosumnes sub-area is approximately 15 square miles in size. Tributaries to the North Fork Cosumnes sub-area include Sly Park Creek, Hazel Creek, Camp Creek, North Canyon Creek and Big Canyon Creek. (El Dorado County Water Agency 2007)

Water Quality

Water in the environment is re-circulated through the hydrological cycle. As water moves through the system, the quality of the water is continuously changed by physical processes. In addition, the composition of geologic materials that the water encounters can affect the water quality. Some processes, such as filtration through surface soils and within aquifers, tend to change the quality of the water. All of these changes are temporary. The relative quality of surface water and groundwater at any given time and location reflects the balance of the pollutant loading and the ability of the system to treat or purify the water. If the pollutant loading exceeds the ability of the system to assimilate pollutants, then water quality problems may occur. In general, the encroachment of development tends to increase the pollutant loading, while simultaneously reducing the ability of the natural system to assimilate pollutants.

There are no water bodies in the Diamond Springs area listed on the 2006 Clean Water Act 303(d) list of impaired water bodies. Furthermore, none of the tributaries within the project study area are listed on the 2006 Clean Water Act 303(d) list of impaired water bodies. As such, no Total Maximum

Daily Load requirements are in effect for any surface water bodies in or adjacent to the project site. (SWRCB, 2008)

Stormwater Quality

In general, water quality depends primarily on the hydrologic characteristics of the surrounding water basin, mineral composition of the soils in the watershed, and sources of contamination in the watershed. The quality of stormwater varies greatly depending on climatic and land use conditions. Urban and industrial runoff is known to contribute significantly to the levels of toxic materials such as metals and organic pesticides transported to surface bodies of water. Stormwater discharges may contain unacceptable levels of total petroleum hydrocarbons such as gasoline and diesel, oils, brake material, organic material, pesticides, heavy metals (copper, lead, cadmium, and zinc), fertilizers, trash, and sediment.

Pursuant to § 303(d) of the Federal Clean Water Act, states, territories and authorized tribes are required to develop lists of water quality limited segments or surface water bodies that do not meet water quality standards due to high levels of pollutants. As described above, stormwater discharge can carry pollutants from a variety of sources into associated surface water bodies. The project study area is located within the Weber Creek drainage area. Some stormwater drains in a northerly direction by means of a storm drain system containing various sizes of culverts. This system diverts the stormwater to its outfall near the intersection of Missouri Flat Road and Forni Road. The stormwater outfalls into an open field located near the mouth of a creekbed that continues to Weber Creek. Some of this drainage may be diverted near the mouth of a creekbed northeast of China Garden Road. This creek also continues to Weber Creek, therefore, the ultimate stormwater destination does not change. In addition, both Mound Springs Creek and Indian Creek convey stormwater to Weber Creek (EDAW 1998).

Jurisdictional Features

The project study area contains several small seasonal wetlands and drainage features, some of which are federally jurisdictional. Federally jurisdictional features includes ephemeral drainages, roadside ditches, a wetland swale, and seasonal wetlands. Non-federally jurisdictional features include fresh emergent wetland, several small seasonal wetlands, and roadside ditches. The location and acreage information for these features is included in Section 4.4, Biological Resources.

Groundwater

No defined groundwater basins are located in El Dorado County. The County lies within the Central Nevada geomorphic province with groundwater located primarily in hard rock aquifers. Water can be found in stress fractures, joints, faults, and fractures caused by heating and cooling in volcanic rock. The highest groundwater yields occur at shallow depths where fracturing is greatest. Groundwater movement is influenced by characteristics of the fracture system including the size and location of fractures, interconnection between fractures, and existing materials within the fracture. Recharge,

movement, and storage of water in fractures of hard rock are limited. As such, the long-term reliability of groundwater cannot be estimated with the same level of confidence as a porous or alluvial aquifer, which is common in the Central Valley of California (DWR 1989, 1990; USGS 1983). Based on this information, the characteristics and depth of the groundwater in the project study area are difficult to predict without onsite drilling.

Groundwater Levels

During the preparation of the Preliminary Geotechnical Engineering Study (Youngdahl 2008), during which subsurface drilling was conducted, a permanent groundwater table was generally not encountered. However, Youngdahl stated that “their experience in the area” shows that water may be perched on less weathered rock and present in the fractures and seams of the weathered rock found beneath the site at varying times of the year.” Youngdahl adds that shallow groundwater was encountered during the most recent realignment of SR-49 at the intersection of Pleasant Valley Road necessitating the installation of subdrains (Youngdahl 2008).

Flooding

Flooding results when water flow cannot be contained within the banks of natural or manmade drainage courses. Flooding can be caused by an excessive storm event, snowmelt, blockage of watercourse, dam failure, or combination of these or other events. A flood event can cause injury or loss of property, such as the flooding of structures including homes and businesses; uplift vehicles and other objects; damage roadways, bridges, infrastructure, and public services; and cause soil instability, erosion, and landsliding. Pursuant to the National Flood Insurance Program (NFIP), the Federal Emergency Management Agency (FEMA) develops flood risk data for use in insurance rating and floodplain management. Based on these data, FEMA prepares Flood Insurance Rate Maps (FIRMs) that delineate areas that are subject to inundation from a 100-year flood event (i.e., a flood that has a 1 percent chance of occurring in a given year) (FEMA 1988).

Because of a lack of extensive low-lying areas and a great deal of upland areas, the majority of El Dorado County is not subject to flooding. To date, FEMA has not delineated the 100-year floodplain for Weber Creek in the project study area; however, FEMA has delineated the 100-year floodplain for Weber Creek between Hangtown Creek, which flows into Weber Creek approximately 2 miles downstream of the Weber Creek (Highway 50) bridge, and the South Fork American River. Weber Creek between Hangtown Creek and the South Fork American River is designated as Zone A, which is defined as “areas of 100-year flood; base flood elevations and flood hazard factors not determined” (FEMA 1983 and 1986). The South Fork American River from Weber Creek to Folsom Lake is designated as Zone D, which is defined as “areas of undetermined, but possible, flood hazards” (FEMA 1983). Based on FIRM data, the El Dorado County General Plan identifies “Weber Creek from the American River to Placerville, including Cold Springs, Dry, and Spring Creek tributaries” as a “flood-prone area” (EDAW 2003).

4.8.3 - Regulatory Framework

Federal

Clean Water Act

Section 303 of the Clean Water Act requires states to adopt water quality standards for all surface waters of the United States. Water quality standards consist of beneficial uses of the waters to be protected, water quality objectives to protect the designated beneficial uses, and a program of implementation needed for achievement of water quality objectives. Beneficial uses are the types of activities for which the receiving water may be protected, and include, but are not limited to, municipal supply, agricultural and industrial supply, recreation, and preservation and enhancement of fish, wildlife, and other aquatic resources. Water quality objectives are the numeric or narrative water quality levels established for the reasonable protection of the beneficial uses and the prevention of nuisance. (See further description of State Porter-Cologne Water Quality Control Act, below.)

Section 402 of the Clean Water Act establishes the NPDES permit program, and section 301 of the Clean Water Act prohibits discharges of pollutants to waters of the United States without first obtaining an NPDES permit. Section 402(p) prescribes requirements for certain types of storm water discharges, and the California State Water Resources Control Board (SWRCB) implements these requirements in NPDES storm water permits. Construction activities that disturb land equal to or greater than 1 acre must comply with the SWRCB's General Permit for Discharges of Storm Water Associated with Construction Activity, SWRCB Order No. 99-08-DWQ, (General Permit), which was revised by the SWRCB on September 2, 2009, and adopted as Order 2009-0009-DWQ. Implementation and enforcement of the General Permit is overseen by the nine Regional Water Quality Control Boards (RWQCBs). The project site is within the boundaries of the Central Valley RWQCB.

Where construction activity disturbs one or more acres, the General Permit requires all dischargers of storm water associated with construction activity to take the following measures:

1. Develop and implement a SWPPP, which specifies BMPs that will minimize or prevent pollutants associated with construction activity from contacting stormwater and with the intent of minimizing sediment from moving offsite into receiving waters.
2. Eliminate or reduce non-stormwater discharges to storm sewer systems and other waters of the United States.
3. Perform inspections of all BMPs.

To obtain coverage, the landowner must file a Notice of Intent (NOI) with the SWRCB, and certify compliance with the requirements listed above. When project construction is completed, El Dorado County must file a notice of termination.

Federal and State Anti-Degradation Policies

The federal anti-degradation policy directs the State to develop and adopt a statewide anti-degradation policy, consistent with the following principles:

- Existing instream water use and level of water quality necessary to protect the existing uses shall be maintained and protected.
- Where the quality of the waters exceed levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water, that quality shall be maintained and protected unless the State finds after full satisfaction of the intergovernmental coordination and public participation provisions of the State's continuing planning process that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located.

In allowing such degradation or lower water quality, the State shall assure water quality adequate to protect existing uses fully. Further, the State shall assure that there shall be achieved the highest statutory and regulatory requirements for all new and existing point sources, and all cost-effective and reasonable best management practices for non-point source control.

- Where high-quality waters constitute an outstanding national resource, such as waters of National and State Parks and wildlife refuges and waters of exceptional recreational or ecological significance, water quality shall be maintained and protected.

In accordance with the federal anti-degradation policy principles excerpted above, the SWRCB adopted SWRCB Res. No. 68-16, setting forth California's anti-degradation policy. Resolution 68-16 states, in part, Whenever the existing quality of water is better than the quality established in policies as of the date on which such policies become effective, such existing high quality will be maintained until it has been demonstrated to the State that any change will be consistent with maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial use of such water and will not result in water quality less than that prescribed in the policies.

Where high quality waters exist, the State anti-degradation policy requires discharges to meet waste discharge requirements that will result in the best practicable treatment or control of the discharge necessary to assure that (a) a pollution or nuisance will not occur and (b) the highest water quality consistent with the maximum benefit to the people of the State will be maintained.

State

Porter-Cologne Water Quality Control Act

The California Porter-Cologne Water Quality Control Act of 1969 authorized the SWRCB to provide comprehensive protection for California's waters through water allocation and water quality protection. The Porter-Cologne Act was later amended to authorize the SWRCB and nine RWQCBs

to issue NPDES permits under the Clean Water Act via authority delegated from the EPA. The SWRCB implements the requirements of the Clean Water Act and the Porter-Cologne Act by adopting statewide water quality control plans that prescribe applicable water quality standards to specified water bodies. The Porter-Cologne Act also established the responsibilities and authorities of the nine RWQCBs, which include preparing regional water quality control plans, promulgating regional water quality standards, and issuing NPDES permits and the state-equivalent Waste Discharge Requirements (WDRs), among other regulatory orders.

Local

El Dorado County General Plan

Appendix J of this Draft EIR provides a matrix that lists the policies determined to have relevance to this proposed project and provides a summary of the County's determination of project consistency with each relevant goal and policy. As shown in Appendix J, the proposed project is consistent with all applicable goals and policies of the General Plan, including those related to hydrology and water quality.

El Dorado County Municipal Code

The El Dorado County Municipal Code provides County-wide standards for development, in the County. Issues related to erosion and sedimentation, water quality, and drainage are contained pertinent to the water resources analysis are presented below:

Chapter 15.14 - Grading Erosion and Sediment Control. This Chapter is enacted for the purpose of regulating grading within the unincorporated area of El Dorado County to safeguard life, limb, health, property and public welfare; to avoid pollution of watercourses; and to ensure that the intended use of a graded site is consistent with the El Dorado County General Plan, any Specific Plans adopted thereto, the adopted Storm Water Management Plan, California Fire Safe Standards and applicable El Dorado County ordinances including the Zoning Ordinance and the California Building Code.

This Chapter is not intended to supersede or otherwise preempt any applicable local, state, or federal law or regulation. Where conflicts may occur between this Chapter and such laws or regulations, the most restrictive shall apply.

County of El Dorado Drainage Manual

The County of El Dorado Drainage Manual (1995) provides guidelines for drainage improvements that are intended to supplement the provisions of the Grading, Erosion and Sediment Control Ordinance and the Design and Improvement Standards Manual. Specifically, the Drainage Manual is intended to provide consistent, specific criteria and guidelines regarding the design of storm drainage facilities and the management of stormwater in El Dorado County. The design criteria provided in the Drainage Manual pertain to hydrologic, hydraulic, and structural design.

SWMP

Western El Dorado County Storm Water Management Plan

The Western El Dorado County Storm Water Management Plan (SWMP) describes the program intended to reduce the discharge of pollutants associated with storm water drainage systems that serve Western El Dorado County. It identifies how the County complies with the provisions of the National Pollutant Discharge Elimination System (NPDES) permit proposed by the California State Water Resources Control Board (SWRCB 2008).

4.8.4 - Project Impact Analysis

Methodology for Analysis

This section analyzes the proposed project's potential to cause adverse impacts on hydrology and water quality utilizing several resources. Information about impervious surface coverage on the project's site and proposed stormwater quality treatment measures was obtained from the Preliminary Drainage Report for the Diamond Springs Parkway, which was prepared by CTA Engineering. This report is provided in its entirety in Appendix I. Meteorological data for the Diamond Springs area was provided by City Data.com and the Western Regional Climate Center. Groundwater information was provided by the El Dorado County General Plan EIR (EDAW 2003) and the Geotechnical Report prepared by Youngdahl (2008; Appendix G). Flood mapping information was provided in the MC&FP EIR (EDAW 1998).

Thresholds of Significance

According to the CEQA Guidelines' Appendix G Environmental Checklist, to determine whether hydrology and water quality impacts are significant environmental effects, the following questions are analyzed and evaluated. Would the project:

- a.) Violate any water quality standards or waste discharge requirements?
- b.) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted?
- c.) Substantially alter the existing drainage pattern of area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?
- d.) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

Hydrology and Water Quality

- e.) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?
- f.) Otherwise substantially degrade water quality?
- g.) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?
- h.) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?
- i.) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?
- j.) Inundation by seiche, tsunami, or mudflow?

Impact Statements and Mitigation Discussions

This section discusses potential impacts associated with the construction and use of the proposed project and provides mitigation measures where appropriate. The MC&FP EIR impact assessment and mitigation measures are included where appropriate, since the proposed project must comply with regulations set forth by prior programmatic level EIR. Further analysis or mitigation required beyond that of the MC&FP EIR is included where necessary.

Water Quality Standards and Discharge Requirements

Impact 4.8-1	The project has the potential to violate a water quality standards or waste discharge requirement. (Less than Significant)
---------------------	---

Impact Analysis

The proposed project may result in an increase of pollutants in local stormwater discharge associated with construction and use of the proposed project. This would be in violation of local, regional, and State water quality standards and waste discharge requirements. Pollutants that could arise as a result of the proposed project would generally be associated with project construction and project operations.

Project construction would involve activities such as clearing and grading of land, trenching, cutting of slopes, and other activities associated with building roadways. Construction activities could lead to the generation of sediments and use of substances containing chemical pollutants. Pollutants commonly associated with roadway construction include oil, motor vehicle fuel, asphalt, cement and concrete, paints, solvents, and adhesives. In addition, construction activities that include demolition of existing buildings and structures can produce pollutants such as asbestos, fiberglass, concrete and sediment.

Typically, sediment may be generated: 1) during and subsequent to grading activities (including cuts and fills, and import and export of soil to and from the construction site), and 2) as a result of erosion of hillsides, slopes, and storm water conveyance channels/ditches. Table 4.8-2 provides a list of typical construction activities, typical building materials, and pollutants associated with each building material that could be present in stormwater discharge.

Table 4.8-2: Construction Related Pollutants

Category	Product/ Activity	Pollutants
Adhesives	Adhesives, Glues, Resins, Epoxy Synthetics, Caulks, Sealers, Putty, Sealing Agents Coal Tars (Naptha, Pitch)	Phenolics, Formaldehydes, Asbestos, Benzene, Phenols, Paphthalene
Cleaners	Polishes(Metal, Ceramic, Tile), Etching Agents, Cleaners, Ammonia, Lye, Caustic Sodas, Bleaching Agents, Chromate Salts	Metals, Acidity/Alkalinity, Chromium
Painting	Paint Thinner, Acetone, MEK, Stripper, Paints, Lacquers, Varnish, Enamels, Turpentine, GUM Spirit, Solvents	VOCs, Metals, Phenolics, Mineral Spirits
Woods	Sawdust, Particle Board Dusts, Treated Woods	BOD, Formaldehyde, Copper, Crepsote
Masonry & Concrete	Dusts(Brick, Cement), Colored Chalks (Pigments), Concrete Curing Compounds, Glazing Compounds, Cleaning Surfaces	Acidity, Sediments, Metals, Asbestos, Acidity
Remodeling & Demolition	Insulation, Venting Systems, Brick, Cement, Saw Cutting, Drywall	Asbestos, Aluminum, Zinc, Sediments
Operations& Maintenance	Vehicle and Machinery Maintenance, Gasoline, Oils, Additives, Marking Paints (Sprays), Grading, Earth Moving, Portable Toilets, Fire Hazard Control (Herbicides), Pest Control, Wash Waters	Oils and Grease, Coolants, Bensene & Derivatives, Oils and Grease, Vinyl Chloride, Metals, Sediments, BOD1, Disinfectants, pathogens, Sodium, Arsenite, Dinitro Compounds, Rodenticides, Insecticides, Herbicides, Concrete, Oils, Greases
Landscaping & Earthmoving	Plating, Plant Maintenance, Excavation, Tiling Masonry& Concrete, Solid Wastes (trees, Shrubs, Green Waste, Mulch), Exposing Mineral Deposits, Soil Additives, Re-vegetation of Graded Areas	Pesticides, Herbicides, Nutrients, Erosion (Sediments), BOD1, Acidity/Alkalinity, Metals, Aluminum Sulfate, Sulfur, Fertilizers

Table 4.8-2 (cont.): Construction Related Pollutants

Category	Product/ Activity	Pollutants
Roadway Paving	Asphalt Batching, Concrete Batching, Vehicle and Machinery Maintenance, Gasoline, Oils, Additives, Marking Paints (Sprays), Grading, Earth Moving	VOCs, Arsenic, Benzene, Formaldehyde, Cadmium, Oils, Naphthalene, Kerosene, Sediment, Oils and Grease, Coolants, Vinyl Chloride
BOD1= Biochemical Oxygen Demand due to the use of oxygen by microorganisms decomposing materials. Source: US EPA, 2007.		

Furthermore, the proposed project would increase the amount of impervious surface area available for contact with storm water runoff (wet and dry weather flows). According to the MC&FP EIR, a 70 percent increase in the runoff coefficient would be anticipated with the conversion of the relatively undeveloped project area to retail uses. (EDAW 1998). However, given the MC&FP EIR accounted for a larger area to be converted to impervious uses (e.g., retail) and did not focus solely on proposed project and it's associated roadway improvements, this does not accurately depict the post project conditions.

The proposed project would result in a modest increase in 100-year storm runoff of 2.7 cfs at Missouri Flat Road and 2.3 cfs at the North Ditch and an increased potential for storm water pollution.

Table 4.8-3 lists sources of typical stormwater pollutants from highway and roadway maintenance activities and the associated pollutants that would be expected in storm water discharges.

Table 4.8-3: Typical Pollutants in Highway Runoff

Product/ Source	Pollutants
Exhaust products	Oil and Grease, VOCs
Brake pad dust	Metals and Ceramics
Tire residues	Rubber and metals
Leaks and spills of fuels , oil antifreeze, solvents, degreasers	Oil and Grease, VOCs
Litter, vegetation debris	Gross solids, sediment
Fertilizers and Pesticides	Nutrients(nitrates, phosphates), VOCs
Source: MBA, 2008.	

The MC&FP EIR includes mitigation requiring a National Pollutant Discharge Elimination System (NPDES) permit. To minimize erosion and foreign materials transport in stormwater during

construction, the County's contractor would be required to prepare a Stormwater Pollution Prevention Plan (SWPPP) in accordance with a NPDES permit for County approval and would implement best management practices (BMPs) for controlling the introduction of materials to stormwater and the flow of stormwater from within the construction area to off-site areas. DOT's contract provisions would require compliance with BMPs identified by the NPDES permit and SWPPP. Use of BMPs, adherence to the SWPPP, and conformity with the NPDES permit would ensure that impacts remain less than significant.

Significance Determination Before Mitigation

Less than significant.

Mitigation Measures from the MC&FP EIR

Measures addressing short-term surface water quality degradation were included in the MC&FP EIR under Mitigation Measure 4.8-2: Short-Term Surface Water Quality Degradation. However, the mitigation measure references the NPDES permit and adherence to the requirements of this permit, which is standard County practice. The County is required by law to acquire a California State Water Resources Control Board General Construction Activity Stormwater Permit under the NPDES.

Other mitigation was prescribed for land use developments within the MC&FP Area that is not applicable to the proposed project. For example, the County DOT prepares their own erosion control plans that are, by County regulation, consistent with the County's Grading, Erosion, and Sediment Control Ordinance and DOT projects are constructed to the specifications and requirements of DOT as well as AASHTO standards. Accordingly, mitigation measure 4.8-2 is not applicable to the proposed project.

Significance Determination After MC&FP Mitigation, and Supporting Rationale

Under the proposed project, construction activities would adhere to County policies and regulations, specifically the County's Grading Ordinance and Storm Water Management Plan for Western El Dorado County, regarding erosion and ground instability. DOT's contract provisions would require compliance with BMPs identified by the NPDES permit and SWPPP. Use of BMPs, adherence to the SWPPP, and conformity with the NPDES permit would ensure that impacts remain less than significant.

Additional Mitigation Measures

N/A

Significance Determination After Additional Mitigation and Supporting Rationale

Less than significant impact.

EID Intertie Improvements

The proposed EID Intertie Improvements would result in additional contribution of pollutants during construction that by itself would not be significant, but in combination with other project components

Hydrology and Water Quality

would contribute to significant impacts related to water quality standards. Similarly, EID's contract provisions would require compliance with BMPs identified by the NPDES permit and SWPPP. Impacts would be less than significant.

Groundwater Supplies and Recharge

Impact 4.8-2	The project has the potential to substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted). (No Impact)
---------------------	--

Impact Analysis

No defined groundwater basins are located in El Dorado County. The amount and location of groundwater varies significantly throughout the County due to its location in hard rock aquifers. Construction activities associated with the proposed project may use water for dust control and other purposes. Water would be provided by a contracted service and would not deplete any groundwater supplies. Upon completion, the proposed project would not require the use of water and therefore would not deplete groundwater supplies. The proposed project would add impervious services but would not affect groundwater recharge because all water would be directed to existing water conveyance features where recharge may take place. Therefore, the construction activities and use associated with the proposed project would result in no impacts to groundwater supply and recharge.

Significance Determination Before Mitigation

No impact.

Mitigation Measures from the MC&FP EIR

N/A

Significance Determination After MC&FP Mitigation and Supporting Rationale

No impact.

Additional Mitigation Measures

No additional mitigation measures required.

Significance Determination After Additional Mitigation and Supporting Rationale

No impact.

EID Intertie Improvements

No impact.

Drainage Pattern

Impact 4.8-3	The project has the potential to substantially alter the existing drainage pattern of the area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion, siltation or flooding on- or off-site. (Less than Significant)
---------------------	---

Impact Analysis

As discussed in the MC& FP EIR roadway improvements would result in increased impervious surfaces that would alter the existing drainage patterns and stormwater quality. The MC&FP EIR also concluded that the resulting drainage alterations may increase the potential for flooding in Weber Creek between Placerville and the South Fork American River.

Construction of the proposed project would include individual drainage crossings along the proposed Parkway corridor consisting of either closed conduit culverts or open bottom culverts, depending on site-specific constraints. These crossings would be designed to handle a 100-year storm flow and allow the existing general drainage patterns to be maintained. Alteration of these drainage features would be required to adhere to the SWPPP as well as mitigation included in the Section 4.4, Biological Resources.

A Preliminary Drainage Report (Appendix I) has been prepared that includes appropriate drainage infrastructure and design that, when incorporated into the proposed project would ensure only minor changes in the existing drainage pattern would occur. The proposed road surface drainage system has been designed to direct anticipated storm flows from the roadways toward well-defined channels or existing storm drain systems at an increased rate between 2.3 and 2.7 cfs during a 100-year storm event (CTA 2009). Water would eventually flow to Weber Creek, which has a 100-year storm flow level of approximately 7,381 cfs. Therefore, the increase of 2.3 to 2.7 cfs is minimal and would produce less than significant off-site impacts. Changes to existing drainage flows in the project area would be minimized by the construction of closed conduit culverts or open bottom culverts, depending on site-specific constraints. Accordingly, existing drainage patterns would not be significantly altered and therefore erosion, siltation or flooding on- or off- site impacts would be less than significant.

Completion of a Final Drainage Plan will be implemented and incorporated into the proposed project design in order to ensure that the project's existing drainage pattern would be maintained and would not result in on- or off-site erosions, siltation or flooding. The Final Drainage Plan will take into account information from regulatory agencies and mitigation measures prescribed under Section 4.4, Biological Resources. Accordingly, alterations to the existing drainage pattern would not result in substantial erosion, siltation or flooding on- or off-site.

Significance Determination Before Mitigation

Less than significant impact.

Mitigation Measures from the MC&FP EIR

The MC &FP EIR mitigation measure 4.8-1 Run off Quantity requires applicants for roadway improvements submit and obtain approval of the project drainage report by the El Dorado County Department of Transportation. Since the proposed project is under the oversight of the El Dorado County Department of Transportation (DOT), and a Preliminary Drainage Report has been prepared by the DOT for the proposed project; mitigation requiring submittal of a drainage report to the DOT is unnecessary. The remainder of the mitigation measure is related to stormwater discharge, and does not regulate the alteration of existing drainage patterns.

Significance Determination After MC&FP Mitigation and Supporting Rationale

Less than significant impact. The County's Final Drainage Plan will take into account information from regulatory agencies and mitigation measures prescribed under Section 4.4, Biological Resources, and the proposed project will be designed such that alterations to the existing drainage pattern would not result in substantial erosion, siltation or flooding on- or off-site.

EID Intertie Improvements

The proposed EID Intertie Improvements would not directly result in alterations to existing drainage patterns. Intertie improvements could result in additional contribution to erosion, siltation, and flooding during construction that by itself would not be significant, but in combination with other aspects of the proposed project would contribute to additional impacts related to water quality standards. Similarly, EID's contract provisions would require compliance with BMPs identified by the NPDES permit and SWPPP. Impacts would be less than significant. Upon completion, the EID Intertie Improvements would be located beneath roadway surfaces and would therefore, not contribute to erosion, siltation or increased flooding.

Drainage Capacity

Impact 4.8-4	The project has the potential to create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. (Less than Significant)
---------------------	--

Impact Analysis

As noted above under Impact 4.8-3, a Preliminary Drainage Report (Appendix I) has been prepared for the proposed project. The Preliminary Drainage Report used methodology outlined in the County of El Dorado Drainage Manual. The impact of the proposed roadways were analyzed and compared to the baseline conditions in order to minimize changes to the existing drainage pattern and to properly design the proposed storm drain facilities. The Preliminary Drainage Report indicates that the proposed roadway drainage system has been designed to convey a 10-year storm per the El Dorado County Drainage Manual, Section 4. The Preliminary Drainage Report also indicates that the proposed stormwater facilities are designed to pass a 100-year event without damage to structures or flooding of roadways. The proposed project would result in peak flow increases during 100-year flood events of 2.7 cfs (cubic feet per second) at the Missouri Flat Road tie-in and 2.3 cfs at the north ditch (both existing storm drain systems). CTA conducted a site visit to the existing storm drain

systems and confirmed that adequate capacity exists for the increase in peak flows. Furthermore, under the proposed project, construction activities would adhere to County policies and regulations, specifically the County's Grading Ordinance and Storm Water Management Plan for Western El Dorado County, regarding erosion, ground instability, and water quality. Therefore, this impact is less than significant.

Significance Determination Before Mitigation

Less than significant.

Mitigation Measures from the MC&FP EIR

Measures addressing runoff water were included in the MC&FP EIR under Mitigation Measure 4.8-1: Runoff Volume. However, the mitigation measure was prescribed for the entire MC&FP area and all land use development projects in the MC&FP Area with the intention that drainage reports demonstrate that post-development stormwater peak discharge levels from the MC&FP remain at existing peak levels through the use of detention basins that would be incorporated into the designs of parking lots associated with retail development projects. Accordingly, this mitigation measure is not applicable to the proposed project.

Significance Determination After MC&FP Mitigation and Supporting Rationale

Less than significant.

Additional Mitigation Measures

None

EID Intertie Improvements

Implementation of the proposed EID Intertie Improvements would, upon completion, be located beneath roadway right-of-ways and would, therefore, not create or contribute to runoff water already created by the proposed and existing roadways. As such, no impacts to drainage capacity as a result of the EID Intertie Improvements would occur.

Water Quality

Impact 4.8-5	The project has the potential to substantially degrade water quality. (Less than Significant)
---------------------	--

Impact Analysis

Construction activities associated with the proposed project could temporarily impair water quality due to the potential for sediment, petroleum products, construction materials, and miscellaneous wastes to be discharged into receiving waters or the storm drainage system. Soils and associated contaminants that enter stream channels can increase turbidity, stimulate growth of algae, increase sedimentation of aquatic habitat, and introduce compounds that are potentially harmful or toxic to aquatic organisms.

Hydrology and Water Quality

Use of construction materials such as asphalt and concrete can result also lead to a release of pollutants. Due to the nature and the topography of the project area, short-term water quality impacts related to erosion and pollutant discharges would be expected to be fully mitigated using appropriate BMPs.

Construction activities for the proposed project would adhere to County policies and regulations, specifically the County's Grading Ordinance and Storm Water Management Plan for Western El Dorado County, regarding erosion and ground instability. To minimize erosion and the transport of foreign materials and topsoil during construction, the County's contractor would prepare a Stormwater Pollution Prevention Plan (SWPPP) for County approval and would implement best management practices (BMPs) for controlling the introduction of materials to stormwater and the flow of stormwater from within the construction area to off-site areas. At a minimum, the SWPPP will evaluate and provide BMPs to minimize project-related impacts. The SWPPP must be approved and accepted by the Regional Water Quality Control Board (RWQCB) prior to the commencement of any ground disturbing activities or any activities that have the potential to cause water pollution. The project contractor would submit a Notice of Construction (NOC) to the RWQCB, 30 days prior to the commencement of construction. During the rainy season (October 15 to April 15), temporary construction site BMPs would be implemented at all times to reduce or eliminate the potential for a non-storm water discharge to occur off of the ROW, to a surface body of water, drainage course or to a storm drainage system. The contractor will also identify, develop, implement, and maintain BMPs in accordance with a time schedule identified in the SWPPP to reduce or eliminate pollutants in storm water discharges and authorized non-storm water discharges from the project site during construction. The schedule would be identified in the SWPPP. Adherence to these requirements would ensure that the proposed project would not result in substantial effects on water quality. Impacts would be less than significant.

Significance Determination Before Mitigation

Less than significant impact.

Mitigation Measures from the MC&FP EIR

N/A

Significance Determination After MC&FP Mitigation and Supporting Rationale

Less than significant.

Additional Mitigation Measures

N/A

Significance Determination After Additional Mitigation and Supporting Rationale

Less than significant impact.

EID Intertie Improvements

EID's contract provisions would require compliance with BMPs identified by the NPDES permit and SWPPP. Implementation of the SWPPP would reduce temporary construction impacts to water quality resulting from the implementation of the EID Intertie Improvements to less than significant. Upon completion, the EID Intertie Improvements would be located beneath roadways surfaces and would therefore, not contribute to water quality degradation.

Housing Placement: Flood Hazard Area

Impact 4.8-6	The project could place housing within a 100-year flood hazard area mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map. (No Impact)
---------------------	---

Impact Analysis

Construction of the proposed project would not involve the development of housing. As delineated by the Flood Insurance Rate Map (FIRM) designated by the Federal Emergency Management Agency (FEMA), the project site is not located within a 100-year floodplain, nor is it located within a Special Flood Hazard Area (SFHA). Therefore, impacts associated with flood and water related hazards would not occur as a result of the proposed project.

Significance Determination Before Mitigation

No impact.

Mitigation Measures from the MC&FP EIR

N/A

Significance Determination After MC&FP Mitigation and Supporting Rationale

No impact.

Additional Mitigation Measures

No additional mitigation measures required.

Significance Determination After Additional Mitigation and Supporting Rationale

No impact.

EID Intertie Improvements

No impact.

Structures: Flood Hazard Area

Impact 4.8-7 **The project could place within a 100-year flood hazard area structures which would impede or redirect flood flows. (No Impact)**

Impact Analysis

According to the Flood Insurance Rate Map prepared by FEMA, the project site is not located within a 100-year flood hazard area and would not be inundated by a 100-year flood. Therefore, no impact would occur.

Significance Determination Before Mitigation

No impact.

Mitigation Measures from the MC&FP EIR

N/A

Significance Determination After MC&FP Mitigation and Supporting Rationale

No impact.

Additional Mitigation Measures

No additional mitigation measures required.

Significance Determination After Additional Mitigation and Supporting Rationale

No impact.

EID Intertie Improvements

No impact.

Flooding

Impact 4.8-8 **The project has the potential to expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of a failure of a levee or dam. (No Impact)**

Impact Analysis

The proposed project is not located in an area of flooding or in the vicinity of a levee or dam. Therefore, the proposed project would not expose people or structures to a significant risk of death involving flooding, including flooding as a result of the failure of a dam or levee.

Significance Determination Before Mitigation

No impact.

Mitigation Measures from the MC&FP EIR

N/A

Significance Determination After MC&FP Mitigation and Supporting Rationale

No impact.

Additional Mitigation Measures

No additional mitigation measures required.

Significance Determination After Additional Mitigation and Supporting Rationale

No impact.

EID Intertie Improvements

No impact.

Seiche, Tsunami, or Mudflow

Impact 4.8-9	The project has the potential to be subjected to inundation by seiche, tsunami, or mudflow. (No Impact)
---------------------	--

Impact Analysis

The project site is located substantially inland from the ocean and tsunamis pose no threat to the project site. A seiche is an oscillation of water within a closed impoundment such as a lake or reservoir caused by seismic activity of landsliding. The proposed site is not located in close proximity to a lake or reservoir and therefore seiche pose no threat to the project site. Therefore, the proposed project would not be subjected to inundation by seiche, tsunami, or mudflow.

Significance Determination Before Mitigation

No impact.

Mitigation Measures from the MC&FP EIR

N/A

Significance Determination After MC&FP Mitigation and Supporting Rationale

No impact.

Additional Mitigation Measures

No additional mitigation measures required.

Significance Determination After Additional Mitigation and Supporting Rationale

No impact.

EID Intertie Improvements

No impact.

4.9 - Land Use and Planning

This section describes existing land uses, the local planning environment, and the potential project-related effects on land uses and the planning environment. The content and analysis in this section are based on the El Dorado County General Plan (2004) and the General Plan EIR (EDAW 2003); the County Zoning Code Ordinance (2005, as amended 2008); environmental documents such as the Missouri Flat Area Master Circulation and Funding Plan (MC&FP) Program EIR (EDAW 1998); and other EIRs or negative declarations prepared for other projects in the vicinity of Diamond Springs.

4.9.1 - Summary

Significant Unavoidable Impacts

Project construction and use would not result in any significant unavoidable impacts to land use.

Potentially Significant Impacts

Project construction and use would not result in any potentially significant impacts to land use.

Less Than Significant Impacts

The proposed project would not divide an established community or be inconsistent with the El Dorado County General Plan. The project is not located within a habitat conservation area and would not displace housing. Accordingly, less than significant impacts regarding the division of an established community; compliance with applicable plans, policies or regulations; compliance with conservation plans; and, the displacement of community members would occur.

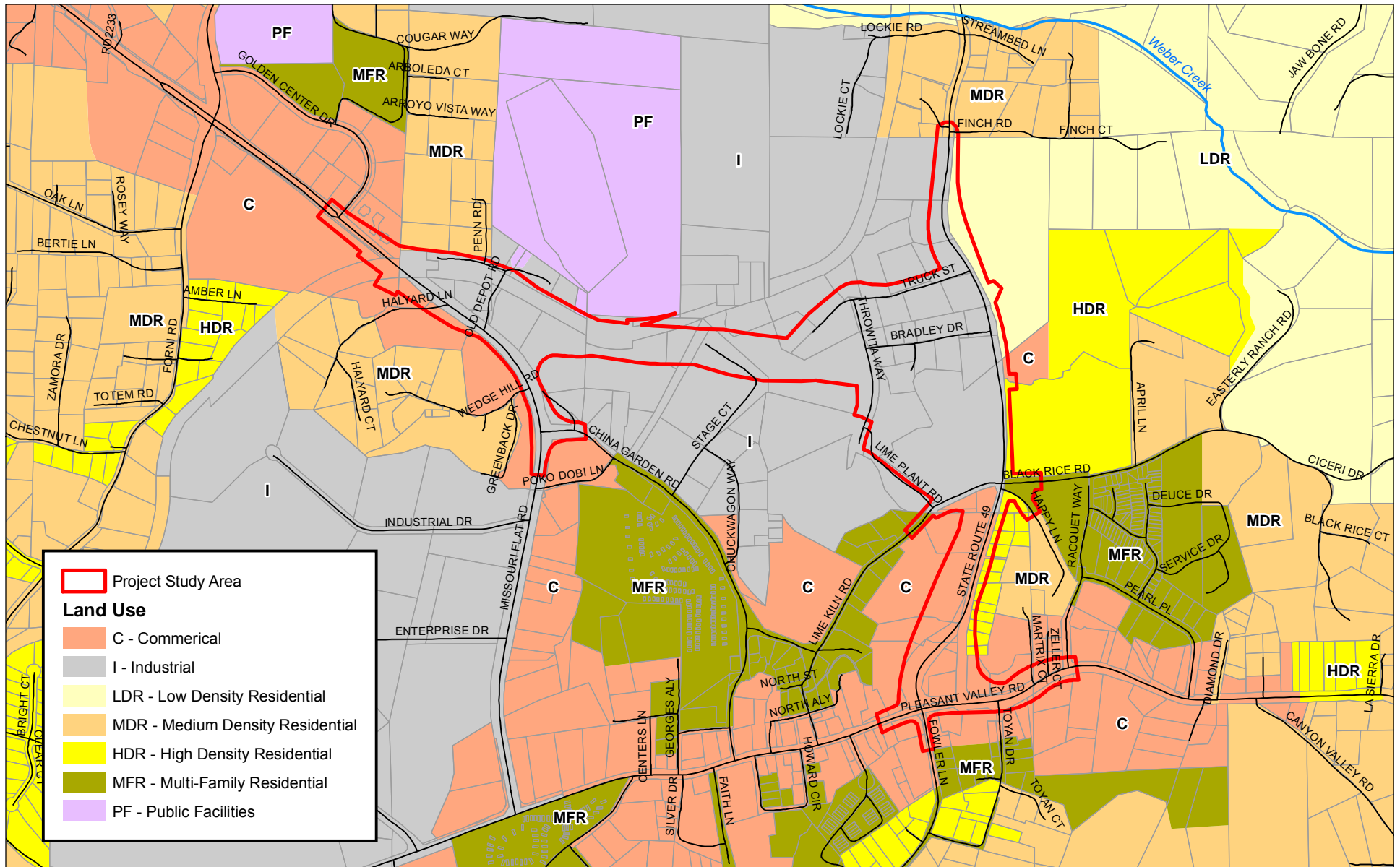
4.9.2 - Environmental Setting

The project area is part of the unincorporated Diamond Springs Community as identified in the El Dorado County General Plan (2004). The project study area includes land designated as Industrial, Commercial and Residential by the El Dorado County General Plan Land Use Diagram (El Dorado County 2004, Figure LU-1) (Exhibit 4.9-1). Land uses surrounding the project study area are primarily industrial and commercial, with sparse residential land use development and commercially designated parcels that are currently under rural residential use. The area north of the project study area is characterized by oak woodland with some light industrial and rural residential uses set back from the existing roads. The area south of the project study area is predominantly characterized by industrial and commercial use but also abuts some residential land uses (Exhibit 4.9-1).

The project study area includes parcels zoned as Industrial and Commercial. A small amount of the project study area is zoned for residential use (Exhibit 4.9-2). Parcels surrounding the project study area are zoned as Commercial, Industrial, Professional Office Commercial, Public Facility, and several types of residential zone types. A portion of the project study area intersects with the Sacramento-Placerville Transportation Corridor (SPTC) right-of-way, which has recently been developed as the El Dorado Multi-Use Trail (EDMUT).

Land Use and Planning

Table 4.9-1 summarizes the land use and zoning designations for the 83 assessor's parcel numbers (APNs) that intersect the project footprint (refer to Exhibit 3-4 for a depiction of the project footprint and affected parcels).



Source: El Dorado County 2007; MBA 2008.

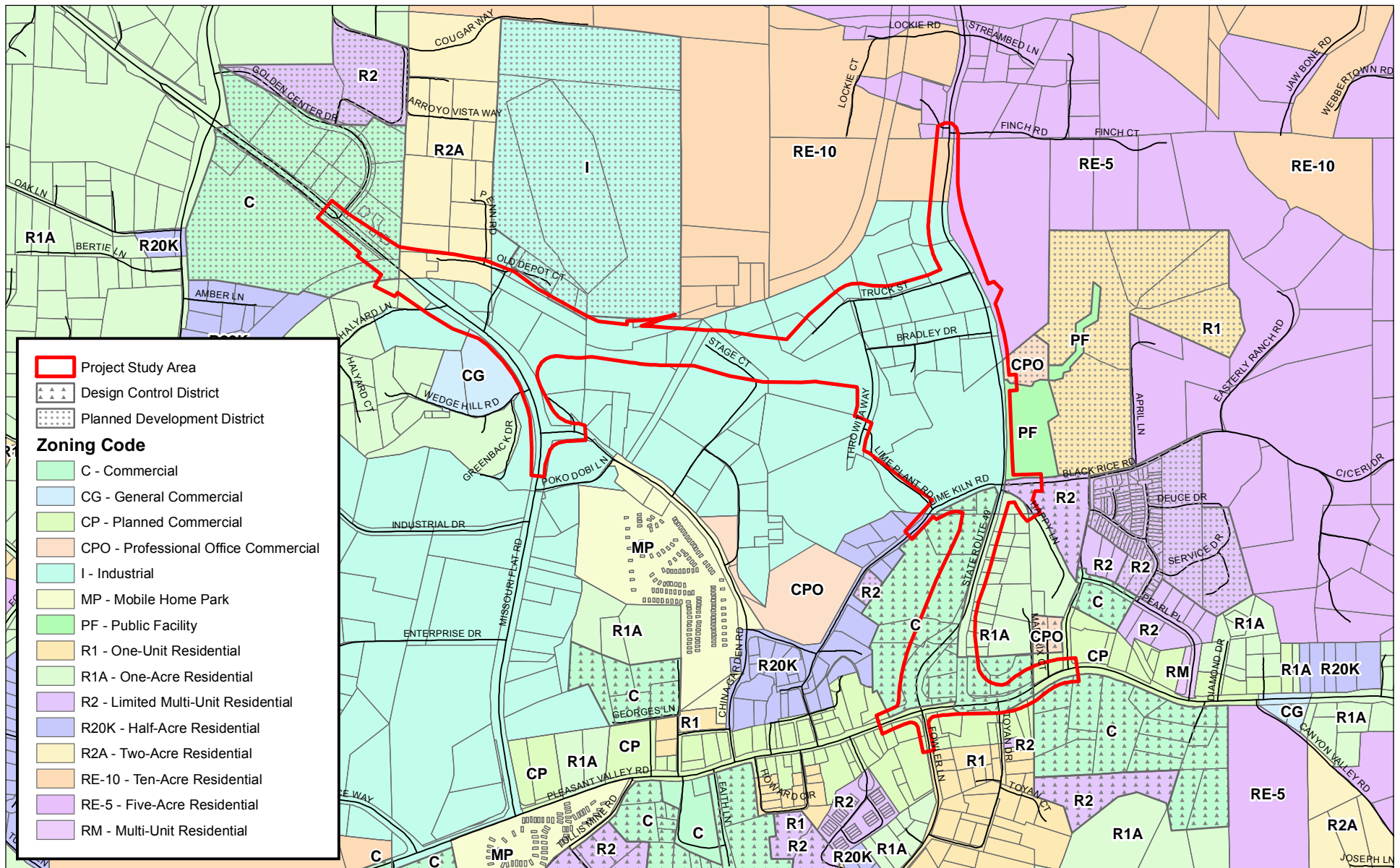


11730025 • 11/2009 | 4.9-1_Land_Use.mxd

Exhibit 4.9-1 Land Use

COUNTY OF EL DORADO DEPARTMENT OF TRANSPORTATION
DIAMOND SPRINGS PARKWAY PROJECT
ENVIRONMENTAL IMPACT REPORT

11-0448.C.333



Source: El Dorado County 2007; MBA 2008.



1,000 500 0 1,000
Feet

Michael Brandman Associates

11730025 • 11/2009 | 4.9-2_Zoning.mxd

Exhibit 4.9-2 Zoning

COUNTY OF EL DORADO DEPARTMENT OF TRANSPORTATION
DIAMOND SPRINGS PARKWAY PROJECT
ENVIRONMENTAL IMPACT REPORT

11-0448.C.335

Table 4.9-1: Project Land Use and Zoning Designations

Assessor's Parcel Number (APN)	Existing Land Use	Land Use Designation	
		General Plan	Zoning Code
051-250-04	Single-Family Residential	High Density Residential (HDR)	One-Acre Residential (R1A)
051-250-06	Single-Family Residential	Commercial (C)	Commercial District (C)
051-250-07	Vacant	Commercial (C)	Commercial District (C)
051-250-08	Vacant	Commercial (C)	Commercial District (C)
051-250-11	Multi-Family Residential (2-3 Units)	Industrial (I)	Industrial District (I)
051-250-12	Rural Residential	Industrial (I)	Industrial District (I)
051-250-13	Vacant	Industrial (I)	Industrial District (I)
051-250-18	Vacant	Industrial (I)	Industrial District (I)
051-250-19	Vacant	Industrial (I)	Industrial District (I)
051-250-20	Vacant	Industrial (I)	Industrial District (I)
051-250-21	Vacant	Industrial (I)	Industrial District (I)
051-250-22	Vacant	Industrial (I)	Industrial District (I)
051-250-23	Industrial (Improved)	Industrial (I)	Industrial District (I)
051-250-30	Offices	Industrial (I)	Industrial District (I)
051-250-31	Industrial (Improved)	Industrial (I)	Industrial District (I)
051-250-33	Vacant	Industrial (I)	Industrial District (I)
051-250-37	Warehouses, Mini-Storage	Industrial (I)	Industrial District (I)
051-250-39	Industrial (Improved)	Industrial (I)	Industrial District (I)
051-250-42	Warehouses, Mini-Storage	Industrial (I)	Industrial District (I)
051-250-46	Industrial (Improved)	Industrial (I)	Industrial District (I)
051-250-48	Industrial (Improved)	Industrial (I)	Industrial District (I)
051-250-51	Vacant	Industrial (I)	Industrial District (I)
051-250-54	Vacant	Industrial (I)	Industrial District (I)
051-250-55	Industrial (Improved)	Industrial (I)	Industrial District (I)
051-461-02	Rural Residential	Industrial (I)	Residential Estate 10-Acre (RE-10)
051-461-04	Vacant	Industrial (I)	Industrial District (I)
051-461-05	Vacant	Industrial (I)	Industrial District (I)
051-461-10	Industrial (Improved)	Industrial (I)	Industrial District (I)
051-461-11	Industrial (Improved)	Industrial (I)	Residential Estate 5-Acre (RE-5)

Table 4.9-1 (cont.): Project Land Use and Zoning Designations

Assessor's Parcel Number (APN)	Existing Land Use	Land Use Designation	
		General Plan	Zoning Code
051-461-12	Rural Residential	Low Density Residential (LDR)	Residential Estate 5-Acre (RE-5)
051-461-37	Vacant	Multi-Family Residential (MFR)	Limited Multi-Unit Residential (R2) - Design Control District
051-461-46	Industrial (Improved)	Industrial (I)	Industrial (I)
051-461-54	Vacant	Commercial (C)	One-Unit Residential (R1) - Planned Development District, Public Facilities (PF)
051-550-47	Vacant	Commercial (C), High Density Residential (HDR)	Professional Office Commercial District (CPO) and One-Unit Residential (R1) - Planned Development District, Public Facilities (PF)
054-341-04	Single-Family Residential	Multi-Family Residential (MFR)	One-Half Acre Residential (R20K)
054-341-06	Vacant	Multi-Family Residential (MFR)	One-Half Acre Residential (R20K)
054-342-15	Vacant	Commercial (C)	Commercial District (C)
054-342-20	Single-Family Residential	Commercial (C)	Commercial District (C)
054-342-21	Vacant	Commercial (C)	Commercial District (C)
054-342-22	Vacant	Commercial (C)	Commercial District (C)
054-342-23	Vacant	Commercial (C)	Commercial District (C)
054-342-24	Vacant	Commercial (C)	Commercial District (C)
054-342-25	Vacant	Commercial (C)	Commercial District (C)
054-342-26	Vacant	Commercial (C)	Commercial District (C)
054-342-27	Vacant	Commercial (C)	Commercial District (C)
054-351-02	Single-Family Residential	High Density Residential (HDR)	One-Acre Residential (R1A)
054-351-33	Vacant	Commercial (C)	Commercial District (C)
054-351-35	Vacant	Commercial (C)	Commercial District (C)
054-391-26	Commercial (Improved)	Commercial (C)	Planned Commercial (CP)
054-411-13	Vacant	Commercial (C)	Planned Commercial (CP)
054-411-46	Vacant	Commercial (C)	Planned Commercial (CP)
054-411-47	Vacant	Commercial (C)	Planned Commercial (CP)
054-422-01	Commercial	Commercial (C)	Planned Commercial (CP)

Table 4.9-1 (cont.): Project Land Use and Zoning Designations

Assessor's Parcel Number (APN)	Existing Land Use	Land Use Designation	
		General Plan	Zoning Code
097-010-01	Multi-Family Residential (2-3 Units)	Medium Density Residential (MDR)	One-Acre Residential (R1A)
327-010-02	Commercial	Commercial (C)	Commercial District (C)
327-010-03	Vacant	Industrial (I)	Two-Acre Residential (R2A)
327-010-04	Government Unassigned	Industrial (I)	Two-Acre Residential (R2A)
327-010-05	Single-Family Residential	Commercial (C)	One-Acre Residential (R1A)
327-010-06	Government Unassigned	Commercial (C)	One-Acre Residential (R1A)
327-240-19	Government Unassigned	Commercial (C)	Commercial District (C)
327-240-22	Government Unassigned	Commercial (C)	Commercial District (C)
327-260-05	Government Unassigned	Commercial (C)	One-Acre Residential (R1A)
327-260-06	Vacant	Commercial (C)	One-Acre Residential (R1A)
327-260-25	Commercial	Commercial (C)	Industrial District (I)
327-260-28	Single-Family Residential	Commercial (C)	General Commercial (CG)
327-260-39	Vacant	Commercial (C)	Industrial District (I)
327-270-02	Industrial (Improved)	Industrial (I)	Industrial District (I)
327-270-03	Multi-Family Residential (4+ Units)	Industrial (I)	Industrial District (I)
327-270-04	Rural Residential	Industrial (I)	Industrial District (I)
327-270-08	Retail	Commercial (C)	Industrial District (I)
327-270-18	Government Unassigned	Industrial (I)	Industrial District (I)
327-270-26	Vacant	Industrial (I)	Industrial District (I)
327-270-27	Light Manufacturing	Industrial (I)	Industrial District (I)
327-270-43	Industrial (Improved)	Industrial (I)	Industrial District (I)
327-270-46	Light Manufacturing	Industrial (I)	Industrial District (I)
327-270-48	Vacant	Industrial (I)	Industrial District (I)
327-270-49	Vacant	Industrial (I)	Industrial District (I)
327-270-50	Vacant	Industrial (I)	Industrial District (I)
327-300-08	Industrial (Improved)	Commercial (C)	Commercial District (C)
990-610-28	Road	Road	Right-of-Way
990-630-66	Road	Road	Right-of-Way
990-645-79	Road	Road	Right-of-Way
990-659-49	Road	Road	Right-of-Way

Source: El Dorado County Parcel Data Information System, 2009.

The 2004 General Plan Land Use Element (Policy 2.2.1.2) further defines the Industrial, Commercial and Residential land use designations as follows:

- **Industrial (I):** The purpose of this land use category is to provide for a full range of light and heavy industrial uses. Types of uses that would be permitted include manufacturing, processing, distribution, and storage. Incompatible, non-industrial uses, excluding support services, shall be prohibited. Industrial uses shall be restricted to industrial lands within, or in close proximity to, Community Regions and Rural Centers. Industrial lands in Rural Regions shall be constrained to uses which support on-site agriculture, timber resource production, mineral extraction, or other resource utilization. In the Rural Regions, no additional land shall be designated for industrial uses. This designation is considered appropriate within Community Regions, Rural Centers and, subject to the limitation described above, Rural Regions.
- **Commercial (C):** The purpose of this land use category is to provide a full range of commercial retail, office, and service uses to serve the residents, businesses, and visitors of El Dorado County. Mixed-use development of commercial lands within Community Regions and Rural Centers that combine commercial and residential uses shall be permitted, provided the commercial activity is the primary and dominant use of the parcel. The residential component of the project shall only be implemented following or concurrent with the commercial component. Numerous zone districts shall be utilized to direct specific categories of commercial uses to the appropriate areas of the County. Except as provided in Policy 2.2.2.3, this designation is considered appropriate only within Community Regions and Rural Centers.
- **Multifamily Residential (MFR):** This land use designation identifies those areas suitable for high-density, multifamily structures such as apartments, single-family attached dwelling units (i.e., air-space condominiums, townhouses) and multiplexes. Mobile home parks, as well as existing and proposed manufactured home parks, shall also be permitted under this designation. Lands identified as MFR shall be in locations with the highest degree of access to transportation facilities, shopping and services, employment, recreation, and other public facilities. The minimum allowable density is five dwelling units per acre, with a maximum density of 24 dwelling units per acre. The provision of single-family attached dwelling units in the MFR land use designation is subject to the use of planned development design concepts that may result in zipper-lot zero-lot line, cottage-type, or comparable developments. Except as provided in Policy 2.2.2.3, this designation is considered appropriate only within Community Regions and Rural Centers.
- **Low-Density Residential (LDR):** This land use designation establishes areas for single-family residential development in a rural setting. In Rural Regions, this designation shall provide a transition from Community Regions and Rural Centers into the agricultural, timber, and more rural areas of the County and shall be applied to those areas where infrastructure such

as arterial roadways, public water, and public sewer are generally not available. This land use designation is also appropriate within Community Regions and Rural Centers where higher density serving infrastructure is not yet available.

The maximum allowable density shall be one dwelling unit per 5.0 acres. Parcel size shall range from 5.0 to 10.0 acres. Within Community Regions and Rural Centers, the LDR designation shall remain in effect until a specific project is proposed that applies the appropriate level of analysis and planning and yields the necessary expansion of infrastructure.

- **Medium-Density Residential (MDR):** This land use designation establishes areas suitable for detached single-family residences with larger lot sizes which will enable limited agricultural land management activities. This designation shall be applied where the character of an area is single-family residences; where the absence or reduced level of infrastructure including roads, water lines, and sewer lines does not justify higher densities; where the topography poses a constraint to higher densities; and as a transitional land use between the more highly developed and the more rural areas of the County. The maximum allowable density shall be one dwelling unit per 1.0 acre. Parcel sizes shall range from 1.00 to 5.00 acres. Except as provided in Policy 2.2.2.3, this designation is considered appropriate only within Community Regions and Rural Centers.
- **High-Density Residential (HDR):** This land use designation identifies those areas suitable for intensive single-family residential development at densities from one to five dwelling units per acre. Allowable residential structure types include single-family attached (i.e., air-space condominiums, townhouses) and detached dwellings and manufactured homes. Except as provided in Policy 2.2.2.3, this designation is considered appropriate only within Community Regions and Rural Centers. Standard residential subdivisions shall maintain a density range from one to two dwelling units per acre. Residential subdivisions utilizing the planned development concept shall maintain a density range from one to five dwelling units per acre. Residential development of single-family attached dwelling units are to be designed to satisfy the upper range of the allowable density under this designation. Proponents of single-family detached or manufactured home projects consistent with the HDR designation shall not be subject to the Planned Development combining zone if their projects meet the criteria set forth in Policy 2.2.5.4 (Res. No. 298-98; 12/8/98).

The project study area also includes some parcels with a Design Control Combining District designation (see Table 4.9-1 and Exhibit 4.9-2). However, these guidelines are intended for private development and are not applicable to roadway projects undertaken by the County.

Roadway Acquisition

Land acquisitions could include negotiated payment, condemnation through eminent domain and /or dedication in fee or easement as a condition of development approvals. The County would temporarily utilize the property (APN 051-250-12) located between the proposed right-of-way and

Lime Kiln Road, west of SR-49, for construction staging and temporary access to the Materials Recovery Facility (MRF). Exhibit 3-4 shows the areas of proposed permanent right-of-way acquisition and temporary construction and road right-of-way easements necessary under both Phase 1 and Phase 2 of the project.

Permanent right-of-way acquisition may require relocation of businesses located on APNs 327-270-04, -18, -26, and -27, and APN 051-250-55. El Dorado County would compensate displaced businesses in conformance with Federal and state laws including the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Public Law 91-646, as amended April 2, 1987) and the California Uniform Relocation Act (California Government Code, Chapter 16, Section 7260, et seq.). These laws require that relocation assistance be provided to any person, business, or nonprofit organization displaced because of the acquisition of real property by a public entity for public uses. The Federal Uniform Relocation Act and California Relocation Assistance Act both require that, within a reasonable period of time prior to displacement, comparable replacement commercial properties must be made available or provided for each displaced person or business. Such assurance must be specifically given on any project requiring displacement.

El Dorado County DOT would carry out the relocation plan to help eligible displaced individuals and businesses move with as little inconvenience as possible. All rights and services provided under the Federal Uniform Relocation Act would be strictly adhered to. Businesses displaced as a result of the project would receive fair and equitable treatment and would not suffer disproportionate injuries as a result of programs (in this case, the proposed project) designed for the benefit of the public as a whole. Relocation resources would be made available to those displaced without discrimination. All relocations would be consistent with zoning and General Plan land use Designations.

Installation of the replacement waterline would occur within EID's permanent easement along SR-49, which was conveyed to the EID in February 2004 (pers. comm., Jim Hilton, Office of the General Counsel / Real Estate Services, 2009).

4.9.3 - Regulatory Framework

Local

El Dorado County General Plan

The El Dorado County General Plan provides for long-range direction and policy for the use of land within El Dorado County. The General Plan consists of the following nine elements: Land Use; Transportation and Circulation; Housing, Public Services and Utilities; Health, Safety, and Noise; Conservation and Open Space; Agriculture and Forestry; Parks and Recreation; and Economic Development.

Appendix J, General Plan Policies and Project Consistency Evaluation, of this Draft EIR provides a matrix that lists the policies determined to have relevance to this proposed project and provides a summary of the County's determination of project consistency with each relevant goal and policy. As shown in Appendix J, the project is consistent with all applicable goals and policies of the General Plan, including those related to land use and planning.

The proposed project was programmatically evaluated in the MC&FP EIR (EDAW 1998), which was based on the 1996 El Dorado County General Plan. On July 19, 2004, the El Dorado County Board of Supervisors adopted a new General Plan for the County. The proposed Parkway, which is referred to as the "Missouri Flat and Pleasant Valley Road Connector" in the 2004 General Plan, is listed as a planned four-lane divided road on the 2004 General Plan Circulation Map. The 2004 General Plan did not contemplate the precise road alignment of the proposed Parkway, but stated that a "Four-Lane Divided Road typically has a right-of-way width of 100 feet and a roadway width from curb to curb, including a 16-foot median, of 84 feet" (El Dorado County 2004).

El Dorado County Code, Title 17: Zoning Ordinance

The County's Zoning Ordinance establishes zoning districts and accompanying activity and development standards (El Dorado County Code 2005; as amended 2008), which must be consistent with the 2004 General Plan land use designations. El Dorado County is currently preparing an update to the Zoning Ordinance to be consistent with the 2004 General Plan land use designations. The Zoning Ordinance updates are accounted for in the following land use and zoning analysis; however, until it is approved, the 2005 edition is the current regulatory control for land use for the project. Exhibit 4.9-2 depicts existing zoning designations within the project study area.

4.9.4 - Project Impact Analysis

Methodology for Analysis

Michael Brandman Associates (MBA) evaluated the potential project-related land use and planning-related impacts by conducting a site reconnaissance of the project study area in March 2008 and by reviewing applicable land use documents. During the site reconnaissance, photographs of the project site and surrounding land uses were taken to document existing conditions. MBA also reviewed the El Dorado County General Plan and the County Zoning Ordinance to identify applicable policies and provisions that pertain to the proposed project.

The MC&FP EIR concluded that the Parkway was consistent with the 1996 General Plan (EDAW 1998). Although the 1996 General Plan goals, objectives, and policies concerning land use planning are substantially similar to the goals, objectives, and policies within the current 2004 General Plan, subtle differences could occur. Therefore, the impact analysis in this section evaluates the project for consistency with the current General Plan.

Thresholds of Significance

According to the CEQA Guidelines' Appendix G Environmental Checklist, to determine whether land use and planning impacts are significant environmental effects, the following questions are analyzed and evaluated. Would the project:

- a.) Physically divide an established community?
- b.) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?
- c.) Conflict with any applicable habitat conservation plan or natural community conservation plan?

Impact Statements and Mitigation Discussions

This section discusses potential impacts associated with the construction and use of the proposed project and provides mitigation measures where appropriate. The MC&FP EIR included a general analysis of the land use and planning setting of the MC&FP area, but the MC&FP EIR analysis was based on a version of the County General Plan that has since been replaced with the 2004 General Plan. Further, the MC&FP analysis was programmatic, and general. The MC&FP EIR impact assessment and mitigation measures are included where appropriate, since the proposed project must comply with regulations set forth by the prior programmatic-level EIR. Further analysis or mitigation required beyond that of the MC&FP EIR is included where necessary. Potential cumulative effects are discussed in Section 6.0 of this report.

Divide an Established Community

Impact 4.9-1:	The project has the potential to physically divide an established community. (Less than Significant)
----------------------	---

Impact Analysis

The MC&FP EIR addresses the issue of community identity within 1996 General Plan Objective 2.4.1. The Objective is substantially the same as Objective 2.4.1 of the 2004 General Plan, and, therefore, is discussed herein with regard to the MC&FP EIR analysis. As stated in the MC&FP EIR “[R]oadway improvements in the [project] area...would be consistent with Objective 2.4.1, because Weber Creek would remain undeveloped and serves as a natural and distinctive physical boundary between Placerville and the Missouri Flat Area” (EDAW 1998). Therefore, the physical separation between Placerville and the project area exists (including the proposed project) and would remain.

The proposed project involves construction of a new roadway and roadway improvements and does not include any residential or commercial development. Improvements to existing roadways would not result in the division of an established community. Construction of the proposed Parkway right-

of-way would be in an area currently containing existing structures associated with a cluster of industrial and commercial businesses, essentially dividing the area in half (Exhibit 3-2). However, the existing land uses and structures are non-residential in nature and non-dependant on one another; therefore, the division caused by the proposed Parkway is considered less than significant.

Existing roads within the project study area currently serve as linkages between residential communities. The proposed project would not block or impeded these linkages. Construction of the proposed Parkway would provide a beneficial, direct, and convenient linkage between the existing SR-49 corridor and the Missouri Flat Road corridor. Therefore, while the proposed project would divide an existing industrial/commercial area, it would also link areas that are currently divided by lack of appropriate and necessary transportation infrastructure. Resulting impacts would be less than significant.

Significance Determination Before Mitigation

Less than significant.

Mitigation Measures from the MC&FP EIR

N/A

Significance Determination After MC&FP Mitigation, and Supporting Rationale

Less than significant.

Additional Mitigation Measures

None.

Significance Determination After Additional Mitigation, and Supporting Rationale

Less than significant.

EID Intertie Improvements

Impacts resulting from the construction of the EID Intertie Improvements would not result in the division of an established community. Upon completion, the proposed EID infrastructure improvements would be located beneath SR-49 and the Parkway and, as such, would not divide an established community. No impacts would occur.

Conflict with Applicable Plans, Policies, or Regulations

Impact 4.9-2:	The project has the potential to conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect. (No Impact)
----------------------	---

Impact Analysis

The MC&FP EIR concluded that the project was consistent with 1996 General Plan and its land use plans, policies and regulations. Along with the other roadway improvements proposed in the

Land Use and Planning

MC&FP EIR, the project was part of a Master Circulation and Funding Plan established for the Missouri Flat Planned Community, as Policy 2.1.4.8 of the 1996 General Plan required.

Policy 2.1.4.8 was not included in the 2004 General Plan, and the 2004 General Plan no longer defines a “Missouri Flat Area Planned Community.” Despite the difference between the General Plans, the proposed project is included in the 2004 General Plan Circulation Element and is therefore consistent with the Plan. Thus, the removal of Policy 2.1.4.8 from the current General Plan does not demonstrate a project inconsistency.

Appendix J, General Plan Policies and Project Consistency Evaluation, of this Draft EIR provides a matrix which lists the 2004 General Plan goals and policies determined to have relevance to this proposed project and provides a summary of the County’s determination of the project consistency with each relevant goal and policy. As shown in Appendix J, the project is consistent with all applicable goals and policies of the General Plan. Therefore, no impacts would occur.

Significance Determination Before Mitigation

No impact.

Mitigation Measures from the MC&FP EIR

N/A

Significance Determination After MC&FP Mitigation, and Supporting Rationale

No impact.

Additional Mitigation Measures

No mitigation is necessary.

Significance Determination After Additional Mitigation, and Supporting Rationale

As discussed in Appendix J, the proposed project would comply with all applicable goals and policies of the El Dorado General Plan. As such, no impact would occur.

EID Intertie Improvements

Impacts resulting from the EID Intertie Improvements regarding consistency with the General Plan would be similar to those for the roadway construction as described above. Upon completion, the proposed EID Intertie Improvements would increase water service capacity to the surrounding areas consistent with growth authorized by the General Plan and accompanying General Plan EIR. No impacts would occur.

Conflict with Conservation Plans

Impact 4.9-3: **The project has the potential to conflict with an applicable habitat conservation plan or natural communities conservation plan. (Less than Significant)**

Impact Analysis

The MC&FP EIR's Land Use Section, as well as its Biological Resources Section, did not address possible conflicts with existing conservation plans. The proposed project is not located in an area covered by any approved habitat conservation plan, natural community conservation plan, or other conservation plan. However, the County is in the process of preparing an Integrated Natural Resources Management Plan (INRMP), as required under Section 7.4.2.8 of the General Plan. Initial INRMP inventory mapping has been completed, and riparian habitat has been identified adjacent to the project study area. The County has accepted a proposal for preparation of the INRMP and completion of the INRMP is anticipated to occur in late 2010. Because the INRMP is not yet approved, the proposed project would not be in conflict and impacts would be less than significant.

Mitigation Measures from the MC&FP EIR

N/A

Significance Determination After MC&FP Mitigation, and Supporting Rationale

Since the proposed project is not located in an adopted habitat conservation plan or natural community conservation plan area, impacts would be less than significant.

Additional Mitigation Measures

N/A

Significance Determination After Additional Mitigation, and Supporting Rationale

Since the proposed project is not located in an adopted habitat conservation plan or natural community conservation plan area, impacts would be less than significant.

EID Intertie Improvements

Impacts resulting from the EID Intertie Improvements regarding conflict with conservation plans would be similar to those for the roadway construction, as described above. The proposed Intertie Improvements would be located beneath SR-49 and the Parkway and, as such, would not affect an area currently covered by an adopted habitat conservation plan or natural communities conservation plan. No impacts would occur.

4.10 - Noise

This section describes the existing noise setting and potential effects from the proposed project's construction and use. Descriptions and analysis in this section are based on information contained in the Environmental Noise Assessment for the Diamond Springs Parkway Project (Bollard Acoustical Consultants, Inc. 2009), which is included in this EIR as Appendix K, Environmental Noise Assessment. This section summarizes the information included in that technical report.

4.10.1 - Summary

Significant Unavoidable Impacts

Construction and use of the proposed project would not result in any significant unavoidable impacts on noise.

Potentially Significant Impacts

The proposed project has the potential to result in the exposure of persons to or generation of noise levels in excess of standards established in the County's general plan or noise ordinance, or applicable standards of other agencies; result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the proposed project; and result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the proposed project. Mitigation measures have been included in this section to reduce impacts to a less than significant level.

Less Than Significant Impacts

Construction and use of the proposed project would result in less than significant impacts related to excessive groundborne vibrations.

4.10.2 - Environmental Setting

The existing ambient noise environments at residential uses in the project area are defined primarily by traffic operations on SR-49/Diamond Road and other local area roadways. To quantify the existing ambient noise environments in the project vicinity, 24-hour noise level measurement surveys were conducted at two locations in the project study area. Measurement sites were located at 4000 State Route 49 (SR-49) (Site 1) and 4151 SR-49 (Site 2). Ambient noise exposure at Sites 1 and 2 during the 24-hour noise level measurement periods were 72 decibel (dB) day-night average noise level (L_{dn}) and 63 dB L_{dn} , respectively. The ambient noise level measurement surveys revealed that existing noise levels at these receiver locations are elevated due to their proximity to SR-49/Diamond Road (and Bradley Drive for Site 1). Existing noise levels at these properties exceed the County's 60 dB L_{dn} noise exposure criterion.

4.10.3 - Regulatory Framework

Local

El Dorado County General Plan

Appendix J of this Draft EIR provides a matrix that lists the policies determined to have relevance to this proposed project and provides a summary of the County's determination of project consistency with each relevant goal and policy. As shown in Appendix J, the proposed project is consistent with all applicable goals and policies of the General Plan, including those related to noise.

The following provides a general overview of the existing regulations established by the El Dorado County General Plan - Public Health, Safety, and Noise Element (July 2004, Amended March 2009).

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.

The El Dorado County General Plan establishes land use compatibility criteria for various community land uses. For noise generated by transportation noise sources such as traffic, the General Plan specifies that noise sensitive land uses are compatible with exterior noise levels of up to 60 dB L_{dn} without the need for noise mitigation. This criterion is applied at outdoor activity spaces (e.g., backyards). For residential uses fronting the traffic noise source(s), a noise level limit of 65 dB L_{dn} is applied at the closest building façades. The County may allow an exterior noise level of up to 65 dB L_{dn} at outdoor activity areas provided that available exterior noise level reduction measures have been implemented and interior noise levels satisfy the applicable standard.

The County's interior noise level criterion of 45 dB L_{dn} is specified in the General Plan for residential land uses exposed to transportation noise sources. The intent of this interior noise level standard is to provide a suitable environment for indoor communication and sleep.

Policy 6.5.1.11 The standards outlined in Tables 6-3, 6-4, and 6-5 shall apply to those activities associated with actual construction of a project as long as such construction occurs between the hours of 7 a.m. and 7 p.m., Monday through Friday, and 8 a.m. and 5 p.m. on weekends, and on federally recognized holidays. Exceptions are allowed if it can be shown that construction beyond these times is necessary to alleviate traffic congestion and safety hazards.

The noise level criteria presented in Table 4.10-1 (Table 6-3 of the General Plan, as referenced above in Policy 6.5.1.11) apply to activities associated with the construction of a given project. It is expected that most project construction would occur between the hours of 7 a.m. and 7 p.m., Monday thru Friday, and 8 a.m. and 5 p.m. on weekends and federally recognized holidays. It is assumed that the criteria summarized in Table 4.10-1 would apply mostly to noise sensitive uses (e.g., residential).

Table 4.10-1: Construction Noise Exposure Limits - Community Regions and Adopted Plan Areas

Land Use	Time Period	Noise Level (dBA)	
		L_{eq}	L_{max}
Residential	7 a.m.-7p.m.	55	75
	7 p.m.-10 p.m.	50	65
	10 p.m.-7 a.m.	45	60
Commercial and Public	7 a.m.-7 p.m.	70	90
	7 p.m.-7 a.m.	65	75
Industrial	Any Time	80	90
Note: dBA = A-weighted decibel Source: Table 6-3 of the El Dorado County General Plan (July 2004) - Public Health, Safety, and Noise Element.			

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

- a) Where existing or projected future traffic noise levels are less than 60 dBA L_{dn} at the outdoor activity areas of residential uses, an increase of more than 5 dBA L_{dn} 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 L_{dn} at the outdoor activity areas of residential uses, an increase of more than 3 dBA L_{dn} 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 L_{dn} at the outdoor activity areas of residential uses, an increase of more than 1.5 dBA L_{dn} caused by a new transportation noise will be considered significant.

The potential increase in traffic noise exposure due to the construction and use of the proposed project is a factor in determining significance. Research into the human perception of changes in sound level indicates the following.

- A 3 dB change is barely perceptible,
- A 5 dB change is clearly perceptible, and
- A 10 dB change is perceived as being twice or half as loud.

A limitation of using a single noise level increase value to evaluate noise impacts is that it fails to account for pre-project noise conditions. Table 4.10-2, which is offered as impact criteria within

Policy 6.5.1.12 of the El Dorado County General Plan – Public Health, Safety, and Noise Element, is based on recommendations made in August 1992 by the Federal Interagency Committee on Noise (FICON). The recommendations are based on studies that relate aircraft noise levels to the percentage of persons highly annoyed by the noise. Although the FICON recommendations were specifically developed to assess aircraft noise impacts, it has been asserted that they are applicable to all sources of noise described in terms of cumulative noise exposure metrics such as the L_{dn} . Specifically, they provide good correlation to transportation-related noise sources.

An increase in the traffic noise levels becomes more significant as the ambient noise levels increase. For instance, a significant increase in traffic noise levels is expected to be 1.5 dB when the existing traffic noise levels exceed 65 dB L_{dn} . However, a significant increase in traffic noise levels is expected to be 5 dB when the Existing traffic noise levels are less than 60 dB L_{dn} . In other words, as ambient noise levels increase, a smaller increase in noise resulting from the project is sufficient to cause significant annoyance.

Table 4.10-2: Significance of Changes in Cumulative Noise Exposure

Existing Noise Level Without Project (L_{dn})	Increase Required for Significant Impact
<60 dB	+5.0 dB or more
60-65 dB	+3.0 dB or more
>65 dB	+1.5 dB or more
Source: Federal Interagency Committee on Noise (FICON) and the El Dorado County General Plan (July 2004)	

Noise impacts associated with the proposed project would be considered significant if they would expose existing noise sensitive land uses to a traffic noise level increase consistent with Table 4.10-2.

4.10.4 - Project Impact Analysis

Methodology for Analysis

The perceived loudness of sound is dependent on many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by the A-weighting network. There is a strong correlation between A-weighted sound levels (expressed as dBA) and the way we perceive noise. For this reason, the A-weighted sound level has become a standard tool for environmental noise assessment. All noise levels reported below are A-weighted.

Community noise is commonly described in terms of the “ambient” noise level, which is defined as the all encompassing noise level associated with a given noise environment. A common statistical tool used to measure the ambient noise level is the average, or equivalent sound level (L_{eq}), which corresponds to a steady-state, A-weighted sound level containing the same total energy as a time-

varying signal over a given time period (usually one hour). The L_{eq} is the foundation for the day/night average level (L_{dn}). The L_{dn} is based on the average noise level over a continuous 24-hour period, with a +10 dB weighting (penalty) applied to noise occurring during nighttime hours (10 p.m.- 7 a.m.). The nighttime penalty is based on the assumption that people react to nighttime noise exposures as if they are twice as loud as daytime exposures. Because L_{dn} represents a 24-hour average, it tends to disguise short-term variations in the noise environment.

This impact analysis was conducted within the context of the California Environmental Quality Act (CEQA, California Public Resources Code Sections 21000, et seq.). The equipment type, calibration methods, and assumptions used in the Environmental Noise Assessment can be found in Appendix K of this Draft EIR.

Thresholds of Significance

According to the CEQA Guidelines' Appendix G Environmental Checklist, to determine whether noise impacts are significant environmental effects, the following questions are analyzed and evaluated. Would the project result in:

- a.) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
- b.) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?
- c.) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?
- d.) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?
- e.) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?
- f.) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

Impact Statements and Mitigation Discussions

This section summarizes the findings of the Environmental Noise Assessment prepared by Bollard Acoustical Consultants (BAC 2009). This section discusses the potential impacts associated with the construction and use of the proposed project and provides mitigation measures where appropriate. The MC&FP EIR impact assessment and mitigation measures are included where appropriate, since the proposed project must comply with applicable mitigation set forth by the MC&FP EIR. Further analysis or mitigation required beyond that of the MC&FP EIR is included where necessary.

Potential cumulative effects are discussed in Section 6, CEQA Required Conclusions, of this Draft EIR.

Noise Levels in Excess of Standards

Impact 4.10-1	The project has the potential to result in the exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. (Potentially Significant)
----------------------	--

Impact Analysis

Exterior Traffic Noise Exposure

Traffic noise levels were predicted at 100 feet from the roadway centerlines for the Existing (2010), Existing (2010)+Project, Future (2030), and Future (2030)+Project traffic scenarios. Results of the proposed project's traffic noise modeling are summarized in Table 4.10-3.

Table 4.10-3: Predicted Traffic Noise Exposure Levels at 100 Feet from Roadway Centerlines Diamond Springs Parkway EIR - El Dorado County, California

Roadway	Segment	L _{dn} , dB (Δ re: Existing)	
		Existing (2010)+Project	Future (2030)+Project
Missouri Flat Rd.	Golden Center Dr. to Golden Springs Pkwy.	66 (0)	69 (0)
	Golden Springs Pkwy. to China Garden Rd.	63 (-3)	65 (-4)
	China Garden Rd. to SR-49/Pleasant Valley Rd.	63 (-1)	65 (-2)
SR-49/Diamond Rd.	North of Truck St.	65 (+1)	65 (0)
	Truck St. to Bradley St.	65 (+1)	65 (+1)
	Bradley St. to Diamond Springs Pkwy.	65 (+1)	65 (0)
	Diamond Springs Pkwy. to Lime Kiln Rd.	67 (+3)	67 (+2)
	Lime Kiln Rd. to SR-49/Pleasant Valley Rd.	67 (+3)	67 (+3)
SR-49/Pleasant Valley Rd.	SR-49/Pleasant Valley Rd. to China Garden Rd.	65 (-3)	66 (-2)
	China Garden Rd. to Missouri Flat Rd.	65 (-3)	65 (-3)
	West of Missouri Flat Rd.	66 (-1)	66 (-1)
Pleasant Valley Rd.	SR49/Pleasant Valley Rd. to Racquet Way	63 (+1)	64 (0)
	East of Racquet Wy.	61 (0)	62 (+1)
China Garden Rd.	Missouri Flat Rd. to SR-49/Pleasant Valley Rd.	55 (0)	57 (0)
Lime Kiln Rd.	West of SR-49/Diamond Rd.	54 (+1)	55 (0)
Black Rice Rd.	East of SR-49/Diamond Rd.	53 (+3)	53 (+2)

Table 4.10-3 (cont.): Predicted Traffic Noise Exposure Levels at 100 Feet from Roadway Centerlines Diamond Springs Parkway EIR - El Dorado County, California

Roadway	Segment	L _{dn} , dB (Δ re: Existing)	
		Existing (2010)+ Project	Future (2030)+ Project
Flower Ln.	South of SR-49/Pleasant Valley Rd.	55 (0)	56 (0)
<i>Diamond Springs Pkwy.</i>	Missouri Flat Rd. to Throwita Wy.	63 (na)	64 (na)
	<i>Throwita Wy. to SR-49/Diamond Rd.</i>	63 (na)	64 (na)
<p>Note: More site-specific analyses are provided for residential receivers adjacent to the <i>bold and italicized</i> roadway segments. Sources: FHWA-RD-77-108, Kimley-Horn and Associates, Inc. (March 26, 2009), and Bollard Acoustical Consultants, Inc.</p>			

Exterior Traffic Noise Outside of the Project Area

Based on the information presented in Table 4.10-3, project-related traffic noise level changes *outside of the project area* would not significantly impact existing noise sensitive receivers. In fact, in many cases, the proposed project would reduce traffic volumes on these area roadways resulting in lower traffic noise exposure relative to the existing condition. It is noted that traffic noise exposure from SR-49/Diamond Road in the project area is not expected to change substantially between 2010 and 2030, even though overall traffic volumes are expected to substantially increase. This result is directly related to an assumed drop in heavy truck percentage of the overall traffic volume (percent average daily trips [ADT]) over time (refer to Appendix K for modeling assumptions). Since heavy truck operations are louder than medium truck or auto operations, the expected decrease in percent heavy trucks would offset the overall traffic volume increase, resulting in little to no change in traffic noise exposure.

Project-related traffic noise level increases on local roadways outside of the project area would not be expected to exceed +1 dB would actually be expected to decrease traffic noise exposure along many nearby roadways by as much as -4 dB. Therefore, project-related traffic noise exposure changes outside of the project area are expected to be less than significant.

Exterior Traffic Noise within the Project Area

Within the project study area, project-related traffic noise level increases may be significant at 11 existing residential uses on SR-49/Diamond Road between Lime Kiln Road and SR-49/Pleasant Valley Road. Accordingly, specific traffic noise assessments were completed for these residential receivers. A site-specific traffic noise assessment was also completed for the residence on the southwest corner of Bradley Drive and SR-49/Diamond Road, just north of the future Parkway intersection of SR-49/Diamond Road. Please see Table 4.10-4 for a summary of these specific traffic noise assessment. Results of each exterior traffic noise analysis are discussed below.

Exterior Traffic Noise Exposure at 4000 SR-49 (APN 051-250-11)

Traffic noise exposure from SR-49/Diamond Road at a distance of 75 feet from the Roadway centerline (assumed building setback distance) was calculated to be approximately 67 dB L_{dn} for the Existing (2010)+Project, and Future (2030)+Project traffic scenarios. This is a 2 dB increase in traffic noise exposure relative to the level predicted at 100 feet shown in Table 4.10-3.

The residential property at 4000 SR-49 (APN 051-250-11) would experience new noise exposure from the proposed project. Existing (2010)+Project and Future (2030)+Project noise exposure from project traffic would be approximately 59 dB L_{dn} and 60 dB L_{dn} , respectively, at a distance of 190 feet from the roadway centerline. The distance of 190 feet is the approximate existing setback of the center of the residence's back/side yard relative to the centerline of the future Parkway. These noise exposure levels are 4 dB less than the levels at 100 feet shown in Table 4.10-3.

Combined SR-49/Diamond Road and Parkway traffic noise exposure would be approximately 69 dB L_{dn} and 70 dB L_{dn} for the Existing (2010)+Project and Future (2030)+Project scenarios, respectively. These noise exposure levels represent a calculated, project-related, traffic noise level increase of 1-2 dB. Project traffic noise exposure may exceed the 1.5 dB threshold under the Existing (2010)+Project condition, producing a potentially significant long-term traffic noise impact. Please see Table 4.10-4, below, for a summary of the traffic noise level assessment. The use of noise-reducing paving materials for the impacted areas is a feasible means of achieving a 3-5 dB decrease in traffic noise and reducing the potential for adverse public reaction to future traffic noise levels on these roadways. Accordingly, the use of noise-reducing paving materials has been incorporated in to Mitigation Measure 4.10-1a, which would reduce noise impacts at this location to a less than significant level.

Exterior Traffic Noise Exposure at Residences on the East Side of SR-49/Diamond Road between Lime Kiln Road and SR-49/Pleasant Valley Road

Existing (2010) and Future (2030) traffic noise exposure at the 10 studied residences was estimated to be 69 dB L_{dn} at a existing building setback of 50 feet from the centerline of SR-49/Diamond Road. As part of the proposed project, the existing SR-49/Diamond roadway alignment would be moved to the west to accommodate a frontage road for the residences in this area; resulting in a SR-49/Diamond Road's centerline at approximately 90 feet from the closest residential structures. A traffic noise level change of approximately -4 dB would be expected as a result of the new SR-49/Diamond Road alignment. Project-related traffic volume increases on the roadway would add to the traffic noise exposure by approximately 3 dB (as shown in Table 4.10-3). Therefore, an overall traffic noise level change of approximately -1 dB would be experienced by the nearest residences as a result of the proposed project. Existing (2010)+Project and Future (2030)+Project traffic noise exposure at the closest residential building facades to the new SR-49/Diamond Road alignment would be approximately 68 dB L_{dn} . From a traffic noise perspective, residences to the east of the re-aligned Highway would be expected to benefit from the proposed project and impacts would be less than significant. This traffic noise assessment is summarized in Table 4.10-4, below.

Exterior Traffic Noise Exposure at 4160 SR-49 (APN 051-342-20)

As shown in Table 4.10-3, the proposed project would be expected to produce a 3 dB traffic noise level increase at an established reference distance from the centerline of SR-49/Diamond Road between Lime Kiln Road and SR-49/Pleasant Valley Road. The current distance from the centerline of the Highway to the residential outdoor activity area (pool area) to the west is approximately 125 feet. As part of the proposed project, the roadway alignment would be moved to the west approximately 40 feet in the vicinity of 4160 SR-49 (APN 051-342-20) (approximately 85 feet from the center of the pool area to the centerline of SR-49). The resulting traffic noise exposure increase due to the reduced distance would be approximately 3 dB, resulting in an overall project-related traffic noise level increase of 6 dB at the outdoor activity area. This preliminary assessment does not account for the noise attenuation provided by the residence's existing elevation above the roadway or the existing residential privacy wall associated with this residential property.

This residence is elevated above the existing and proposed future SR-49/Diamond Road by approximately 24 feet and includes a 6-7 foot high wood-framed/stucco privacy wall. The privacy wall functions as a de facto noise barrier because it mitigates existing, and presumably, future traffic noise exposure for users of the backyard/pool area. Noise barrier calculations using the FHWA Model methodology were used to determine the noise attenuation/insertion loss provided by the property elevation in relation to the roadway and the 6-foot high privacy wall. The noise attenuation provided was calculated to be approximately 11 dB with the existing roadway alignment and approximately 14-15 dB with the proposed project alignment. Given this attenuation and applying the appropriate distance offset (+3 dB), Existing (2010)+Project and Future (2030)+Project traffic noise exposure within the primary outdoor activity area was calculated to be approximately 54 dB L_{dn} . As shown, project-related traffic noise level increases of 2-3 dB would be expected at this residence. These levels do not exceed the applicable +5 dB threshold for significance and impacts would be less than significant. Please see Table 4.10-4 for a summary of this traffic noise assessment.

In summary, project-related traffic noise level changes outside of the project area would not significantly impact existing noise sensitive receivers. In fact, in many cases, the proposed project would reduce traffic volumes on these area roadways resulting in lower traffic noise exposure relative to the existing condition. Project-related traffic noise level changes within the project area would require mitigation for the residence located at 4000 SR-49 (APN 051-250-11), be beneficial for residences on the east side of SR-49/Diamond Road, and be less than significant for the residence at 4160 SR-49 (APN 051-342-20).

**Table 4.10-4: Summary of Noise Level Calculations
Diamond Springs Parkway EIR - El Dorado County, California**

Receiver (Source)	Traffic Scenario	Level at 100 feet, dB L _{dn} ¹	Offsets/Adjustments to Levels at 100 feet			Level, dB L _{dn} ^{2,3}	Impact (Y/N)
			Distance	Topo/ Shielding	Cal./Meas.		
4000 SR-49 (SR-49/Pkwy)	Existing (2010)	64	+2	0	0	66	n/a
	Future (2030)	65	+2	0	0	67	n/a
	Existing (2010)+Project	65/63	+2/-4	0/0	0/0	67/59 (68)	Y
	Future (2030)+Project	65/64	+2/-4	0/0	0/0	67/60 (68)	N
SR-49 - East (SR-49)	Existing (2010)	64	+5	0	0	69	n/a
	Future (2030)	64	+5	0	0	69	n/a
	Existing (2010)+Project	67	+1	0	0	68	N
	Future (2030)+Project	67	+1	0	0	68	N
4160 SR-49 (SR-49)	Existing (2010)	64	-2	-11	0	51	n/a
	Future (2030)	64	-2	-11	0	51	n/a
	Existing (2010)+Project	67	+1	-14	0	54	N
	Future (2030)+Project	67	+1	-14	0	54	N
Notes: ¹ Refer to Table 4.10-3. Level calculated at 100 feet not accounting for any offsets or adjustments. Levels represent SR-49/Parkway. ² Level calculated at receiver outdoor activity area or building setback accounting for offsets/adjustments. ³ Levels for 4151 SR-49 represent noise exposure or offsets/adjustments for SR-49/Parkway (SR-49+Parkway).							

Interior Traffic Noise Exposure

Standard residential construction will generally provide at minimum 25 dB of exterior-to-interior noise level reduction when exterior windows and doors are fully closed. This exterior-to-interior noise level reduction is a worst-case conservative assumption because newer homes generally provide 30 to 35dB of exterior-to-interior noise level reduction. According to the El Dorado County Assessor's office the effective year built of houses near SR-49 range from 1945 to 1973, and it would therefore be acceptable to use the 25dB exterior-to-interior noise level reduction assumption. Accordingly, to exceed the applicable interior noise exposure limit (45 dB L_{dn}), exterior noise exposure would need to exceed 70 dB L_{dn} .

As presented above, exterior traffic noise exposure would be no higher than approximately 69 dB L_{dn} at residential structures in the project area. Therefore, with exterior windows and doors fully closed, interior noise exposure associated with traffic on project-area roadways would be limited to 44 dB L_{dn} or less and impacts would be less than significant.

Project Construction

During the construction phases of the proposed project, noise from construction equipment would be expected to temporarily add to the noise environment in the immediate project vicinity. Activities involved in construction of the proposed project would likely generate maximum noise levels, as indicated in Table 4.10-5, ranging from 77-85 dB at a distance of 50 feet. Construction activities would be temporary in nature and are anticipated to occur between 7 a.m.-7 p.m., Monday thru Friday, and 8 a.m.-5 p.m. on weekends and federally recognized holidays. Still, existing residences in the project area would likely be affected by this noise.

Table 4.10-5: Construction Equipment Noise Levels at 50 Feet

Type of Equipment dB	L_{max} , dB	Hourly L_{eq} , dB/% Use
Backhoe	78	74/40%
Concrete Mixer Truck	79	75/40%
Dump Truck	77	73/40%
Front End Loader	79	75/40%
Pneumatic Tools	85	82/50%
Air Compressor	78	74/40%
Source: Roadway Construction Noise Model V 1.0, U.S. Department of Transportation		

Noise would also be generated during the proposed project's construction by increased truck traffic on local area roadways. A significant project-generated noise source would be truck traffic associated with the transport of heavy materials and equipment to and from the construction sites.

Noise

Due to the proximity of project construction equipment to existing residences on SR-49/Diamond Road, which could be within 50 feet of residential buildings (due to roadway shoulder work), project construction would be expected to produce maximum noise exposure as high as 85 dB (L_{max}). This level exceeds the applicable daytime construction noise criterion by 10 dB. The installation of a temporary noise barrier between the construction areas and affected residences would normally be recommended to mitigate this noise exposure; however, ingress/egress for the residential properties would make this an unlikely and ineffective effort. Therefore, temporary construction noise would be considered potentially significant. Mitigation is proposed that would require the project contractors to comply with all applicable local regulations regarding noise suppression and attenuation and shall require that engine-driven equipment be fitted with mufflers according to manufacturers' specifications. Incorporation of Mitigation Measure 4.10-1b will reduce potential construction impacts to less than significant.

In summary, operational noise impacts at a single residence located at 4000 SR-49 (APN 051-250-11) and construction noise impacts at residences along SR-49/Diamond Road would result in potentially significant impacts.

Significance Determination Before Mitigation

Potentially significant impact.

Mitigation Measures from the MC&FP EIR

Mitigation measures set forth in the MC&FP EIR applied to retail projects and are not directly applicable to the proposed roadway construction and improvements. As such, the MC&FP mitigation is not applicable to the proposed project. Furthermore, the proposed project has conducted a project-specific acoustical analysis, the results of which is summarized above.

Significance Determination After MC&FP Mitigation and Supporting Rationale

Potentially significant impact.

Additional Mitigation Measures

MM 4.10-1a Noise-reducing pavement shall be installed at SR-49/Diamond Road between the north end of the Bradley Drive intersection and the south end of the future Parkway intersection. If noise-reducing pavement is not installed, alternative noise reduction methods shall be agreed upon by the El Dorado County Department of Transportation and Caltrans and implemented in such a way to offer the same or greater noise reduction levels as the noise-reducing pavement.

MM 4.10-1b The County shall require that construction contractors comply with all applicable local regulations regarding noise suppression and attenuation and shall require that engine-driven equipment be fitted with mufflers according to manufacturers'

specifications. The following requirements shall be included in the construction specifications:

- a) Limit construction activities to the hours of 7:00 a.m. to 7:00 p.m. on weekdays and the hours of 8:00 a.m. to 5:00 p.m. on weekends and federally recognized holidays except as required to alleviate traffic congestion or safety hazards;
- b) Locate fixed construction equipment such as compressors and generators at distances no less than 250 feet from sensitive receptors (including occupied residential property boundaries);
- c) Shroud or shield impact tools, and muffle or shield intake and exhaust ports on power construction equipment; and
- d) Construction equipment using internal combustion engines shall be in proper tune.

Significance Determination After Mitigation and Supporting Rationale

Less than significant impact.

EID Intertie Improvements

Construction activities associated with the EID Intertie Improvements would be similar to those described above for the roadway construction. Implementation of Mitigation Measure 4.10-1b would reduce this impact to a less than significant level.

Excessive Groundborne Vibration

Impact 4.10-2	The project has the potential to result in the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels. (Less than Significant)
----------------------	--

Impact Analysis

Construction activities associated with the proposed project, such as operation of large pieces of equipment (i.e., heavy trucks), may result in the periodic temporary generation of groundborne vibration. Given the nature of any potential groundborne vibration and given that any impacts would be temporary and periodic, potential impacts are less than significant.

Significance Determination Before Mitigation

Less than significant impact.

Mitigation Measures from the MC&FP EIR

No mitigation measures required.

Significance Determination After MC&FP Mitigation and Supporting Rationale

Less than significant impact.

Noise

Additional Mitigation Measures

No additional mitigation measures required.

Significance Determination After Mitigation and Supporting Rationale

No impact.

EID Intertie Improvements

Construction activities associated with the EID Intertie Improvements would have similar potential to result in periodic temporary groundborne vibration. Given the nature of any potential groundborne vibration and given that any impacts would be temporary and periodic, potential impacts are less than significant.

Permanent Increase in Ambient Noise Levels

Impact 4.10-3	The project has the potential to result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. (Potentially Significant)
----------------------	---

Impact Analysis

Long-term impacts would result from vehicle traffic associated with the proposed project. As discussed in Impact 4.10-1, project-related traffic noise level changes outside of the project area would not significantly impact existing noise sensitive receivers. However, within the project area, project-related traffic noise level increases may be significant at existing residential uses on SR-49/Diamond Road between Lime Kiln Road and SR-49/Pleasant Valley Road. Based on the traffic noise assessment presented above the proposed project could result in significant impacts to exterior noise at 4000 SR-49. The proposed project is not expected to result in significant substantial permanent increases in ambient noise levels at any other location in the study area. Implementation of Mitigation Measure 4.10-1a would reduce exterior noise impacts at this residential location to a less than significant level.

Significance Determination Before Mitigation

Potentially significant impact.

Mitigation Measures from the MC&FP EIR

N/A

Significance Determination After MC&FP Mitigation and Supporting Rationale

Potentially significant impact.

Additional Mitigation Measures

Implementation of Mitigation Measure 4.10-1a, above.

Significance Determination After Mitigation and Supporting Rationale

Less than significant impact.

EID Intertie Improvements

No long-term noise impacts would result from the EIR Intertie Improvements. No impact would occur.

Temporary or Periodic Increase in Ambient Noise Levels

Impact 4.10-4	The project has the potential to result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project. (Potentially Significant)
----------------------	---

Impact Analysis

During construction of the proposed project, construction noise could cause short-term increase in noise levels at existing residences adjacent to construction areas. Activities involved in construction would typically generate maximum noise levels as high as 85 dB L_{max} at a distance of 50 feet. Construction activities would be temporary and would occur during daytime hours. Project construction noise is considered potentially significant. Incorporation of the Mitigation Measure 4.10-1b, above, would reduce potential construction noise impacts to less than significant levels.

Significance Determination Before Mitigation

Potentially significant.

Mitigation Measures from the MC&FP EIR

As discussed above, mitigation measures from the MC&FP do not apply to the proposed project. Mitigation measures included in the MC&FP EIR for noise impacts have been superseded by the project-specific mitigation measures included above.

Significance Determination After MC&FP Mitigation and Supporting Rationale

Potentially significant.

Additional Mitigation Measures

Implementation of Mitigation Measure 4.10-1b, above.

Significance Determination After Mitigation and Supporting Rationale

Less than significant impact.

Airport Noise Levels

Impact 4.10-5	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, the project has the potential to expose people residing or working in the project area to excessive noise levels. (No Impact)
----------------------	--

Impact Analysis

The nearest airport to the project site is the Placerville Airport. This airport is approximately 3.5 miles from the project site. Noise from aircraft activity is not a primary source of noise in the project area. There are no other airports in the project vicinity. Based on distance to nearby airports, and the

Noise

expected noise level from those facilities, aircraft noise would not result in excessive noise at the project site, and therefore, there would be no aircraft noise impacts.

Significance Determination Before Mitigation

No impact.

Mitigation Measures

N/A

Significance Determination After MC&FP Mitigation and Supporting Rationale

Less than significant impact.

Additional Mitigation Measures

No additional mitigation measures required.

Significance Determination After Mitigation and Supporting Rationale

No impact.

EID Intertie Improvements

No impact.

Private Airstrip Noise Levels

Impact 4.10-6	For a project within the vicinity of a private airstrip, the project has the potential to expose people residing or working in the project area to excessive noise levels. (No Impact)
----------------------	---

Impact Analysis

There are no private airstrips in the project vicinity and aircraft noise would not result in excessive noise at the project site. Therefore, there would be no aircraft noise impacts.

Significance Determination Before Mitigation

No impact.

Mitigation Measures

N/A

Significance Determination After MC&FP Mitigation and Supporting Rationale

Less than significant impact.

Additional Mitigation Measures

No additional mitigation measures required.

Significance Determination After Mitigation and Supporting Rationale

No impact.

EID Intertie Improvements

No impact.

4.11 - Public Services

This section describes the existing public services in the project area as well as the potential for construction and use of the proposed project to result in effects on these services. Descriptions and analyses in this section incorporate information obtained from the El Dorado County Emergency Medical Services Division (County of El Dorado, EMS Plan 2007) and through consultation with public service providers, including the County of El Dorado Sheriff - Coroner (El Dorado County Sheriff 2008; Appendix L), and the Diamond Springs/El Dorado Fire Protection District (Cunningham, pers. comm., 2008 and Combs, pers. comm., 2010; Appendix L). Additional information was obtained from the El Dorado County General Plan and the MC&FP EIR (EDAW 1998).

4.11.1 - Summary

Significant Unavoidable Impacts

Project construction and use would not result in any significant unavoidable impacts to public services.

Potentially Significant Impacts

Project construction and use would not result in any potentially significant impacts to public services.

Less Than Significant Impacts

Less than significant impacts related to public services would result from project construction and use. The proposed project would have a less than significant impact on public services because the proposed project involves the construction and use of a new roadway, upgrades to existing roadways, and associated roadway improvements and does not propose residential or commercial development. The proposed project would improve circulation in the area, thereby enabling increased emergency vehicle response.

The EID Intertie Improvements would upgrade undersized facilities thereby improving existing infrastructure that must accommodate future planned growth as authorized by the General Plan. The EID Intertie Improvements would also upgrade undersized fire flow capacities in the surrounding area.

4.11.2 - Environmental Setting

Fire Protection and Emergency Medical Services

Fire protection services throughout El Dorado County are provided by 13 separate fire districts, one city fire department, the California Department of Forestry and Fire Protection (CDF), and the U.S. Forest Service (USFS). The project area is located within the Diamond Springs/El Dorado Fire Protection District (Fire District). The Fire District responded to MBA's service provider questionnaire in letters dated March 24, 2008 (Cunningham, pers. comm.; Appendix L) and March

29, 2010 (Combs, pers. comm.; Appendix L). The Fire District covers 95 square miles, with a nighttime population of 24,000 residents. Within the Fire District exists a diverse combination of businesses, senior citizen housing, mobile home parks, convalescent hospitals, and rural residential and high-density residential areas—all situated within a wildland-urban interface.

Emergency medical services (EMS) are provided by the Fire District through a cooperative agreement with County Service Area No. 7 and a subcontract with the El Dorado County Regional Prehospital Emergency Services Operations Authority (County of El Dorado, EMS Plan 2007).

ISO Rating

Fire protection districts are assigned an Insurance Service Organization (ISO) Public Protection Classification rating that measures the quality of public fire protection to determine insurance costs. Class 1 represents exemplary public protection, and Class 10 indicates that an area's fire-suppression program does not meet ISO's minimum criteria. According to the 2006 Countywide Fire Suppression and Emergency Services Municipal Service Review, agricultural and rural-residential areas within the Fire District have an ISO rating of Class 8 while industrial or semi-urban commercial areas (such as that of the project area) have an ISO rating of Class 5 (El Dorado County LAFCo 2006).

Staffing

The Fire District currently has five stations and operates the following equipment with 22 total career staff, 26 volunteer safety personnel, and three non-safety positions:

- 5 Type 1 Engines
- 2 Type 2 Engines
- 1 Type 2 Truck
- 1 Type 1 Water Tender
- 2 ALS Medic Units (ambulances)
- 1 Type 2 Rescue
- 7 Staff or Command Vehicles

The closest station to the project site is located 0.5 mile to the south at 501 Main Street, Diamond Springs, and is staffed by two career personnel and one fire engine.

Mutual Aid Agreements

The Fire District has mutual aid agreements with the following surrounding agencies for first response in an emergency: El Dorado County Fire Protection District (which also protects the City of Placerville), Rescue Fire Protection District, and Pioneer and Amador Fire Protection District Battalion 20 (formerly Plymouth Fire Department). Additionally, the Fire District has operating agreements with CDF (Amador-El Dorado Unit) and the USFS (El Dorado National Forest) (El Dorado County 2004).

Calls for Service

Fire District personnel responded to 2,472 emergency calls in 2008 (Combs, pers. comm.; Appendix L). Types of calls and percent of total calls are as follows:

- 59.42% Medical Aid
- 3.11% Fires and Fire Related, All Types
- 1.39% Hazardous Conditions
- 1.78% False Alarms
- 34.30% Other (Good Intent, Cancelled In Route and Citizen Assistance Calls)

Response Times

According to the El Dorado County General Plan, the minimum level of service for Fire District response on discretionary projects and within a community region is an 8-minute response time to 80 percent of the population. The El Dorado County General Plan sets the minimum level of response time for ambulance services at 10 minutes for 80 percent of the population (El Dorado County 2004).

The Fire District reported a 9.5-minute response time, 80 percent of the time, for its last planning cycle. In addition, the Fire District reported that the response performance, when adequate concentration of personnel and equipment are considered, equates to 9.5 minutes, 80 percent of the time for medical aid incidents, 10.0 minutes for vehicle collisions, and 10.6 minutes for structure fires (Combs, pers. comm.; Appendix L).

Law Enforcement

The El Dorado County Sheriff's Office (EDSO) provides service to the unincorporated areas of the County with a staff of 414 sworn and non-sworn personnel (El Dorado County Human Resources Department 2008). EDSO operates two main offices and one satellite office. The closest office to the project site is the Placerville Office, located at 300 Fair Lane (El Dorado County Sheriff 2008; Appendix L).

The EDSO is divided into five divisions: Administrative, Custody, Investigations, Patrol, and Support. Currently the EDSO has 184 sworn deputies, sergeants, and managers. In addition, the EDSO is supplemented by the Sheriff's Reserves, a trained work force supporting the Sheriff's Office in all areas of law enforcement, and the Sheriff's Team of Active Retirees (STAR), which consists of senior volunteers who handle tasks ranging from fingerprinting booths to public awareness programs.

Mutual Aid Agreements

The EDSO is engaged in a mutual aid assistance program with the California Highway Patrol and with the law enforcement agencies of adjacent jurisdictions. Under the mutual aid assistance program, the California Highway Patrol (CHP) and neighboring jurisdictions provide support to, and receive support from, the El Dorado County Sheriff's Office on an as-needed basis. In addition, the

Sheriff's Office is part of the statewide mutual aid system and provides assistance to jurisdictions throughout the State in the event of a major emergency or catastrophe (EDAW 1998).

Calls for Service

The proposed project is located in Zone 1 of the EDSO service area. The EDSO typically receives 79,881 calls for service on an annual basis, with approximately 15,260 of those calls in Zone 1 (El Dorado County Sheriff 2008; Appendix L).

Response Times

In 2009, the average response time for high priority calls in Zone 1 was 6 minutes, 20 seconds (Lyons, pers. comm. 2010).

Level of Service Standards

The EDSO strives to maintain a ratio of one deputy per 1,000 residents. The current ratio is just over one deputy per 1,000 residents. While a ratio of deputies per 1,000 has been a commonly used formula, within the last 2 years the EDSO has switched to a concept called a Patrol Allocation Study. The Patrol Allocation Study methodology determines workload based on calls for service, obligated time, and a shift relief factor. The new method is more statistically based than the previous ratio concept. Recently, the new concept determined that EDSO is currently adequately staffed for the Placerville Patrol Division (El Dorado County Sheriff 2008; Appendix L).

Schools

The proposed project is located within the Mother Lode Union School District (for grades kindergarten [K] through 8) and the El Dorado Union High School District (for grades 9 through 12) (EDAW 1998). The nearest schools to the project site are the Herbert Green Middle School in Placerville and the El Dorado Adult High School.

Parks

The nearest parks to the proposed project are located in the City of Placerville, approximately 1.25 miles to the north. The El Dorado Multi-Use Trail is located adjacent to and north of the project site.

4.11.3 - Regulatory Framework

Local

El Dorado County General Plan

The Public Services and Utilities Element and the Public Health, Safety, and Noise Element of the El Dorado County General Plan, adopted July 19, 2004, provides policies pertaining to fire protection, emergency medical, public safety and law enforcement services. The 2004 General Plan states that while the Public Services and Utilities Element is not required by state law, the subjects addressed are critical to the County's future growth and development. In addition, Chapter 5 of the 2004 General Plan states that the County's public services are straining to meet demand. "Many of the public

services are currently operating close to or exceeding capacity level. The purpose of the Public Services and Utilities Element is to promote a pattern of development which maximizes the use of existing services while minimizing the costs of providing new facilities and services,” (El Dorado County 2004).

Appendix J of this Draft EIR provides a matrix that lists the policies determined to have relevance to this proposed project and provides a summary of the County’s determination of project consistency with each relevant goal and policy. As shown in Appendix J, the project is consistent with all applicable goals and policies of the General Plan, including those related to public services.

4.11.4 - Project Impact Analysis

Methodology for Analysis

Michael Brandman Associates (MBA) consulted with public services providers regarding their ability to serve the proposed project. Letters were sent to the El Dorado County Sheriff’s-Coroner Office and the Diamond Springs/El Dorado Fire Protection District requesting information about their ability to serve the proposed project. The agency responses are provided in Appendix L.

Thresholds of Significance

According to the CEQA Guidelines’ Appendix G Environmental Checklist, to determine whether environmental effects to public services are significant, the following questions are analyzed and evaluated.

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

- a.) Fire protection?
- b.) Police protection?
- c.) Schools?
- d.) Parks?
- e.) Other public facilities?

Impact Statements and Mitigation Discussions

This section discusses potential impacts associated with the construction and use of the proposed project and provides mitigation measures where appropriate. The MC&FP EIR impact assessment and mitigation measures are included where appropriate, since the proposed project must comply with regulations set forth by the prior programmatic level EIR. Further analysis or mitigation required

beyond that of the MC&FP EIR is included where necessary. Potential cumulative effects are discussed in Section 6 of this Draft EIR.

Fire Protection

Impact 4.11-1: The project has the potential to adversely impact fire protection services. (Less than Significant)

Impact Analysis

Construction-Related Impacts

Construction and staging activities associated with the proposed project could have the potential to interference with emergency response plans by obstructing response and evacuation routes on existing roads. However, the proposed project will require construction contract special provisions requiring that a traffic management plan be prepared. The traffic management plan will include construction staging and traffic control measures to be implemented during construction to maintain and minimize impacts to traffic. Minor traffic stoppages or delays may be allowed if necessary during project construction. Full roadway closures will be avoided during project construction and provisions for emergency vehicle movement through the project area will be provided at all times during construction. Furthermore, DOT or its construction contractors will conduct early coordination with utility service providers, law enforcement, and emergency service providers to ensure minimal disruption to service during construction. As a result, of this coordination, emergency service providers would be aware of project construction and the potential for any emergency vehicle movement delays within the project area and measures to avoid such delays would be determined. The proposed project's construction would not affect the provision of emergency services or evacuation of the project area in the event of a major emergency. Impacts would be less than significant.

Operational Impacts

One of the primary objectives of the proposed project is to improve the flow of traffic and connectivity through the existing community, which would in turn improve emergency vehicle access. During preparation of the MC&FP EIR, the Fire District indicated that emergency vehicle access through congested traffic conditions was still a concern of the Fire District and that during peak traffic hours, the Fire District's response time to emergencies could be reduced (EDAW 1998). This concern was due to the retail development considered in the MC&FP, which is not included as part of the proposed project or evaluated in this EIR.

Since the proposed project would not include the construction of residential or commercial land uses, the construction of new or physically altered fire protection facilities would not be required. The proposed project would improve circulation in the Missouri Flat/Diamond Springs area thereby reducing delay times that the Fire Department may encounter. Based on the project-specific Traffic Impact Analysis, the project has incorporated traffic-related mitigation measures such as signal optimization into the project so that traffic circulation is optimized in the study area and project

vicinity (KHA 2009). Furthermore, signal preemptors would be installed at each new signalized intersection for use by emergency vehicles. As such, the proposed project may assist the Fire Department in meeting minimum level of service response times. Increased traffic circulation and installation of signal preemptors would ensure that operational impacts would be less than significant.

Significance Determination Before Mitigation

Less than significant impact.

Mitigation Measures from the MC&FP EIR

The MC&FP included mitigation regarding Fire Department response times in Mitigation Measure 4.11-3: Phase 1 Response Times. However, the mitigation is specific to the Sundance Plaza portion of the MC&FP EIR and does not address response times in relation to the proposed connector. As such, the mitigation is not applicable.

Significance Determination After MC&FP Mitigation, and Supporting Rationale

Less than significant impact.

Additional Mitigation Measures

N/A

Significance Determination After Additional Mitigation, and Supporting Rationale

Less than significant impact.

EID Intertie Improvements

Impacts resulting from construction of the EID Intertie Improvements would be similar to those described above. The proposed traffic management plan would ensure that construction activities would not interfere with the provision of fire services. Construction of the EID Intertie Improvements would increased undersized facilities and allow for growth as approved by the General Plan. Accordingly, operational impacts would not result in population growth requiring increased fire protection, but would be beneficial because of increased water flow for use in fire suppression and the potential for additional hydrants due to facility upgrades.

Police Protection

Impact 4.11-2:	The project has the potential to adversely impact police protection services. (Less than Significant)
-----------------------	--

Impact Analysis

Construction-Related Impacts

Construction of the proposed project could create significant interference with emergency plans by obstructing response and evacuation routes on existing roads. However, construction contract special provisions will require that a traffic management plan be prepared. The traffic management plan will include construction staging and traffic control measures to be implemented during construction to maintain and minimize impacts to traffic. Minor traffic stoppages or delays may be allowed if

necessary during project construction. Full roadway closures will be avoided during project construction and provisions for emergency vehicle movement through the project area will be provided at all times during construction. Furthermore, DOT or its construction contractors will conduct early coordination with utility service providers, law enforcement, and emergency service providers to ensure minimal disruption to service during construction. As a result of this coordination, law enforcement service providers would be aware of project construction and the potential for any emergency vehicle movement delays within the project area and measures to avoid such delays would be determined. The proposed project's construction and use would not affect the provision of police services or area evacuation in the event of a major emergency. Impacts would be less than significant.

Operational Impacts

Since the proposed project would not include the construction of residential or commercial land uses, the construction of new or physically altered police protection facilities would not be required. Furthermore, operation of the proposed project would not result in unacceptable service ratios, response times, or impaired police protection. The Patrol Allocation Study assessment conducted for the project area determined that the EDSO is currently adequately staffed for the Placerville Patrol Division (El Dorado County Sheriff 2008; Appendix L). It is not anticipated that construction of a new roadway designed to improve traffic circulation would have a negative impact or would impede the continued protection and service to residents by the EDSO. This would be a less than significant impact.

Significance Determination Before Mitigation

Less than significant impact.

Mitigation Measures from the MC&FP EIR

N/A

Significance Determination After MC&FP Mitigation, and Supporting Rationale

Less than significant impact.

Additional Mitigation Measures

No mitigation is required.

Significance Determination After Additional Mitigation, and Supporting Rationale

Less than significant impact.

EID Intertie Improvements

The inclusion of a traffic management plan in all construction contracts would ensure that construction of the EID Intertie Improvements would not result in unacceptable service ratios, response times, or impaired police protection. Construction of the EID Intertie Improvements would increased undersized facilities and allow for growth as approved by the General Plan. Accordingly,

operational impacts would not result in population growth requiring increased police services. Upon operation, the waterlines would be underground and would not physically impede circulation. This would be a less than significant impact.

Schools

Impact 4.11-3: The project has the potential to adversely impact school services. (Less than Significant)

Impact Analysis

Construction Impacts

The proposed project is located within the Mother Lode Union School District (for grades K through 8) and the El Dorado Union High School District (for grades 9 through 12) (EDAW 1998). Construction of the proposed Parkway and associated roadway could interfere with existing school bus travel by creating temporary route delays that reduce the flow of vehicular traffic at certain times of day. Delays would occur only during the construction phase and implementation of the traffic management plan would ensure that a through-route is provided at all times. Since the construction period and resulting delays would be temporary, impacts would be less than significant.

Operational Impacts

The direct increase in demand for schools is normally associated with new residential projects that bring new families with school-aged children to a region. Residential development is not a component of the proposed project, and the project study area is not zoned residential. The project, therefore, would not result in an influx of new students in the study area and is not expected to result in an increased demand upon District resources and would not require the construction of new facilities.

Significance Determination Before Mitigation

Less than significant impact.

Mitigation Measures from the MC&FP EIR

N/A

Significance Determination After MC&FP Mitigation, and Supporting Rationale

Less than significant impact.

Additional Mitigation Measures

No mitigation is necessary.

Significance Determination After Additional Mitigation, and Supporting Rationale

Less than significant impact.

Public Services

EID Intertie Improvements

The inclusion of a traffic management plan in all construction contracts would ensure that construction of the EID Intertie Improvements would not affect routes to nearby schools, resulting in additional traffic congestion and delays. Operation of the waterlines would not result in an adverse impact on the ability of local schools to maintain acceptable service ratios, response times, or other performance objectives.

Parks

Impact 4.11-4: The project has the potential to adversely impact park facilities. (No Impact)

Impact Analysis

The proposed project is located within the Diamond Springs Community Region, as designated in the 2004 General Plan. The project would not result in an increase in demand for parks and recreation facilities because it would not result in an increase in population. Accordingly, the proposed project would have no impacts on parks.

Significance Determination Before Mitigation

No impact.

Mitigation Measures from the MC&FP EIR

N/A

Significance Determination After MC&FP Mitigation, and Supporting Rationale

No impact.

Additional Mitigation Measures

No mitigation is necessary.

Significance Determination After Additional Mitigation, and Supporting Rationale

No Impact.

EID Intertie Improvements

Similar to the roadway improvements described above, the EID Intertie Improvements would not directly result in an increase in population or an adverse impact to park facilities. No impact would occur.

Other Public Facilities

Impact 4.11-5: The project has the potential to adversely impact public facilities. (No Impact)

Impact Analysis

The proposed project does not propose residential, commercial, or industrial development. The project, therefore, would not result in increased demand for, or impacts on, other public facilities such as library services. Accordingly, no impact would occur.

Significance Determination Before Mitigation

No impact.

Mitigation Measures from the MC&FP EIR

N/A

Significance Determination After MC&FP Mitigation, and Supporting Rationale

No impact.

Additional Mitigation Measures

No mitigation is necessary.

Significance Determination After Additional Mitigation, and Supporting Rationale

No impact.

EID Intertie Improvements

Implementation of the EID Intertie Improvements would not result in significant effects on public libraries or other public facilities. Accordingly, no impact would occur.

4.12 - Traffic and Transportation

This section describes the existing transportation conditions within the project area as well as the potential for construction and implementation of the proposed project to result in impacts on transportation facilities. Descriptions and analysis in this section are based on information contained in the Preliminary Traffic Impact Analysis completed in October 2009 by Kimley Horn and Associates, Inc. (KHA 2009), included in this EIR as Appendix M.

4.12.1 - Summary

The proposed project includes construction of a new four-lane roadway connector (the Parkway); widening SR-49 to a four-lane multilane highway; creation of a frontage road parallel to State Route 49 (SR-49); other local road and intersection improvements; and a connection to the El Dorado Multi-Use Trail and a Class I bike path extension. EID Intertie Improvements would also be constructed concurrently with the roadway improvements. As previously discussed, the proposed project is anticipated to significantly reduce traffic on the segment of SR-49 between Missouri Flat Road and Diamond Road (SR-49) by constructing a new road (the proposed Parkway) to provide parallel capacity to SR-49 and alternate access to Missouri Flat Road and US-50. The addition of the proposed project to the roadway network would result in a diversion of traffic from Pleasant Valley Road/SR-49, between Missouri Flat Road and Diamond Road/SR-49, to Diamond Road/SR-49 and the proposed Parkway. The proposed project would improve traffic circulation, operations, congestion, and safety in the Diamond Springs area.

The proposed project also provides increased multi-modal transportation benefits with the connection of the El Dorado Multi-Use Trail (EDMUT); extension of the Class I bike path along Missouri Flat Road from Diamond Springs Parkway to the future westerly extension of EDMUT; inclusion of Class II bike lanes along Diamond Springs Parkway; sidewalks; and bus turnouts.

DOT has incorporated the traffic mitigation measures included in the Traffic Impact Analysis (KHA 2009) into the proposed project design, including:

- Signalization of the Diamond Springs Parkway at Missouri Flat Road, Diamond Springs Parkway at Throwita Way, and Diamond Springs Parkway at Diamond Road (SR-49) intersections;
- Addition of a northbound left-turn lane at the Diamond Springs Parkway at Missouri Flat Road intersection;
- Dual northbound left-turn pockets, and allowance of northbound U-turns, and dual eastbound right-turn lane at the Diamond Springs Parkway at Diamond Road (SR-49) intersection;
- Restriction of left turn and through movements of both Lime Kiln Road and Black Rice Road at Diamond Road (SR-49); and,

- Addition of a second southbound left turn lane, including allowance of southbound U-turns, and second northbound right turn lane at Diamond Road (SR-49) at Pleasant Valley Road intersection.

Significant Unavoidable Impacts

Project construction and use would not result in any significant unavoidable impacts related to traffic and transportation.

Potentially Significant Impacts

Project construction and use could result in potentially significant impacts related to traffic and transportation. Implementation of the recommendations from the Traffic Impact Analysis have been incorporated into the proposed project design which would reduce the impacts to less than significant.

Less Than Significant Impacts

Impacts related to parking, recreational facilities, and alternative transportation / circulation resulting from the proposed project would also be less than significant.

4.12.2 - Environmental Setting

Roadway Network

The project site is located in El Dorado County. The following are descriptions of the primary roadways in the vicinity of the proposed project.

US Route 50

US-50 is an east-west freeway located north of the project site. Generally, US-50 serves all of El Dorado County's major population centers and provides connections to Sacramento County to the west and the State of Nevada to the east. Access to the project site from US-50 is provided at the Missouri Flat Road interchange and SR-49. At the time of preparation of the Traffic Impact Analysis, the US-50 interchange with Missouri Flat Road was under construction to modify the existing interchange. The analysis scenarios included in this evaluation include discussions regarding the assumed status of the modifications to this interchange for each scenario. North of the project area, US-50 currently serves approximately 55,000 vehicles per day (vpd) with two travel lanes in each direction.

The interchange reconstruction will occur in multiple phases with the first two phases: Phase 1A, completed in 2009; and Phase 1B, currently under construction and anticipated to be completed by 2011. Phase 1A included widening the US-50 overcrossing, widening Missouri Flat Road and Mother Lode Drive, and modifying the US-50 off-ramps. Phase 1B will modify the eastbound on-ramp and reconfigure the westbound ramps to eliminate the loop off ramp. Phase 2 will result in the interchange being reconfigured to a single-point urban interchange. The traffic impact analysis

assumes that the Phase 1A improvements will be in place for the Existing (2010) analysis scenarios, Phase 1B improvements and the Phase 2 improvements will be in place for the Cumulative (2030) conditions.

State Route 49

SR-49 is a two-lane state highway located at the eastern terminus of the proposed project. SR-49 is named Diamond Road between Pleasant Valley Road to the City of Placerville. SR-49 shares the Pleasant Valley Road alignment to the west of the project area. In the vicinity of the proposed project, SR-49/Diamond Road currently serves approximately 6,200 vpd.

Missouri Flat Road

Missouri Flat Road is generally a north-south arterial roadway that provides a connection between SR-49 and US-50 and is located at the western terminus of the proposed project. In the immediate vicinity of the project site, this roadway provides one travel lane in each direction. Missouri Flat Road expands to provide two lanes in each direction between Golden Center Drive and US-50. The portion of the roadway in the area of the interchange at US-50 is being improved along with the improvements to the interchange. Missouri Flat Road currently accommodates approximately 23,100 vpd near the project site.

Pleasant Valley Road

Pleasant Valley Road is generally an east-west collector roadway located south of the proposed project that provides a connection to Mother Lode Drive and Diamond Road (SR-49). Pleasant Valley Road becomes SR-49 between the town of El Dorado and Diamond Road. In the vicinity of the proposed project, Pleasant Valley Road accommodates approximately 19,100 vpd with one lane in each direction.

China Garden Road

China Garden Road is a minor, two-lane roadway that connects Missouri Flat Road with Pleasant Valley Road (SR-49).

Level of Service

Intersection Operations

Level of Service (LOS) is a qualitative term describing operating conditions a driver will experience while traveling on a particular street or at an intersection during a specific time interval. It ranges from LOS A (very little delay) to LOS F (long delays and congestion). LOS is measured separately for signalized and un-signalized intersections. The Highway Capacity Manual, 2000 (HCM) includes procedures for analyzing two-way stop controlled (TWSC), all-way stop controlled (AWSC), and signalized intersections. The TWSC procedure defines LOS as a function of average control delay for each minor street approach movement. Conversely, the AWSC and signalized intersection

procedures define LOS as a function of average control delay for the intersection as a whole. Table 4.12-1 presents intersection LOS definitions as defined in the HCM.

Table 4.12-1: Intersection Level of Service Criteria

Level of Service (LOS)	Un-Signalized	Signalized
	Average Control Delay (sec/vehc)	Control Delay per Vehicle (sec/vehc)
A	≤ 10	≤ 10
B	>10-15	>10-20
C	>15-25	>20-35
D	>25-35	>35-55
E	>35-50	>55-80
F	>50	>80
Notes: * Applied to the worst lane/lane group(s) for TWSC Source: Highway Capacity Manual, 2000.		

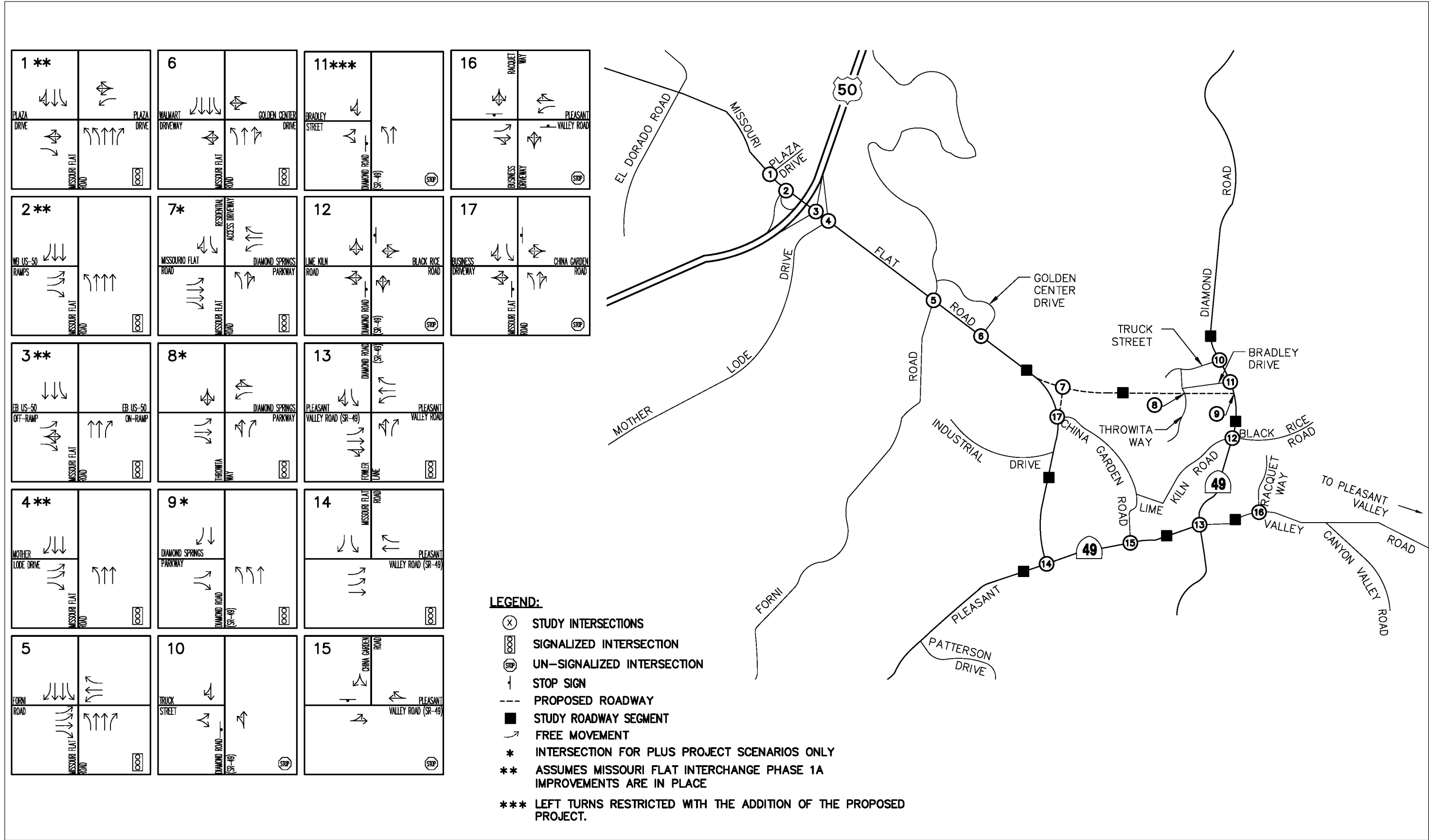
Roadway Segments

Roadway segment LOS definitions are based on the El Dorado County General Plan EIR, Traffic and Circulation, May 2003. Table 4.12-2 presents the applicable roadway segment LOS definitions.

Table 4.12-2: Roadway Segment Level of Service Criteria

Operational Class	Peak-Hour LOS Capacity Threshold (vehicles per hour)				
	A	B	C	D	E
Minor Two-Lane Highway	90	200	680	1,410	1,740
Major Two-Lane Highway	120	290	790	1,600	2,050
Four-Lane, Multilane Highway	1,070	1760	2,530	3,280	3,650
Two-Lane Arterial	—	—	970	1,760	1,870
Four Lane Arterial, Undivided	—	—	1,750	2,740	2,890
Four Land Arterial Divided	—	—	1,920,	3,540	3,740
Source: Adapted from El Dorado County General Plan EIR, 2003.					

The intersections and roadway segments listed below were identified for evaluation. The locations of the intersections, roadway segments and existing lane geometries are depicted in Exhibit 4.12-1.



Source: Kimley-Horn and Associates, Inc. 2009.

Exhibit 4.12-1 Project Location, Study Intersections, and Existing Lane Geometry

Intersections

1. Missouri Flat Road at Plaza Drive
2. Missouri Flat Road at US-50 Westbound Ramps
3. Missouri Flat Road at US-50 Eastbound Ramps
4. Missouri Flat Road at Mother Lode Drive
5. Missouri Flat Road at Forni Road
6. Missouri Flat Road at Golden Center Drive
7. Diamond Springs Parkway at Missouri Flat Road (constructed with proposed project)
8. Diamond Springs Parkway at Throwita Way (constructed with proposed project)
9. Diamond Springs Parkway at Diamond Road (SR-49) (constructed with proposed project)
10. Diamond Road (SR-49) at Truck Street
11. Diamond Road (SR-49) at Bradley Drive
12. Diamond Road (SR-49) at Lime Kiln Road/Black Rice Road
13. Diamond Road (SR-49) at Pleasant Valley Road
14. Pleasant Valley Road (SR-49) at Missouri Flat Road
15. Pleasant Valley Road (SR-49) at China Garden Road
16. Pleasant Valley Road at Racquet Way
17. Missouri Flat Road at China Garden Road

Roadway Segments

1. Missouri Flat Road south of Halyard Lane
2. Missouri Flat Road south of China Garden Road
3. Pleasant Valley Road east of Missouri Flat Road
4. Pleasant Valley Road east of SR-49
5. Pleasant Valley Road west of Missouri Flat Road
6. SR-49 north of Pleasant Valley Road
7. SR-49 north of Truck Street
8. Diamond Springs Parkway, east of Missouri Flat Road

Existing Level of Service

Volume Development

Traffic volumes used in this analysis were developed in consultation with the County and Caltrans, and were subsequently accepted by both agencies. The traffic volumes utilized to represent the “Existing Conditions” for the proposed project for peak-hour LOS for roadway segments are presented in Exhibit 4.12-3, Existing (2010) Roadway Segment Levels of Service.

Table 4.12-3: Existing (2010) Roadway Segment Levels of Service

#	Roadway Segment	Roadway Classification	PM Peak-Hour	
			Volume (vph)	LOS
1	Missouri Flat Road south of Halyard Lane	2 Lane Arterial	1,271	D
2	Missouri Flat Road south of China Garden Road	2 Lane Arterial	1,647	D
3	Pleasant Valley Road west of Missouri Flat Road	Minor 2 Lane Highway	1,347	D
4	Pleasant Valley Road east of Missouri Flat Road	Minor 2 Lane Highway	1,833	F
5	Pleasant Valley Road east of Diamond Road (SR-49)	Minor 2 Lane Highway	1,237	D
6	SR-49 north of Pleasant Valley Road	Minor 2 Lane Highway	697	D
7	SR-49 north of Truck Street	Minor 2 Lane Highway	856	D
8	Diamond Springs Parkway east of Missouri Flat Road	2 Lane Arterial	N/A	N/A
Source: KHA, 2009.				

As indicated in Table 4.12-3, the study roadway segments operate at LOS D or LOS F during the PM peak-hour. The existing peak-hour traffic volume data, as well as intersection traffic controls and lane geometry are presented in Exhibit 4.12-2.

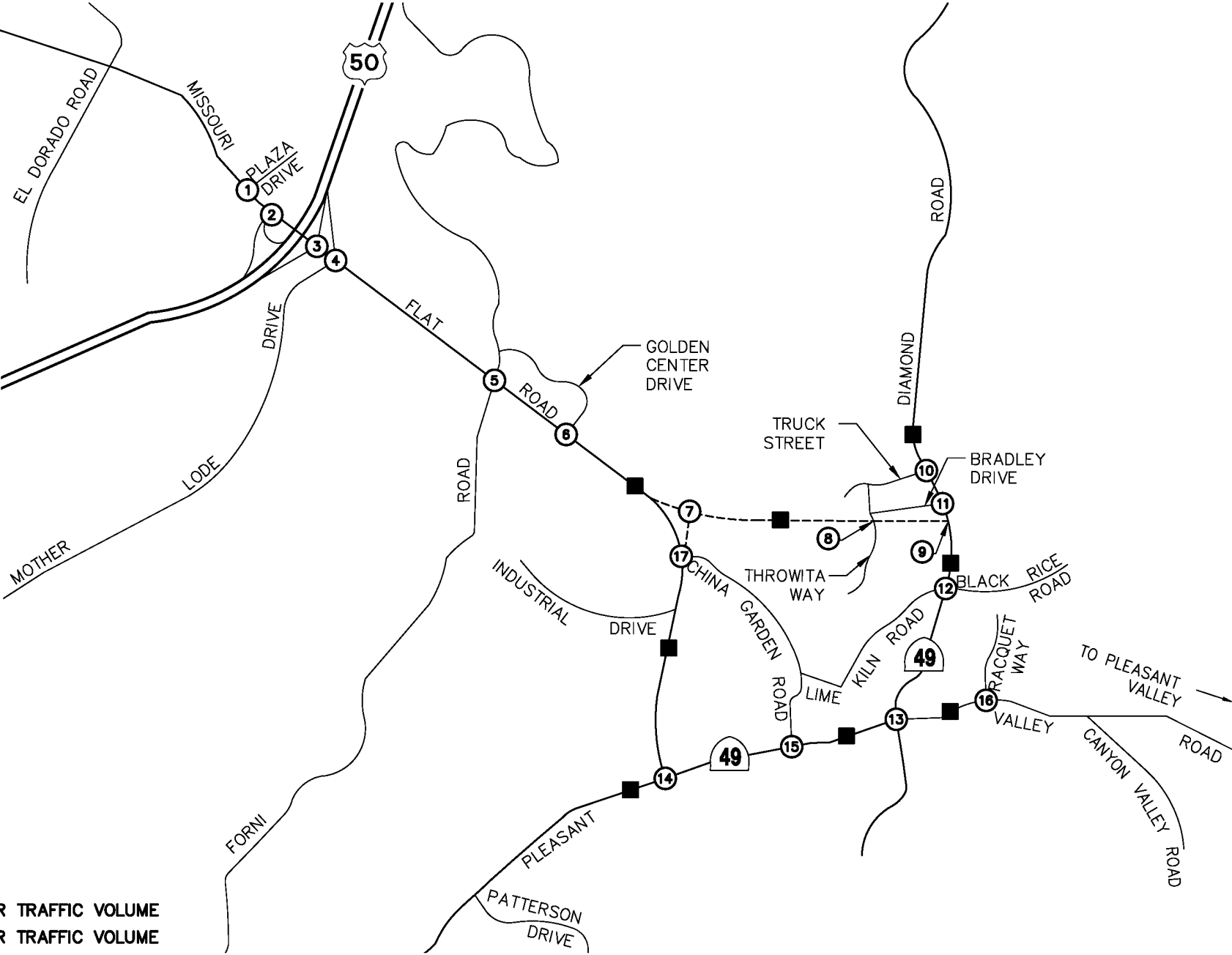
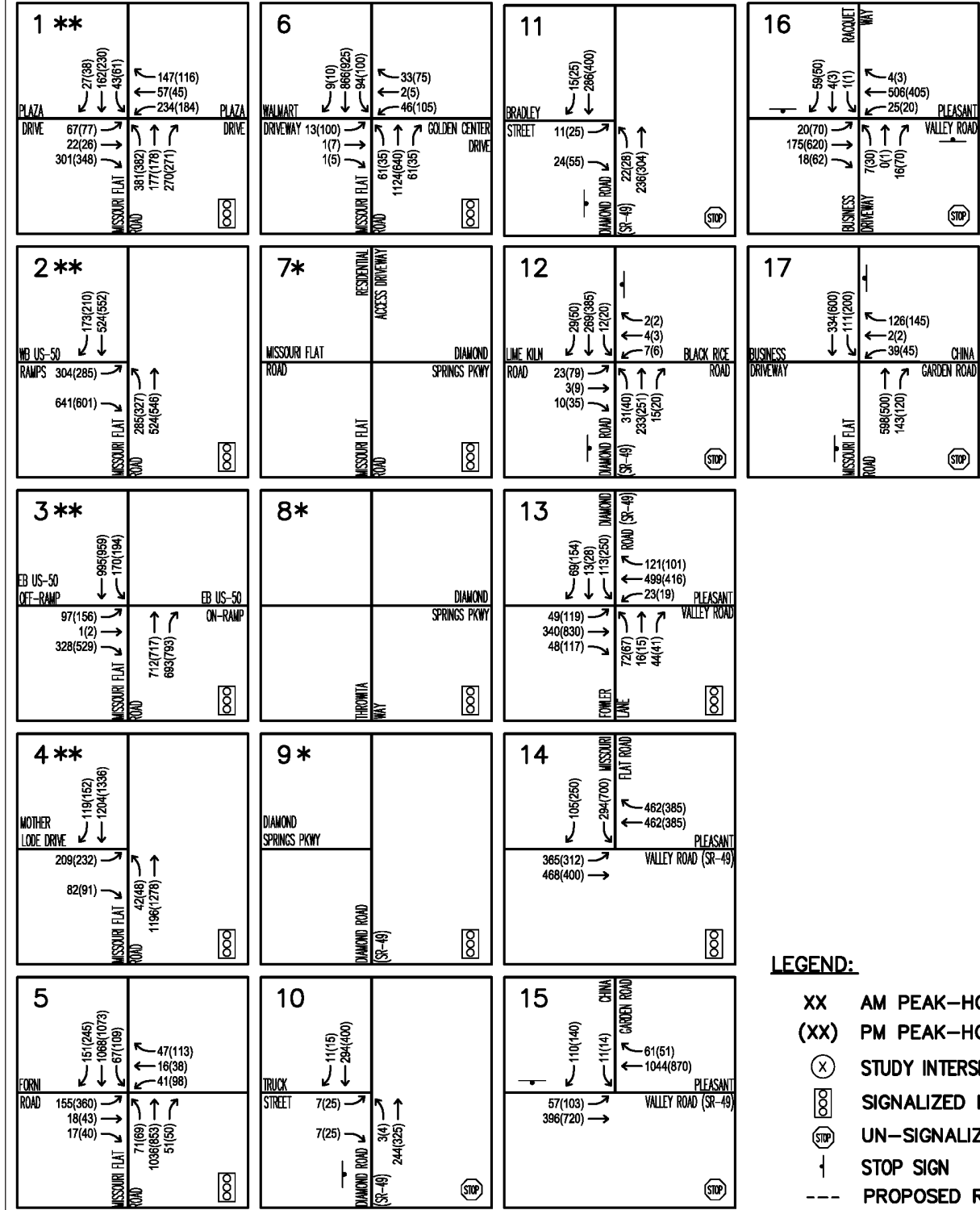
Queuing

Queuing is the distance that vehicles would back up in each direction approaching an intersection. Queuing is evaluated by comparing the anticipated vehicle queues for critical movements at evaluated intersection. The following five intersections were analyzed in the TIA (KHA 2009):

- Diamond Springs Parkway / Missouri Flat Road
- Diamond Springs Parkway / Throwita Way
- Diamond Springs Parkway / Diamond Road (SR-49)
- Diamond Springs Parkway / Lime Kiln Road
- Diamond Road (SR-49) / Pleasant Valley Road

Public Transit

The El Dorado County Transit Authority (El Dorado Transit) became the major, responsible provider of general public transportation services within the greater Placerville area in July 1980. El Dorado Transit provides scheduled fixed-route bus service, dial-a-ride service, commercial bus service, taxi service, vanpools, car pools, and park-and-ride facilities.

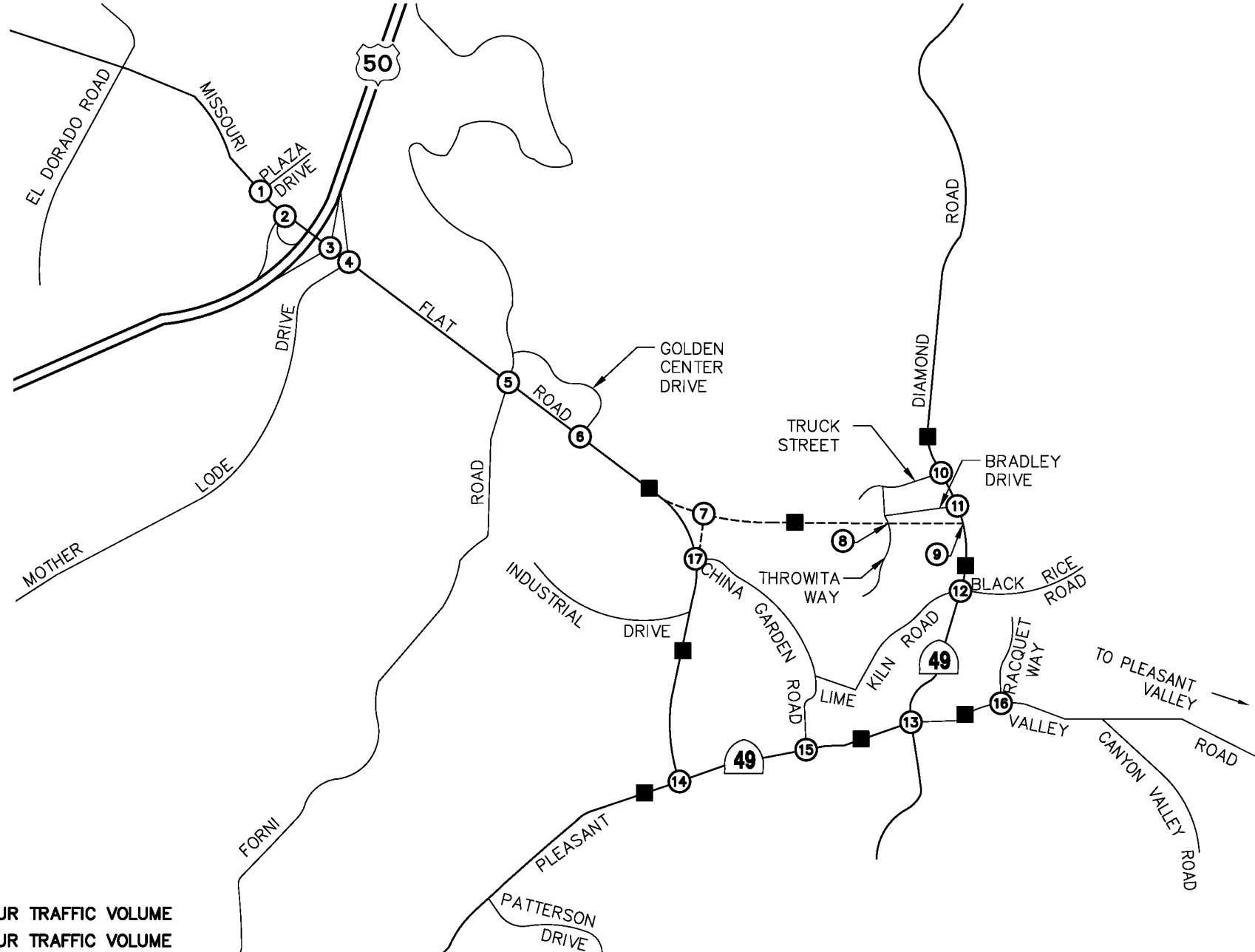
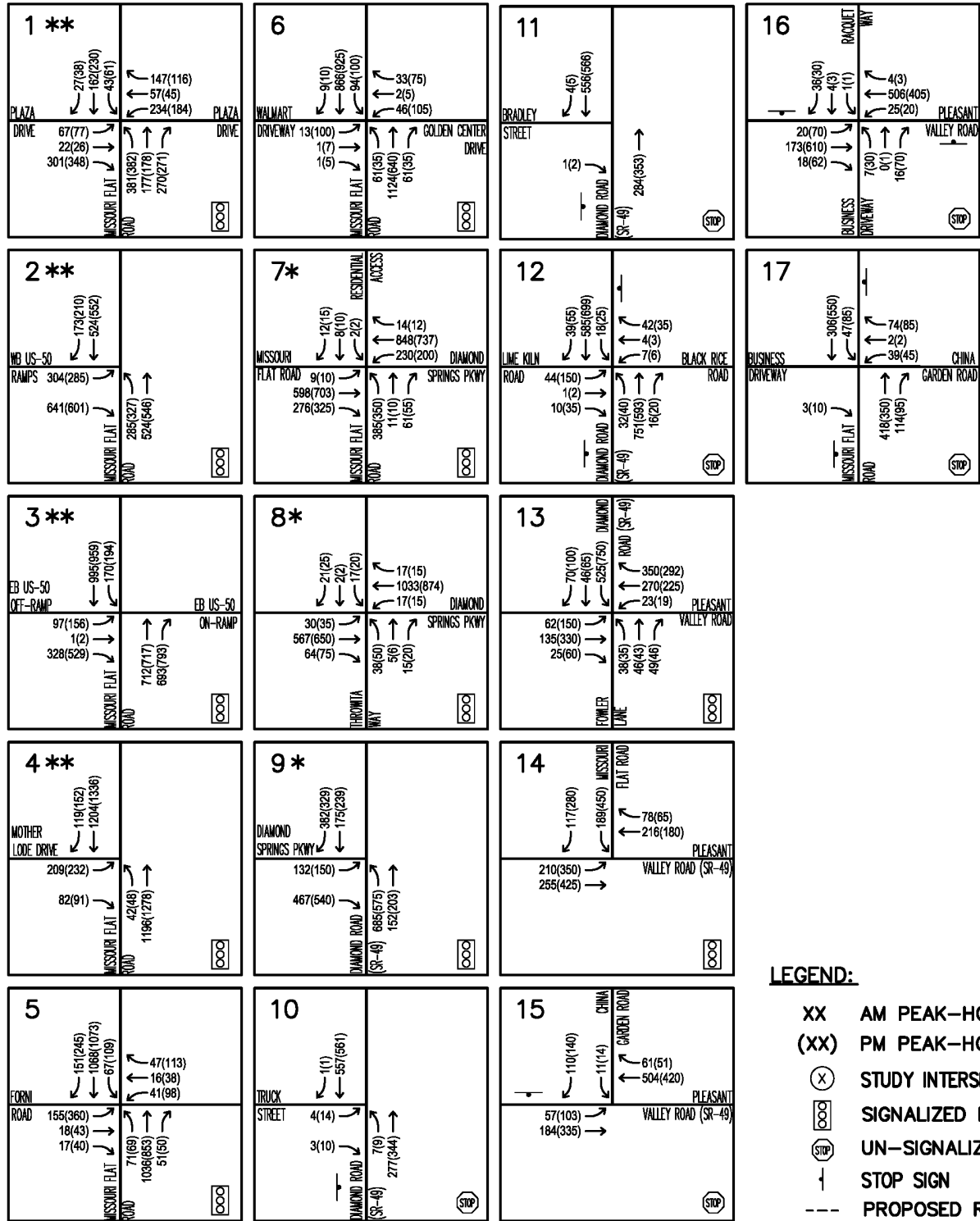


Source: Kimley-Horn and Associates, Inc. 2009.



Michael Brandman Associates

Exhibit 4.12-2 Existing (2010) Peak-Hour Traffic Volumes



- LEGEND:**
- XX AM PEAK-HOUR TRAFFIC VOLUME
 - (XX) PM PEAK-HOUR TRAFFIC VOLUME
 - (X) STUDY INTERSECTIONS
 - [Signalized Intersection Symbol] SIGNALIZED INTERSECTION
 - [Unsignalized Intersection Symbol] UN-SIGNALIZED INTERSECTION
 - [Stop Sign Symbol] STOP SIGN
 - [Proposed Roadway Symbol] PROPOSED ROADWAY
 - [Study Roadway Segment Symbol] STUDY ROADWAY SEGMENT
 - * INTERSECTION FOR PLUS PROJECT SCENARIOS ONLY
 - ** ASSUMES MISSOURI FLAT INTERCHANGE PHASE 1A IMPROVEMENTS ARE IN PLACE

Source: Kimley-Horn and Associates, Inc. 2009.

 NOT TO SCALE
Michael Brandman Associates

1173.0025 • 11/2009 | 4.12-3_Existing_Peak_Hour_Plus_Project.ai

Exhibit 4.12-3 Existing (2010) Plus Proposed Project Peak-Hour Traffic Volumes

COUNTY OF EL DORADO DEPARTMENT OF TRANSPORTATION
DIAMOND SPRINGS PARKWAY PROJECT
ENVIRONMENTAL IMPACT REPORT

El Dorado Transit manages eight local bus routes connecting the communities of Pollock Pines, Camino, Placerville, El Dorado, Diamond Springs, Cameron Park, Shingle Springs and Grizzly Flat. The Missouri Flat Transfer Center (MFTC) is located in front of the Wal-Mart retail store at 4300 Missouri Flat Road, near Forni Road, adjacent to the northwest limits of the project study area on Missouri Flat Road. The MFTC is a destination point for all El Dorado Transit local bus routes. Currently, the El Dorado Transit local bus system provides six local routes near the project area including the Placerville Eastbound and Westbound; Pollock Pines Eastbound and Westbound; Diamond Springs; Cameron Park; Folsom Lake College; and Grizzly Flat. The routes stop at the MFTC at 60-minute intervals with the exception of the Grizzly Flat route, which stops at the MFTC twice a day.

Pedestrian Access

The El Dorado Multi-Use Trail (EDMUT) is a Class I bicycle/pedestrian trail through the northwestern portion of the project site. The intent of the EDMUT is to open up a multi-modal transportation corridor to the public for uses including bicycle, pedestrian and equestrian trails.

Ultimately, the EDMUT concept is to span El Dorado County from Sacramento County to Tahoe. This portion of the EDMUT is within the Sacramento-Placerville Transportation Corridor (SPTC) Plan, which covers 28 miles of the abandoned Southern Pacific Railroad right-of-way.

Bicycle Facilities

On January 25, 2005, the El Dorado County Board of Supervisors adopted the 2005 El Dorado County Bicycle Transportation Plan (BTP). The plan provides a blueprint for the development of a bicycle transportation system in El Dorado County. The BTP identifies three types of bicycle facilities as follows.

- **Class I Bike Path:** Provides a completely separated facility designed for the exclusive use of bicycles and pedestrians with minimal cross flows by motorists.
- **Class II Bike Lane:** Provides a restricted right-of-way designated for the exclusive or semi-exclusive use of bicycles with through travel by motor vehicles or pedestrians prohibited, but with vehicle parking and cross flows by pedestrians and motorists permitted.
- **Class III Bike Route:** Provides a right-of-way designated by signs or permanent markings and shared with pedestrians and motorists.

Bicycle facilities in the project study area are described below:

- **Missouri Flat Road:** Existing Class II bicycle facilities are located along Missouri Flat Road, adjacent to the northwest limits of the project study area. The Bicycle Transportation Plan proposes Class II bicycle facilities along the entire portion of Missouri Flat Road, and extending along the proposed Parkway.

- **SPTC El Dorado Multi-Use Trail:** Class I bicycle facilities have recently been completed along the SPTC, as part of the EDMUT that intersects the project site.

4.12.3 - Regulatory Framework

State

Caltrans Transportation Concept Report (TCR)

Caltrans has jurisdiction over all freeway ramp terminals and mainline segments. Caltrans endeavors to maintain a minimum peak-hour LOS on its facilities of between LOS C and D, which represents a volume-to-capacity ratio of 0.71.

Caltrans published Transportation Concept Report (TCR) for SR-49, dated September 2000, identifies this section of SR-49 as Segment 2. Caltrans states this segment is currently at LOS E. It further concludes that the 20-year, No Build, LOS is F and identifies LOS E as the 20-year target LOS. Caltrans Transportation Concept Improvements are to “widen to 40-foot standard where possible.”

Local

Relevant local regulatory and policy requirements pertinent to transportation and circulation associated with the proposed project’s environmental review are primarily associated with County transportation planning policies as documented in the County General Plan Circulation Element, the El Dorado County Regional Transportation Plan (RTP) and the El Dorado County Bicycle Transportation Plan.

El Dorado County General Plan

The 2004 El Dorado County General Plan Circulation Map (Figure TC-1 of the General Plan) depicts the proposed circulation system to support existing, approved, and planned development in unincorporated El Dorado County through 2025. This circulation system is shown on the General Plan Circulation Map using a set of roadway width classifications, developed to guide the County’s long-range transportation planning and programming. The Diamond Springs Parkway is identified in the County’s General Plan Circulation Element Table TC-1 and Circulation Map from Missouri Flat Road to SR-49 as a future four-lane, divided roadway.

Appendix J of this Draft EIR provides a matrix that lists the policies determined to have relevance to this proposed project and provides a summary of the County’s determination of project consistency with each relevant goal and policy. As shown in Appendix J, the proposed project is consistent with all applicable goals and policies of the General Plan, including those related to traffic and transportation.

El Dorado County Regional Transportation Plan and Capital Improvement Program (CIP)

The El Dorado County Transportation Commission (EDCTC) is the Regional Transportation Planning Agency (RTPA) for El Dorado County (excluding the Tahoe Basin) and is responsible for

the preparation of the El Dorado County RTP. The El Dorado County 2025 RTP was developed by the EDCTC to document the policy direction, actions and funding recommendations intended to meet El Dorado County's short and long-range transportation needs over the next 20 years. The RTP is designed to be a blueprint for the systematic development of a balanced, comprehensive, multi-modal transportation system. In general, RTPs are developed to provide a clear vision of the regional transportation goals, objectives, and policies, complemented by short-term and long-term strategies for implementation. The 2025 RTP also serves as the El Dorado County portion of the Sacramento Area Council of Governments (SACOG) Metropolitan Transportation Plan (MTP). The 2025 RTP identifies the County's 10-year Capital Improvement Program (CIP) in its regional road network short-term action plan. The Diamond Springs Parkway is included in SACOG's MTP.

El Dorado County Bicycle Transportation Plan

The El Dorado County Bicycle Transportation Plan (EDCTC 2005) provides a blueprint for the development of a bicycle transportation system on the western slope of El Dorado County. The 2005 plan is in compliance with Caltrans Streets and Highways Code (sections 890-894.2), enabling the county to be eligible for State Bicycle Transportation Account (BTA) funds. The Bicycle Transportation Plan addresses bicycle transportation issues and goals within the County, including those related to bicycle commuting, safety and education, implementation and maintenance of bicycle facilities, the integration of bicycle and pedestrian facilities in land use development, integration of bicycle facilities with multi-modal transportation connections, funding and bicycle facility connectivity. The Bicycle Transportation Plan also identifies existing and proposed/planned future bicycle facilities within the County. Within the project area, the Bicycle Transportation Plan identifies proposed Class II Bike Lanes along the Parkway that connect the proposed project with the adjacent EDMUT Class I Bike Path and Class II Bike Lanes along Missouri Flat Road.

The Sacramento-Placerville Transportation Corridor (SPTC) Master Plan

The SPTC Master Plan, dated February 25, 2003, considers the feasibility of the corridor's interim use, and develops a set of guiding principles to use in the development of specific projects that are consistent with the Master Plan. "Three types of trails are envisioned for the corridor: natural or "hiking/bike" trails; improved trails; and, paved trails. Additional guidelines specific to the development of each trail type are identified in the respective sections [in the Master Plan]." (SPTC Master Plan, Section V. Design Guidelines) The Master Plan identifies configurations for road crossing design of the trail and alternatives to consider in light of traffic volumes, and vertical and horizontal sight distances, including guidelines for the construction of trails on banks and above channels.

4.12.4 - Project Impact Analysis

As described above, the proposed project includes construction of a new four-lane roadway connector (the Parkway); widening SR-49 to a four-lane multilane highway; creation of a frontage road parallel to State Route 49 (SR-49); other local road and intersection improvements; and a connection to the El

Dorado Multi-Use Trail and a Class I bike path extension. EID Intertie Improvements would also be constructed concurrently with the roadway improvements. The objective of the proposed project is to significantly reduce traffic on the segment of SR-49 between Missouri Flat Road and Diamond Road (SR-49) by constructing a new road to provide parallel capacity to SR-49 and alternate access to Missouri Flat Road and US-50. The addition of the proposed project to the existing roadway network would result in a diversion of traffic from Pleasant Valley Road/SR-49, between Missouri Flat Road and Diamond Road/SR-49, to Diamond Road/SR-49 and the proposed Parkway. The proposed project would improve traffic circulation, operations, congestion and safety in the town of Diamond Springs.

DOT has incorporated the traffic mitigation measures included in the Traffic Impact Analysis (KHA 2009) into the proposed project design, including:

- Signalization of the Diamond Springs Parkway at Missouri Flat Road, Diamond Springs Parkway at Throwita Way, and Diamond Springs Parkway at Diamond Road (SR-49) intersections;
- Addition of a northbound left-turn lane at the Diamond Springs Parkway at Missouri Flat Road intersection;
- Dual northbound left-turn pockets, and allowance of northbound U-turns, and dual eastbound right-turn lane at the Diamond Springs Parkway at Diamond Road (SR-49) intersection;
- Restriction of left turn and through movements of both Lime Kiln Road and Black Rice Road at Diamond Road (SR-49); and,
- Addition of a second southbound left turn lane, including allowance of southbound U-turns, and second northbound right turn lane at Diamond Road (SR-49) at Pleasant Valley Road intersection.

Methodology for Analysis

Intersection and Roadway Operations Analysis

Kimley-Horn and Associates (KHA) prepared a Traffic Impact Analysis that evaluated project impacts on intersection and roadway operations. The study included counts of traffic volumes at intersections to identify existing conditions and modeling projections of future conditions under near-term and long-term scenarios. The key aspects of the Traffic Impact Analysis are discussed below.

Level of Service Analysis

Intersection LOS for this study was determined using methods defined in the Highway Capacity Manual, 2000 (HCM) using appropriate traffic analysis software.

Analysis Scenarios

The analysis scenarios were selected based on Caltrans' requirements due to the proposed project intersecting SR-49. These requirements require evaluation of the proposed project's opening day, assumed for this project to be 2010. Caltrans also requires evaluation of the proposed project after a 20-year design life, or year 2030. The LOS analysis was conducted for the study facilities for the weekday AM and PM peak-hours for the following scenarios:

- Existing (2010) Conditions
- Existing (2010) plus Proposed Project Conditions
- Cumulative (2030) Conditions
- Cumulative (2030) plus Proposed Project Conditions

Analysis of Other Transportation Issues

This Draft EIR evaluates the proposed project impacts on the following additional transportation issue areas: parking, emergency response, public transit, bicycles, pedestrians, and construction traffic. The evaluation included a review of the Caltrans Requirements and the County Municipal Code requirements for emergency access and an analysis of El Dorado County Transit bus service to the project site, as well as bicycle and pedestrian mobility.

Thresholds of Significance

According to the CEQA Guidelines' Appendix G Environmental Checklist, to determine whether transportation and traffic impacts are significant environmental effects, the following questions are analyzed and evaluated. Would the project:

- a.) Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?
- b.) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?
- c.) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?
- d.) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
- e.) Result in inadequate emergency access?
- f.) Result in inadequate parking capacity?

Potential impacts to transportation-related recreation are also considered in this section. According to the CEQA Guidelines' Appendix G Environmental Checklist, to determine whether recreational impacts are significant environmental effects, the following questions are analyzed and evaluated:

- g.) Does the project include recreational facilities or require the construction or expansion of recreational activities, which might have an adverse physical effect on the environment?
- h.) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Standards of Significance

Project impacts were determined by comparing conditions with the proposed project to those without the project. Impacts for intersections are created when traffic from the proposed project forces the LOS to fall below a specific threshold. Intersections that are not part of the Missouri Flat Road interchange at US-50 and are not on SR-49 are within County jurisdiction and are subject to County LOS requirements. Intersections that are on SR-49 or are within the Missouri Flat Road interchange at US-50 are subject to Caltrans' jurisdiction and fall under Caltrans LOS requirements. Roadway segments, including those on SR-49, are subject to County LOS requirements. SR-49 is subject to both County and Caltrans requirements.

The County's standards specify the following:

- "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" (El Dorado County General Plan Policy TC-Xd). The proposed project is located within the Diamond Springs Community Region.
- "If a project causes the peak-hour level of service...on a County road or State highway that would otherwise meet the County standards (without the project) to exceed the [given] values, then the impact shall be considered significant."
- "If any county road or state highway fails to meet the [given] standards for peak hour level of service...under existing conditions, and the project will 'significantly worsen' conditions on the road or highway, then the impact shall be considered significant." According to General Plan Policy TC- Xe "significantly worsen" is defined as "a 2 percent increase in traffic during the a.m. peak hour, p.m. peak hour, or daily, or the addition of 100 or more daily trips, or the addition of 10 or more trips during the a.m. peak hour or the p.m. peak hour."

The Caltrans standard of significance was applied to intersections on SR-49 and at the Missouri Flat Road Interchange. The following LOS requirement was used for Caltrans facilities:

- "The District 3 standard for average delay at signalized intersections, in most areas, is LOS D on an hourly basis, or LOS E for the peak 15 minutes. For all-way stop intersections and, this

standard should be used for each approach. Queue lengths on each approach must also be considered for all intersection analysis.”

Impact Statements and Mitigation Discussions

This section discusses potential impacts associated with the development of the proposed project and provides mitigation measures where appropriate. The analysis considers individual impacts associated with the Diamond Springs Parkway and associated roadway improvements, as well as the EID Intertie Improvements, and the combined effects from implementation of both project components.

Existing (2010) Plus Project Intersection and Roadway Operations (Traffic Increase)

Impact 4.12-1	The project has the potential to result in an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections). (Less than Significant)
----------------------	--

Impact Analysis

This impact evaluates the impacts of the proposed project on existing plus project intersection and roadway operations. Using the Existing (2010) plus Proposed Project volumes, levels of service were determined at the study facilities with the addition of the proposed project.

Intersections

Table 4.12-4 presents the peak-hour intersection operating conditions for the Existing (2010) analysis scenario with and without the addition of the proposed project. The construction of the proposed project is not expected to change traffic volumes at a number of existing intersections.

Table 4.12-4: Existing (2010) and Existing (2010) plus Project Intersection Level of Service

#	Intersection	Traffic Control	Analysis Scenario	AM Peak-Hour		PM Peak-Hour	
				Delay (seconds)	LOS	Delay (seconds)	LOS
1	Missouri Flat Road @ Plaza Drive	Signal	Ex.	28.6	C	30.2	C
			Ex. + PP	28.6	C	30.2	C
2	Missouri Flat Road @ US-50 WB Ramps	Signal	Ex.	18.0	B	20.1	C
			Ex. + PP	18.0	B	20.1	C
3	Missouri Flat Road @ US-50 EB Ramps	Signal	Ex.	13.2	B	21.7	C
			Ex. + PP	13.2	B	21.7	C
4	Missouri Flat Road @ Mother Lode Drive	Signal	Ex.	10.1	B	12.3	B
			Ex. + PP	10.1	B	12.3	B
5	Missouri Flat Road @ Forni Road	Signal	Ex.	16.3	B	26.8	C
			Ex. + PP	16.3	B	26.8	C

Table 4.12-4 (cont.): Existing (2010) and Existing (2010) plus Project Intersection Level of Service

#	Intersection	Traffic Control	Analysis Scenario	AM Peak-Hour		PM Peak-Hour	
				Delay (seconds)	LOS	Delay (seconds)	LOS
6	Missouri Flat Road @ Golden Center Drive	Signal	Ex.	12.0	B	16.6	B
			Ex. + PP	12.0	B	16.6	B
7	Diamond Springs Parkway @ Missouri Flat Road	Signal	Ex.	N/A	N/A	N/A	N/A
			Ex. + PP	22.0	C	24.4	C
8	Diamond Springs Parkway @ Throwita Way	Signal	Ex.	N/A	N/A	N/A	N/A
			Ex. + PP	10.0	A	15.6	B
9	Diamond Springs Parkway @ Diamond Road (SR-49)	Signal	Ex.	N/A	N/A	N/A	N/A
			Ex. + PP	49.4	D	19.0	B
10	Diamond Road (SR-49) @ Truck Street	TWSC*	Ex.	11.8 (EB)	B	14.6 (EB)	B
			Ex. + PP	15.7 (EB)	C	17.5 (EB)	C
11	Diamond Road (SR-49) @ Bradley Drive	TWSC*	Ex.	11.6 (EB)	B	14.6 (EB)	B
			Ex. + PP***	12.5 (EB)	B	12.6 (EB)	B
12	Diamond Road (SR-49) @ Lime Kiln Road/Black Rice Road	TWSC*	Ex.	15.1 (WB)	C	26.9 (EB)	D
		TWSC/RLT**	Ex. + PP	17.1 (WB)	C	17.4 (EB)	C
13	Diamond Road (SR-49) @ Pleasant Valley Road	Signal	Ex.	21.2	C	29.3	C
			Ex. + PP	18.8	B	26.0	C
14	Pleasant Valley Road (SR-49) @ Missouri Flat Road	Signal	Ex.	20.8	C	53.8	D
			Ex. + PP	9.7	A	16.3	B
15	Pleasant Valley Road (SR-49) @ China Garden Road	TWSC*	Ex.	56.0 (SB)	F	71.1 (SB)	F
			Ex. + PP	16.6 (SB)	C	21.8 (SB)	C
16	Pleasant Valley Road @ Racquet Way	TWSC*	Ex.	13.1 (SB)	B	19.5 (NB)	C
			Ex. + PP	12.7 (SB)	B	19.3 (NB)	C
17	Missouri Flat Road @ China Garden Road	TWSC*	Ex.	23.3 (WB)	C	31.6 (WB)	D
			Ex. + PP	15.5 (WB)	C	20.0 (WB)	C

Notes:

Ex. = Existing (2010)

Ex. + PP = Existing (2010) plus Proposed Project

TWSC = Two Way Stop Control

* Control delay for worst minor approach (worst minor movement)

** RLT = Restricted left turn and through movements from side streets

*** Access converted to right-in/right-out with the addition of the Proposed Project.

Bold = indicate significant impact as defined by the County or Caltrans.

Source: KHA, 2009.

Roadway Segments

Table 4.12-5 presents the existing and plus project peak-hour roadway segment operating conditions for this analysis scenario.

Table 4.12-5: Existing (2010) and Existing (2010) plus Project Roadway Level of Service

#	Roadway Segment	Roadway Classification	Analysis Scenario	PM Peak-Hour	
				Volume (vph)	LOS
1	Missouri Flat Road south of Halyard Lane	2 Lane Arterial	Ex.	1,271	D
		4 Lane Arterial (Div)	Ex. + PP	1,897	C
2	Missouri Flat Road south of China Garden Road	2 Lane Arterial	Ex.	1,647	D
			Ex. + PP	1,197	D
3	Pleasant Valley Road west of Missouri Flat Road	Minor 2 Lane Highway	Ex.	1,347	D
			Ex. + PP	1,341	D
4	Pleasant Valley Road east of Missouri Flat Road	Minor 2 Lane Highway	Ex.	1,833	F
			Ex. + PP	998	D
5	Pleasant Valley Road east of Diamond Road (SR-49)	Minor 2 Lane Highway	Ex.	1,237	D
			Ex. + PP	1,193	D
6	SR-49 north of Pleasant Valley Road	Minor 2 Lane Highway	Ex.	697	D
			Ex. + PP	1,063	D
7	SR-49 north of Truck Street	Minor 2 Lane Highway	Ex.	856	D
			Ex. + PP	921	D
8	Diamond Springs Parkway east of Missouri Flat Road	Two Lane Arterial, Divided	Ex.	N/A	N/A
			Ex. + PP	1,375	D
Notes: Ex. = Existing (2010) Ex. + PP = Existing (2010) plus Proposed Project Source: KHA, 2009.					

Significance Determination Before Mitigation

Intersections

As shown in Table 4.12-3, the proposed project does not result in a LOS deficiency at any of the studied intersections; to the contrary, the proposed project improves a number of existing LOS deficiencies such as Diamond Springs Parkway at Throwita Way and Pleasant Valley Road (SR-49) at China Garden Road. Therefore, the proposed project's impacts at study intersections are considered less than significant.

Roadway

As shown in Table 4.12-5 the proposed project does not cause the study roadway segments that operate at LOS E or better without the proposed project to operate at LOS F, or worsen any roadway segment operating at LOS F without the proposed project. In addition, the proposed project improves operations on a number of existing roadways. Therefore, the proposed project's impacts at study roadway segments are considered less than significant.

MC&FP EIR Mitigation Measures

Mitigation addressing traffic capacity for the MC&FP is included in Section 4.4 of the MC&FP EIR. These mitigation measures specifically state that the required intersection mitigation measures apply to the development projects in the MC&FP area. Accordingly, the mitigation measures previously identified would not be applicable to the proposed project.

Significance Determination After MC&FP Mitigation, and Supporting Rationale

Less than significant impact.

Additional Mitigation Measures

No additional mitigation is necessary.

Significance Determination After Additional Mitigation, and Supporting Rationale

Less than significant.

EID Intertie Improvements

EID Intertie Improvements would be located beneath SR-49 and the Parkway, and, as such, would not impact traffic operations. No impact.

Cumulative (2030) Plus Project Intersection and Roadway Operations

Impact 4.12-2	The project has the potential to exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways. (Less than Significant)
----------------------	---

Impact Analysis

This impact evaluates the impacts of the proposed project on cumulative (2030) plus project intersection and roadway operations.

2030 Conditions

For this scenario, Phase 1B and Phase 2 of the Missouri Flat Road interchange at US-50 are assumed to be completed. Phase 1B, which began construction in 2010, will modify the eastbound on-ramp and reconfigures the westbound ramps to eliminate the loop ramp. Phase 2 of the interchange improvements would construct a single point urban interchange (SPUI). The SPUI will result in the removal of the signal at each of the east- and westbound off-ramp intersections. The off-ramp signals will be replaced by one centralized signal.

For this scenario, additional traffic from the development located north of US-50 and west of Missouri Flat Road along the extension of Headington Road, as included in vested Sundance Development Agreement (in Traffic Analysis Zone (TAZ) 186), was included in the Cumulative (2030) volumes.

Cumulative Impacts

Utilizing the Cumulative (2030) volumes, levels of service were determined at the study facilities without and with the addition of the proposed project. Exhibit 4.12-4 illustrates the cumulative (2030) peak-hour traffic volumes at the study intersections. Exhibit 4.12-5 illustrates the cumulative (2030) plus project peak-hour traffic volumes.

Intersections

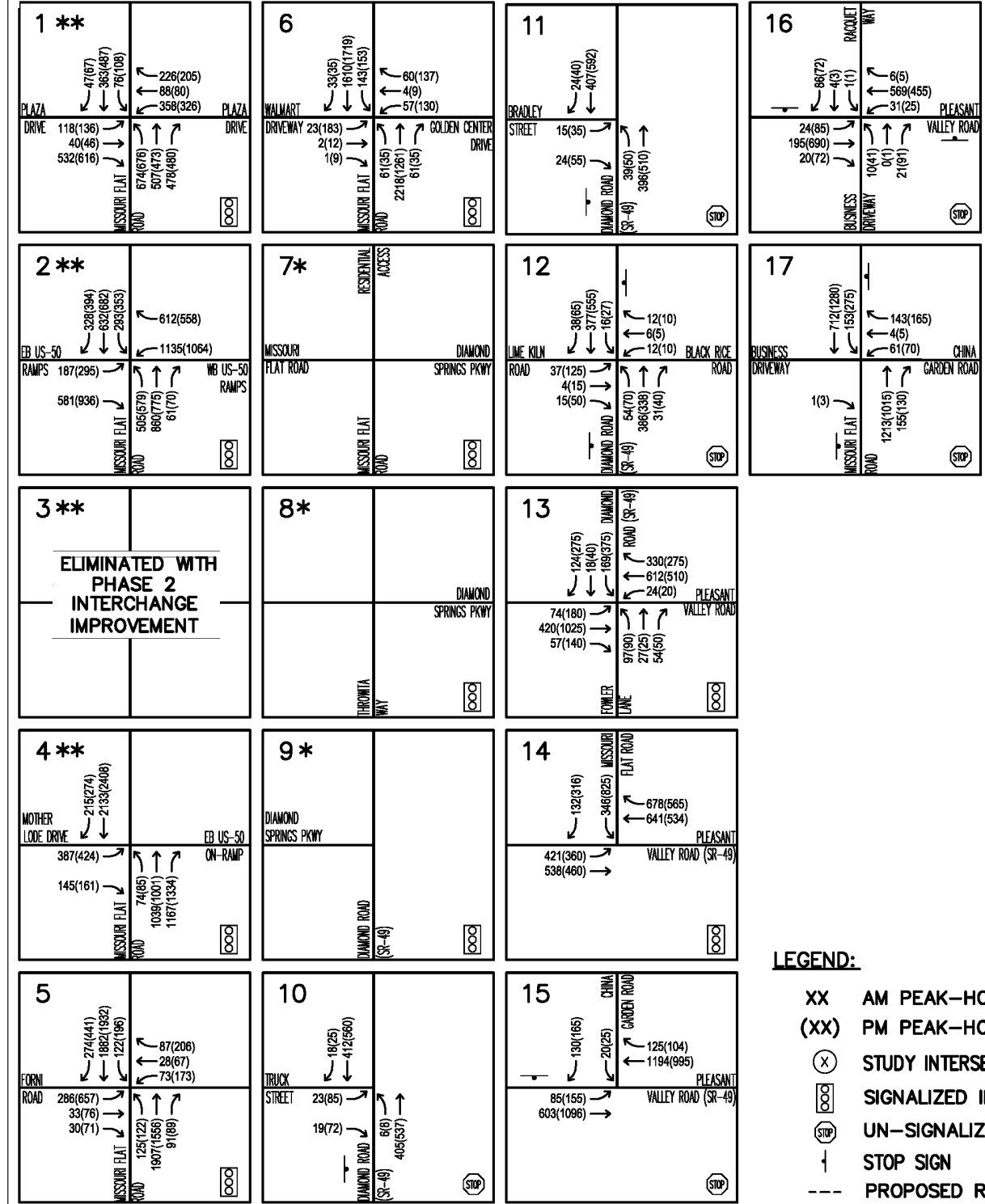
Table 4.12-6 presents the peak-hour intersection operating conditions for the Cumulative (2030) scenario.

Table 4.12-6: Cumulative (2030) and Cumulative (2030) plus Project Intersection Level of Service

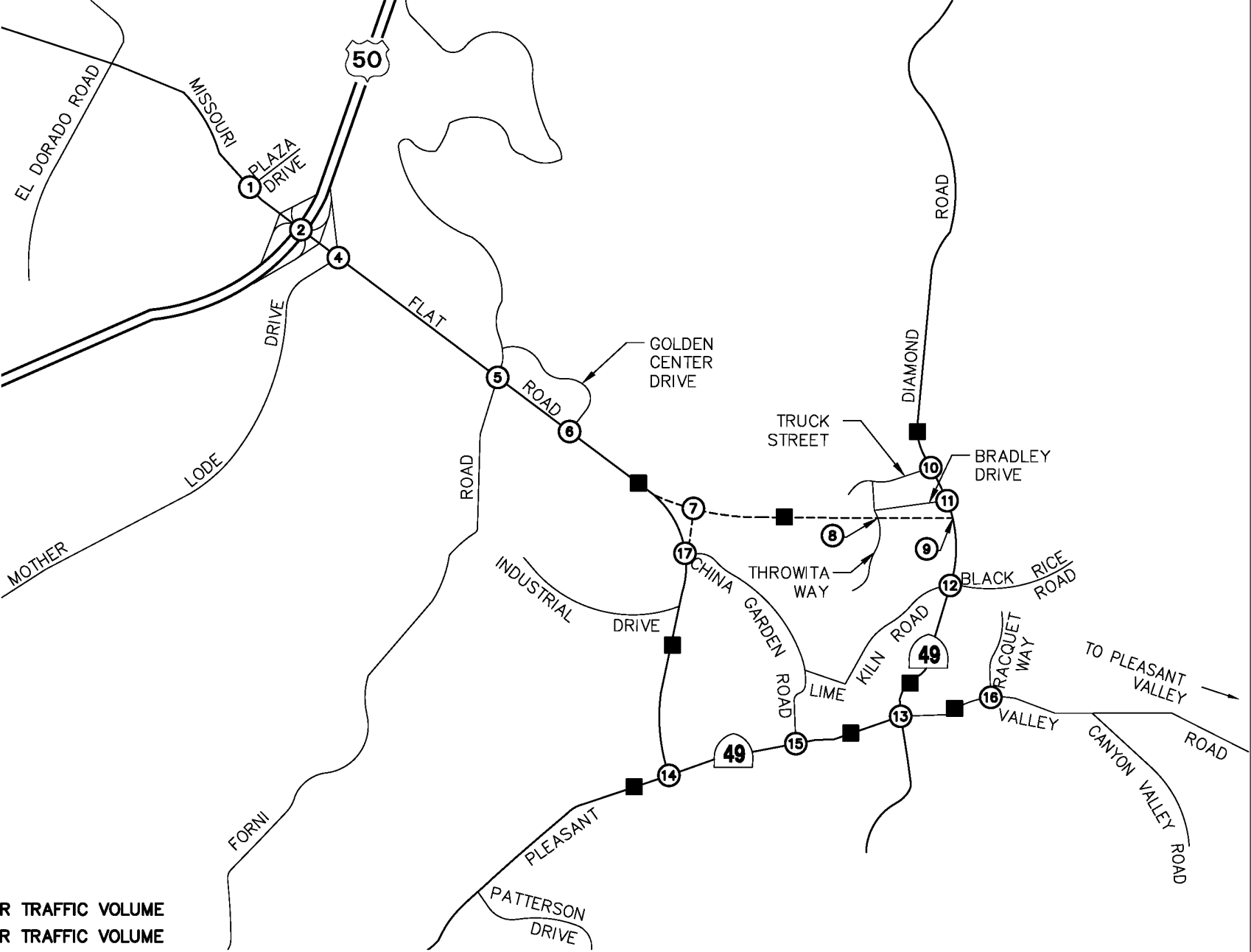
#	Intersection	Traffic Control	Analysis Scenario	AM Peak-Hour		PM Peak-Hour	
				Delay (seconds)	LOS	Delay (seconds)	LOS
1	Missouri Flat Road @ Plaza Drive	Signal	Cum	59.0	E	78.2	E
			Cum + PP	59.0	E	78.2	E
2	Missouri Flat Road @ US-50 EB/WB Ramps	Signal	Cum	95.2	F	102.4	F
			Cum + PP	95.2	F	102.4	F
3	Missouri Flat Road @ US-50 EB Ramps	Signal	Cum	Intersection Eliminated with Phase 2 of Interchange			
			Cum + PP	Intersection Eliminated with Phase 2 of Interchange			
4	Missouri Flat Road @ Mother Lode Drive	Signal	Cum	15.8	B	57.7	E
			Cum + PP	15.8	B	57.7	E
5	Missouri Flat Road @ Forni Road	Signal	Cum	126.1	F	147.5	F
			Cum + PP	126.1	F	147.5	F
6	Missouri Flat Road @ Golden Center Drive	Signal	Cum	75.5	E	49.3	D
			Cum + PP	75.5	E	49.3	D
7	Diamond Springs Parkway @ Missouri Flat Road	Signal	Cum	N/A	N/A	N/A	N/A
			Cum + PP	30.4	C	33.3	C
8	Diamond Springs Parkway @ Throwita Way	Signal	Cum	N/A	N/A	N/A	N/A
			Cum + PP	15.7	B	15.4	B

Table 4.12-6 (cont.): Cumulative (2030) and Cumulative (2030) plus Project Intersection Level of Service

#	Intersection	Traffic Control	Analysis Scenario	AM Peak-Hour		PM Peak-Hour	
				Delay (seconds)	LOS	Delay (seconds)	LOS
9	Diamond Springs Parkway @ Diamond Road (SR-49)	Signal	Cum	N/A	N/A	N/A	N/A
			Cum + PP	52.0	D	44.4	D
10	Diamond Road (SR-49) @ Truck Street	TWSC*	Cum	15.8 (EB)	C	43.1 (EB)	E
			Cum + PP	20.3 (EB)	C	27.1 (EB)	D
11	Diamond Road (SR-49) @ Bradley Drive	TWSC*	Cum	15.1 (EB)	C	28.4 (EB)	D
			Cum + PP	14.2 (EB)	B	14.6 (EB)	B
12	Diamond Road (SR-49) @ Lime Kiln Road/Black Rice Road	TWSC*	Cum	26.8 (EB)	D	302.0 (EB)	F
		TWSC*/RLT***	Cum + PP	12.3 (EB)	B	14.7 (EB)	B
13	Diamond Road (SR-49) @ Pleasant Valley Road	Signal	Cum	27.3	C	46.5	D
			Cum + PP	23.3	C	59.8	E
14	Pleasant Valley Road (SR-49) @ Missouri Flat Road	Signal	Cum	32.5	C	83.9	F
			Cum + PP	16.0	B	35.7	D
15	Pleasant Valley Road (SR-49) @ China Garden Road	TWSC*	Cum	313.6 (SB)	F	802.3 (SB)	F
			Cum + PP	45.5 (SB)	E	252.6 (SB)	F
16	Pleasant Valley Road @ Racquet Way	TWSC*	Cum	14.7 (SB)	B	29.2 (NB)	D
			Cum + PP	15.4 (SB)	C	34.3 (NB)	D
17	Missouri Flat Road @ China Garden Road	TWSC*	Cum	372.7 (WB)	F	>1000 (WB)	F
			Cum + PP	67.6 (WB)	F	226.7 (WB)	F
Notes: Cum = Cumulative (2030), Cum + PP = Cumulative (2030) plus Proposed Project TWSC = Two Way Stop Control * Control delay for worst minor approach (worst minor movement) ** RLT = Restricted left and through movements from side streets Bold = indicate significant impact as defined by the County or Caltrans. Source: KHA, 2009.							



- LEGEND:**
- XX AM PEAK-HOUR TRAFFIC VOLUME
 - (XX) PM PEAK-HOUR TRAFFIC VOLUME
 - (X) STUDY INTERSECTIONS
 - [Signalized Symbol] SIGNALIZED INTERSECTION
 - [Un-signalized Symbol] UN-SIGNALIZED INTERSECTION
 - [Stop Sign Symbol] STOP SIGN
 - PROPOSED ROADWAY
 - STUDY ROADWAY SEGMENT
 - * INTERSECTION FOR PLUS PROJECT SCENARIOS ONLY
 - ** ASSUMES MISSOURI FLAT INTERCHANGE PHASE 2 IMPROVEMENTS ARE IN PLACE



Source: Kimley-Horn and Associates, Inc. 2009.

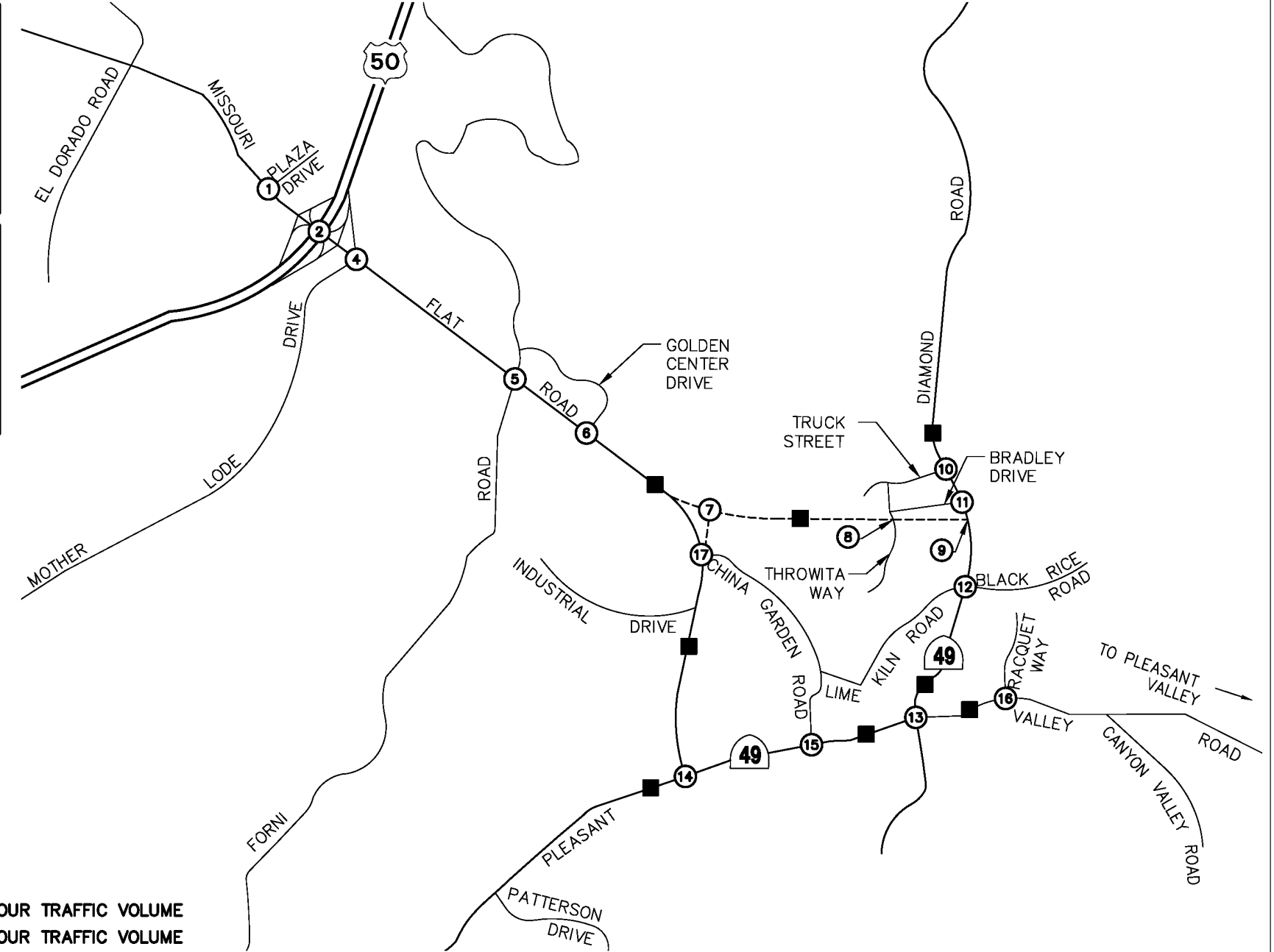
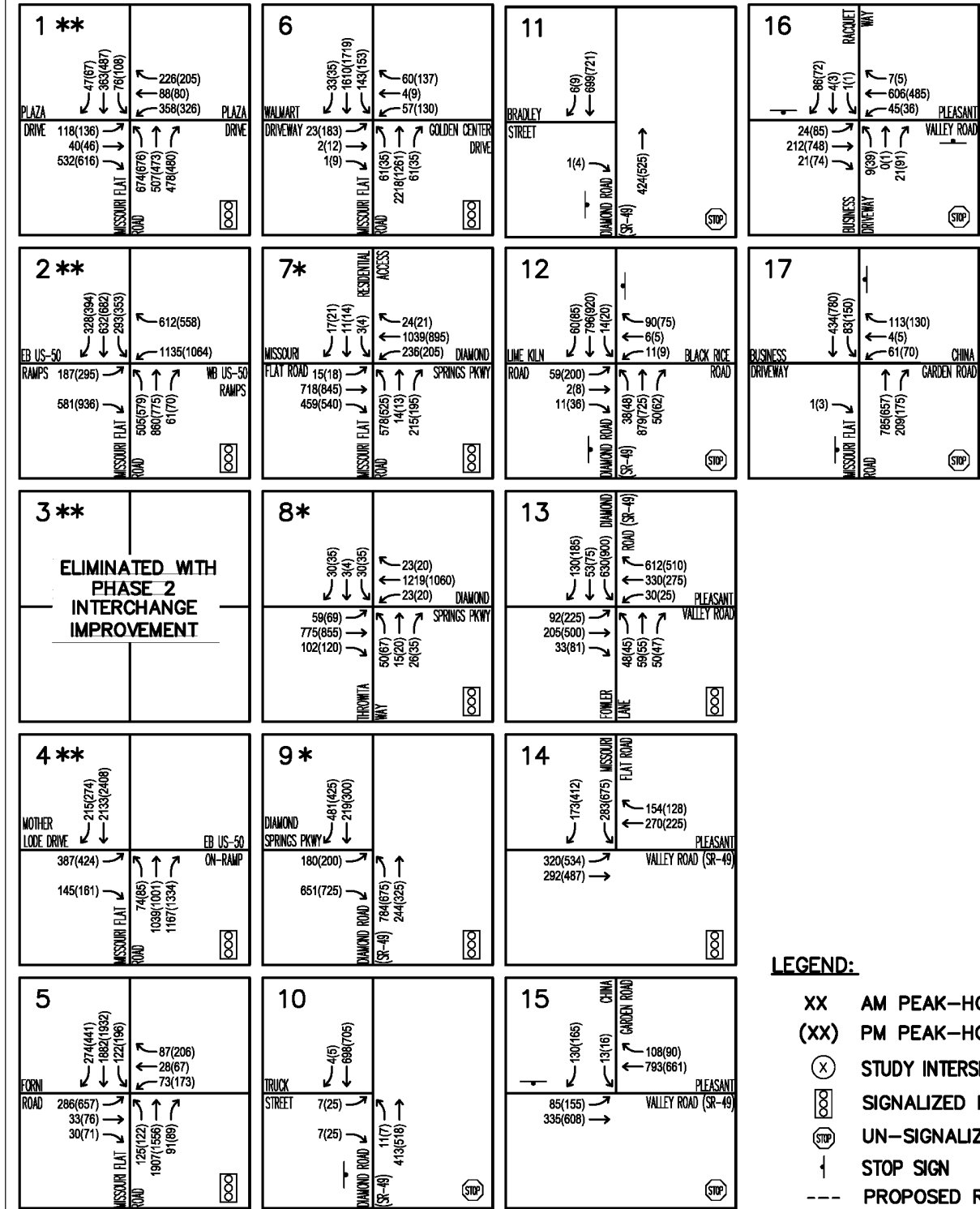


Michael Brandman Associates

1173.0025 • 03/2010 | 4.12-4_Cumulative_Peak_Hour_Traffic.ai

Exhibit 4.12-4 Cumulative (2030) Peak-Hour Traffic Volumes

COUNTY OF EL DORADO DEPARTMENT OF TRANSPORTATION
DIAMOND SPRINGS PARKWAY PROJECT
ENVIRONMENTAL IMPACT REPORT



LEGEND:

- XX AM PEAK-HOUR TRAFFIC VOLUME
- (XX) PM PEAK-HOUR TRAFFIC VOLUME
- (X) STUDY INTERSECTIONS
- Signalized Intersection Symbol
- Un-Signalized Intersection Symbol
- STOP SIGN
- PROPOSED ROADWAY
- STUDY ROADWAY SEGMENT
- * INTERSECTION FOR PLUS PROJECT SCENARIOS ONLY
- ** ASSUMES MISSOURI FLAT INTERCHANGE PHASE 2 IMPROVEMENTS ARE IN PLACE

Source: Kimley-Horn and Associates, Inc. 2009.



Michael Brandman Associates

1173.0025 • 03/2010 | 4.12-5_Cumulative_Plus_Project_Peak_Hour_Traffic.ai

Exhibit 4.12-5 Cumulative (2030) Plus Project Peak-Hour Traffic Volumes

COUNTY OF EL DORADO DEPARTMENT OF TRANSPORTATION
DIAMOND SPRINGS PARKWAY PROJECT
ENVIRONMENTAL IMPACT REPORT

Roadway Segments

Table 4.12-7 presents the peak-hour roadway segment operating conditions for this analysis scenario. As indicated in Table 4.12-7, the study roadway segments operate from LOS D to LOS F during the PM peak-hour.

Table 4.12-7: Cumulative (2030) and Cumulative (2030) plus Project Roadway Level of Service

#	Roadway Segment	Roadway Classification	Analysis Scenario	PM Peak-Hour	
				Volume (vph)	LOS
1	Missouri Flat Road south of Halyard Lane	2 Lane Arterial	Cum	2,133	F
		4 Lane Arterial (Div)	Cum + PP	2,739	D
2	Missouri Flat Road south of China Garden Road	2 Lane Arterial	Cum	2,157	F
			Cum + PP	1,707	D
3	Pleasant Valley Road west of Missouri Flat Road	Minor 2 Lane Highway	Cum	1,664	E
			Cum + PP	1,658	E
4	Pleasant Valley Road east of Missouri Flat Road	Minor 2 Lane Highway	Cum	2,350	F
			Cum + PP	1,515	E
5	Pleasant Valley Road east of Diamond Road (SR-49)	Minor 2 Lane Highway	Cum	1,559	E
			Cum + PP	1,503	E
6	SR-49 north of Pleasant Valley Road	4 Lane Multilane Highway	Cum	1,236	D
			Cum + PP	1,752	C
7	SR-49 north of Truck Street	Minor 2 Lane Highway	Cum	1,307	D
			Cum + PP	1,478	E
8	Diamond Springs Parkway east of Missouri Flat Road	Four Lane Arterial, Divided	Cum	N/A	N/A
			Cum + PP	1,858	C
Notes: Cum = Cumulative (2030), Cum + PP = Cumulative (2030) plus Proposed Project Bold = indicate significant impact as defined by the County or Caltrans. Source: KHA, 2009.					

Significance Determination Before Mitigation

Intersections

As shown in Table 4.12-3, the proposed project does not cause the study intersections that operate at LOS E or better without the proposed project to operate at LOS F, or worsen any intersection operating at LOS F without the proposed project. In addition, the proposed project improves operations on a number of intersections. Therefore, the proposed project's impacts at study intersections are considered less than significant.

Traffic and Transportation

Roadway

As shown in Table 4.12-6, the proposed project does not cause the study roadway segments that operate at LOS E or better without the proposed project to operate at LOS F, or worsen any roadway segment operating at LOS F without the proposed project. In addition, the proposed project improves operations on a number of existing roadways. Therefore, the proposed project's impacts at study roadway segments are considered less than significant.

Mitigation Measures from the MC&FP EIR

Mitigation addressing traffic capacity for the MC&FP is included in Section 4.4 of the MC&FP EIR. These mitigation measures specifically state that the required intersection mitigation measures apply to land use development projects in the MC&FP area. Accordingly, the mitigation measures previously identified would not be applicable to the proposed project.

Significance Determination After MC&FP Mitigation, and Supporting Rationale

Less than significant impact.

Additional Mitigation Measures

No additional mitigation is necessary.

Significant Determination After Additional Mitigation, and Supporting Rationale

Less than significant impact.

EID Intertie Improvements

EID Intertie Improvements would be located beneath SR-49 and the Parkway, and, as such, would not impact traffic operations. No impact.

Queuing Lengths

Impact 4.12-3: The project has the potential to contribute unacceptable queue lengths. (Less than Significant)

Impact Analysis

Vehicle queuing was evaluated at the following five study intersections:

- Diamond Springs Parkway / Missouri Flat Road
- Diamond Springs Parkway / Throwita Way
- Diamond Springs Parkway / Diamond Road (SR-49)
- Diamond Springs Parkway / Lime Kiln Road
- Diamond Road (SR-49) / Pleasant Valley Road

The calculated vehicle queues were compared to actual or anticipated vehicle storage/segment lengths.

As shown in Table 4.12-8, implementation of design considerations described in Section 3, Project Description, would increase queuing lane lengths to accommodate project traffic under the cumulative (2030) plus project scenarios for all five of the affected intersections.

Table 4.12-8: Cumulative (2030) Plus Project Intersection Queuing Evaluation

Intersection / Analysis Scenario	Movement	AM Peak-Hour		PM Peak-Hour	
		Available Storage (ft)	95 th % Queue (Ft)	Available Storage (ft)	95 th % Queue (Ft)
DSP@ Missouri Flat Road					
WBTH		2,835*	508	2,835*	368
WBLT		325	324	325	323
NBLT		325 ⁺	288	325 ⁺	321
DSP@ Throwita Way					
EBLT		175	26	175	163
WBTH		850*	491	850*	283
DSP@ Diamond Rd (SR-49)					
NBLT		350 ⁺	341	350 ⁺	272
EBRT		850*	578	850*	730
Diamond Rd (SR-49) @ Pleasant Valley Rd					
EBLT		180	85	180	187
SBLT		525 ⁺	237	525 ⁺	505
WBRT		180	93	180	120
Notes: Source: Highway Capacity Manual (HCM) 2000 methodology per Synchro® v7. ⁺ Dual left-turn lanes, *Intersection approach with available storage length equal to segment length Source: KHA, 2009.					

As shown in Table 4.12-8, intersection design has incorporated the above available storage lengths into the proposed project to ensure appropriate queuing lengths are provided. Therefore, impacts would be less than significant.

Significance Determination Before Mitigation

Less than significant impact.

Mitigation Measures from the MC&FP EIR

There are no mitigation measures proposed in the MC&FP EIR that are applicable to proposed project related to queuing lengths.

Traffic and Transportation

Significance Determination After MC&FP Mitigation, and Supporting Rationale

Less than significant impact.

Additional Mitigation Measures

No additional mitigation is necessary.

Significant Determination After Additional Mitigation, and Supporting Rationale

Less than significant impact.

EID Intertie Improvements

EID Intertie Improvements would be located beneath SR-49 and the Parkway, and, as such, would not impact queuing. No impact.

Construction Traffic, Staging, and Parking

Impact 4.12-4: Construction activities associated with the project may adversely affect circulation and parking on nearby roadways. (Less than Significant)

Impact Analysis

This impact evaluates the proposed project's impacts associated with construction traffic, staging, and parking. The analysis considers individual impacts associated with the Diamond Springs Parkway and the EID Intertie Improvements project and the combined effects from implementation of both project components.

Construction of the proposed project would require site clearance, grading, and delivery of equipment and materials. Construction workers would need to travel to and from the project site. Most of the construction traffic, especially trucks and equipment delivery vehicles, would be expected to travel via US-50 and Missouri Flat Road to reach to the construction site. The proposed project is located within a commercial area of El Dorado County that currently experiences a significant number of truck movements on a daily basis; therefore, this route would be adequate to support construction traffic associated with the proposed project.

The majority of the activities associated with constructing proposed Parkway would take place in an area where motor vehicle travel does not presently occur. However, construction activities at and near the terminating ends of the Parkway (Missouri Flat Road and Diamond Road/SR-49) will require traffic controls, temporary lane closures, and /or traffic lane diversions to ensure safe and efficient movement of vehicles, bicyclists and pedestrians through intersections and /or use of alternative routes during construction.

Traffic to the MRF on Throwita Way would be temporarily diverted during construction of a portion of the Parkway; an alternate access route to the MRF would be provided during that state of construction. Upon completion of the Parkway, MRF traffic would resume access via Throwita Way.

DOT anticipates that during construction activities on SR-49, the construction contractor may close one lane of traffic. Traffic would be re-routed to use the portion of the right-of-way not being affected. Lane configurations would be changed as necessary to accommodate construction activity locations. Short-term closures would occur during K-rail installation and striping, during which a detour would be provided. Diversions of traffic would be signed; and traffic control devised would be used as necessary to guide traffic and delineate temporary lanes.

All construction staging and equipment storage would occur within the identified project study area. The bulk of the staging and storage is anticipated to occur on APN 051-250-12, which is located adjacent to and south of the proposed Parkway, and west of SR-49.

Under standard DOT procedures, special provisions within construction contracts would require that a traffic management plan be prepared for the proposed project. The traffic management plan would include construction staging and traffic control measures to be implemented during construction to minimize impacts to traffic. Minor traffic stoppages or delays may be allowed if necessary during project construction. Full roadway closures would be minimized during project construction and provisions for emergency vehicle movement through the project area and private property access would be provided at all times during construction.

Implementation of the provisions discussed under this impact analysis, including DOT's traffic management plan, would minimize effects to surrounding roadways and ensure impacts resulting from construction traffic, staging and parking are less than significant.

Significance Determination Before Mitigation

Less than significant impact.

Mitigation Measures from the MC&FP EIR

Mitigation addressing traffic construction and staging as it relates to traffic are included in Section 4.4 of the MC&FP EIR; however, the impacts and mitigation measures that are referenced analyze a different project footprint. Accordingly, construction traffic, staging, and parking impacts previously identified would not be applicable to the proposed project.

Significance Determination After MC&FP Mitigation, and Supporting Rationale

Less than significant impact.

Additional Mitigation Measures

No additional mitigation is necessary.

Significance Determination After Mitigation and Supporting Rationale

Less than significant impact.

Traffic and Transportation

EID Intertie Improvements

EID Intertie Improvements would occur simultaneously with construction activities for the Parkway and Diamond Road (SR-49). Accordingly, EID construction traffic, staging and parking would be included in the Parkway's construction-traffic management plan and impacts would be less than significant.

Air Traffic Patterns

Impact 4.12-5 The project has the potential to change air traffic patterns. (No Impact)

Impact Analysis

The nearest airport to the project site is the Placerville Airport, located approximately 2.8 miles to the northeast. This distance, and the type of project proposed, precludes the possibility of changes to air traffic patterns. No impacts would occur.

Significance Determination Before Mitigation

No impact.

Mitigation Measures from the MC&FP EIR

N/A

Significance Determination After MC&FP Mitigation, and Supporting Rationale

No impact.

Additional Mitigation Measures

No additional mitigation is necessary.

Significance Determination After Additional Mitigation, and Supporting Rationale

No impact.

EID Intertie Improvements

No impact.

Safety and Roadway Hazards

Impact 4.12-6 The project has the potential to substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). (Less than Significant)

Impact Analysis Standard roadway design procedures and planned safety improvements are incorporated into the proposed project's design and would ensure that no significant impacts would result from project implementation.

Significance Determination Before Mitigation

Less than significant impact.

Mitigation Measures from the MC&FP EIR

N/A

Significance Determination After MC&FP Mitigation, and Supporting Rationale

Less than significant impact.

Additional Mitigation Measures

No additional mitigation is necessary.

Significance Determination After Additional Mitigation, and Supporting Rationale

Less than significant impact.

EID Intertie Improvements

The proposed EID Intertie Improvements would be located entirely below the existing and proposed roadways. As such, the EID Intertie Improvements would not result in roadway hazards or incompatible uses. No impact would occur.

Emergency Access

Impact 4.12-7	The project has the potential to result in inadequate emergency access. (Less than Significant)
----------------------	--

Impact Analysis

This impact evaluates the effects of the proposed project's construction and implementation on emergency access. The proposed project construction activities would be coordinated with local law enforcement and emergency service providers. As a result of this coordination, law enforcement and emergency service providers would be aware of project construction and the potential for any emergency vehicle movement or access delays within the project area and measures to avoid such delays would be determined. Accordingly, the proposed project's construction would not affect the provision of emergency services in and adjacent to the project area or evacuation in the event of a major emergency.

Upon completion, the Diamond Springs Parkway would improve emergency access to the project area by creating a more direct route to surrounding land uses and reducing traffic congestion in downtown Diamond Springs. The proposed project would also widen Diamond Road (SR-49), creating easier passing opportunities for emergency response vehicles. Therefore, the new roadway and roadway improvements would improve emergency access to the project vicinity, resulting in beneficial impacts, while impacts resulting from construction activities would be less than significant.

Significance Determination Before Mitigation

Less than significant impact.

Mitigation Measures from the MC&FP EIR

N/A

Traffic and Transportation

Significance Determination After MC&FP Mitigation, and Supporting Rationale

Less than significant impact.

Additional Mitigation Measures

No additional mitigation is necessary.

Significance Determination After Additional Mitigation, and Supporting Rationale

Less than significant impact.

EID Intertie Improvements

The inclusion of a traffic management plan in all construction contracts would ensure that construction of the EID Intertie Improvements would not result in inadequate, response times, or impaired police, fire or emergency response services. Any interruptions to water service would be coordinated with fire response services to ensure that, in the event of a fire, adequate water is available for fire suppression. This would be a less than significant impact.

Conflict with Alternative Transportation

Impact 4.12-8	The project has the potential to conflict with adopted policies, plans or programs supporting alternative transportation (e.g. bus turnouts, bicycle racks). (Less than Significant)
----------------------	---

Impact Analysis

According to Chapter 5 of the El Dorado County Bicycle Transportation Plan (BTP) and preliminary proposed project design plans (Exhibit 3-5a and 3-5b), Class II Bike Lanes are included in the proposed project. Class II Bike Lanes are currently in place north of the project site, along Missouri Flat Road from approximately Mother Lode Drive to Golden Center Drive.

The proposed project would also construct a Class I bike path connection of the EDMUT to the signalized intersection of Diamond Springs Parkway and Missouri Flat Road and an 8-foot-wide, Class I bike path along the western side of Missouri Flat Road. These improvements would provide EDMUT users the opportunity to cross the Parkway / Missouri Flat intersection, and connect to the future western extension of the EDMUT within the Sacramento-Placerville Transportation Corridor (SPTC). Additionally, the project also proposes the construction of a parking lot for trail users (Exhibits 3-5a, 3-5 b, and 3-5c). The paved parking lot would consist of up to 40 parking spaces.

Through these connections to the existing and future bicycle transportation network, the proposed project would provide continuity with adjacent projects, schools, parks, and other public facilities. It would not conflict with the Bicycle Transportation Plan.

Transit system operations within the project area would be subject to the same potential delays during project construction as those discussed above for the Intersections and Roadway operations analyses. The development and implementation of a traffic management plan for the proposed project would minimize the potential for delays to transit system operations, and this impact is considered less than

significant. Following the completion of the Diamond Springs Parkway, two bus turnouts, one westbound and one eastbound, would be provided near the Parkway / Throwita Way intersection. A third bus turnout would be provided along northbound Diamond Road (SR-49), north of the intersection with Black Rice Road. Provision of the bus turnouts would be in compliance with General Plan Policies related to alternative transportation.

As discussed previously, the proposed project would include the preparation and implementation of a traffic management plan. The traffic management plan would include construction staging and traffic control measures to be implemented during construction to maintain and minimize impacts to traffic, bicycles and pedestrian circulation during construction. In summary, the proposed project would provide pedestrian, bicycle, and bus turnouts and would therefore conform to adopted policies, plans or programs supporting alternative transportation. Impacts are considered less than significant.

Significance Determination Before Mitigation

Less than significant impact.

MC&FP EIR Mitigation Measures

There are no mitigation measures proposed in the MC&FP EIR that are applicable to the Diamond Springs Parkway Project for Conflicts with Alternative Transportation.

Significance Determination After MC&FP Mitigation, and Supporting Rationale

Less than significant impact.

Additional Mitigation Measures

No additional mitigation is necessary.

Significance Determination After Additional Mitigation, and Supporting Rationale

No impact.

EID Intertie Improvements

The inclusion of a traffic management plan in all construction contracts would ensure that construction of the EID Intertie Improvements would not result in unacceptable access to alternative transportation facilities or services. Upon operation, the Intertie Improvements would be underground and would not physically impede alternative forms of circulation. This would be a less than significant impact.

Parking

Impact 4.12-9	The projects may result in inadequate parking supply or loading facilities. (Less than Significant)
----------------------	--

Impact Analysis

This impact evaluates the proposed project's impacts on parking capacity. The analysis considers impacts associated with all the proposed project components.

Traffic and Transportation

Currently, on-street parking is not permitted along SR-49 or Missouri Flat Road. Therefore, the proposed project does not include the addition or removal of parking capacity along any roadway. The proposed project would likely impact a small parking lot, of approximately 15 parking spaces, at the Missouri Flat Road terminus of the EDMUT which was constructed recently with the EDMUT trail improvements. This existing lot is heavily used. However, the proposed project would construct a 30- to 40-space parking lot for EDMUT trail users at the northwest corner of the Missouri Flat Road/Diamond Springs Parkway/Old Depot Road intersection (Exhibit 3-5c) that would increase overall parking availability for EDMUT trail users. In order to accommodate equestrian use of the EDMUT, at least five of the parking spaces would be adequately sized for truck and horse trailer combinations. The additional parking spaces would be a benefit. Accordingly, the proposed project would not adversely affect parking supply in the surrounding area and impacts are considered less than significant.

Significance Determination Before Mitigation

Less than significant impact.

MC&FP EIR Mitigation Measures

There are no mitigation measures proposed in the MC&FP EIR that are applicable to proposed project related to parking capacity.

Additional Mitigation

N/A

Significance Determination After Additional Mitigation and Supporting Rationale

Less than significant impact.

EID Intertie Improvements

The EID Intertie Improvements would not result in impacts to parking capacity. No impact would occur.

Construction of Recreational Facilities

Impact 4.12-10	The construction of recreational facilities has the potential to create an adverse physical effect on the environment. (Less than Significant)
-----------------------	---

Impact Analysis

As previously discussed, the proposed project would construct a connection of the EDMUT to the signalized intersection of Diamond Springs Parkway and Missouri Flat Road. The proposed project would also construct an 8-foot wide, Class I bike path along the western side of Missouri Flat Road. A 30- to 40-space parking lot for EDMUT trail users would be constructed at the northwest corner of the Missouri Flat Road/Diamond Springs Parkway/Old Depot Road intersection (Exhibit 3-5c). The proposed EDMUT connection, Class I bike path, and parking lot would be located within the

project's footprint and all related construction would be required to adhere to applicable mitigation set forth in this Draft EIR.

Trail traffic would require a temporary detour in order to avoid construction areas. The detour would be properly marked to ensure that recreational traffic (e.g. pedestrians or equestrian riders) would not adversely affect areas outside of the project area by deviating from the designated route and potentially affecting vegetation and wildlife or creating soil erosion issues. As described in Section 3, Project Description, temporary avoidance fencing would be installed around environmentally sensitive areas. Accordingly, the temporary detour route and proposed recreational facilities would not result in adverse physical effects on the environment and impacts would be less than significant.

Significance Determination Before Mitigation

Less than significant impact.

MC&FP EIR Mitigation Measures

N/A

Additional Mitigation Measures

No additional mitigation is necessary.

Significance Determination After Additional Mitigation and Supporting Rationale

Less than significant impact.

EID Intertie Improvements

The EID Intertie Improvements would not result the construction or expansion of any recreational facilities. No impacts would occur.

Use of Recreational Facilities

Impact 4.12-11	The project has the potential to increase the use of the El Dorado Multi-Use Trail such that substantial physical deterioration of the facility would occur or be accelerated. (Less than Significant)
-----------------------	---

Impact Analysis

The proposed project would construct a parking lot and connection to the EDMUT, which would allow increased access and, therefore, increased use of the EDMUT. However, the EDMUT has been designed for increased recreational use and, therefore, would not be expected to experience substantial physical deterioration. Accordingly, impacts would be less than significant.

Significance Determination Before Mitigation

Less than significant impact.

MC&FP EIR Mitigation Measures

N/A

Traffic and Transportation

Additional Mitigation Measures

No additional mitigation is necessary.

Significance Determination After Additional Mitigation and Supporting Rationale

Less than significant impact.

EID Intertie Improvements

The EID Intertie Improvements would not cause or increase usage of the EDMUT or any other recreational facility. No impact.

4.13 - Utilities and Service Systems

This section describes the existing utilities and service systems in the project area as well as the potential for construction and use of the project to result in effects on utilities and service systems. Descriptions and analyses in this section are based on information provided by the following: El Dorado Irrigation District (EID), El Dorado Disposal, El Dorado County Environmental Management Department (EDCEMD), Western El Dorado County Materials Recovery Facility (MRF), and Pacific Gas & Electric (PG&E). Letters provided by the applicable service providers are included in Appendix L of this EIR. Additional information was obtained from the El Dorado County General Plan (2004), the El Dorado County General Plan Draft EIR (EDAW 2003), and the MC&FP EIR (EDAW 1998).

4.13.1 - Summary

Significant Unavoidable Impacts

Project construction and use would not result in any significant unavoidable impacts to utilities and service systems.

Potentially Significant Impacts

Project construction and use would not result in any potentially significant impacts to utilities and service systems.

Less Than Significant Impacts

The proposed project would not include residential, industrial or commercial development that would require new utilities or services. Less than significant impacts would result from the temporary disruption in existing utilities during pole replacement and EID waterline replacement.

The EID Intertie Improvements would be constructed to accommodate General Plan Growth that has already been analyzed and accounted for in the General Plan EIR (EDAW 2003) and included in EID's 2010-2014 CIP. Therefore, project construction and use would have a less than significant impact on utilities and service systems related to wastewater treatment, stormwater drainage, water supply, solid waste, energy and other utilizes.

4.13.2 - Environmental Setting

Potable Water

The EID is one of five water purveyors in El Dorado County that works concurrently with the El Dorado County Water Agency in the planning, management, and pursuit of water for use throughout the County. EID serves over 100,000 residents in the County through 38,000 active service connections that rely on surface water to meet potable water demand (Brown and Caldwell 2006).

Water Infrastructure

EID operates a hydroelectric power project that includes dams, reservoirs, and 23 miles of flumes, canals, siphons, and tunnels that deliver water to Forebay Reservoir in Pollock Pines. Service is provided to 14 contiguous service zones and two satellite water systems areas from Jenkinson and Folsom Lakes. EID manages facilities and delivery infrastructure for drinking water that includes 1,200 miles of pipeline, 40 miles of ditches, six treatment plants, 33 storage reservoirs, and 21 pumping stations. The project site is located in Division 2, Service Zone 7 of EID service areas.

Existing EID infrastructure within the project area includes a 6-inch and 8-inch waterline within the Diamond Road / State Route 49 (SR-49) right-of-way (ROW), a 12-inch waterline within SR-49 near Pleasant Valley Road, and an 18-inch waterline within the Missouri Flat right-of-way between Old Depot Road and China Garden Road. EID's facilities within the project area have been identified undersized.

In accordance with EID's Five-year Capital Improvement Program (CIP) (EID 2010), EID staff have been directed to streamline contracting procedures with the DOT for the agencies' joint projects. EID has many water, wastewater, and recycled water lines in roads maintained by the DOT. From time to time, DOT initiates a road project where the EID water, wastewater, or recycled waterlines need to be relocated or upgraded, which presents opportunities for EID to join forces with DOT by simultaneously upgrading and/or relocating facilities. To this end, concurrent with the construction of improvements along the Parkway and SR-49, EID would upgrade the existing 8-inch waterline with a new 12-inch waterline that would extend from the intersection of SR-49 and Finch Road, south to the existing 12-inch waterline within SR-49 near Pleasant Valley Road. In addition, EID would construct a new 18-inch waterline within the proposed Parkway that would connect to the existing 18-inch line within Missouri Flat Road and extend eastward to the proposed Parkway/SR-49 intersection. Along with the installation of the waterlines, there will be appurtenances located outside of the pavement such as vaults, blow-offs, manholes, and valves that may need to be installed and/or adjusted to grade.

Water Supply

The current Water Resources and Service Reliability Report, dated June 25, 2007, is an annually updated report that determines current water supply and water meter availability within EID. The water meter availability for EID is tracked within two distinct water supply areas: the El Dorado Hills Supply Area and the Western/Eastern Supply Area. The project area receives water from the Western/Eastern Supply Area.

The surface water supply yield in El Dorado Hills is currently restricted by infrastructure, which includes the capacity of the water treatment plant and other conveyance facilities, whereas the supply yield in the Western/Eastern area is not restricted by infrastructure. The current water meter availability for EID is an infrastructure-based yield of 15,163 acre-feet for the El Dorado Hills Supply Area, and a supply-based yield of 36,000 acre-feet for the Western/Eastern Supply Area (EID 2009).

Existing sources of water supply include EID water rights, permits, and contracts to Folsom Lake, Jenkinson Lake (Sly Park Dam), South Fork American River and Tributaries, North Fork Cosumnes River, Clear Creek, Squaw Hollow Creek, Middle Fork Cosumnes River/Outingdale; Weber Reservoir, Weber Creek, Slab Creek, South Fork American River/Strawberry, Hangtown Creek, Bass Lake Reservoir, and recycled water. Existing and future EID water supply sources are categorized into the following surface water categories: Sly Park; United States Department of the Interior, Bureau of Reclamation (USBR) Water Service Contract Folsom Lake; Project 184 Forebay; Weber Reservoir and ditch rights-Folsom Lake; Permit 21112-Folsom Lake; PL 101-514-Folsom Lake; and the Sacramento Municipal Utility District (SMUD)-El Dorado Agreement (Brown and Caldwell 2006).

Water Demand

The EID supply areas are divided to account for the supply yield of the two areas:

- 1) El Dorado Hills Supply Area – The area primarily receives water pumped from Folsom Lake, with periodic supplemental water provided by gravity flow from the Gold Hill Intertie (GHI). As mentioned previously, the El Dorado Hills service area supply is restricted, due to infrastructure limitations (EID 2009).
- 2) Western/Eastern Supply Area – The area currently receives gravity-supplied water from the District’s eastern sources: Project 184 Forebay and Jenkinson Lake.

Table 4.13-1 summarizes the reliability of EID surface water received through numerous contracts or rights. The reliability of EID’s water supply is a measure of a system’s expected success in managing water shortages that are due to seasonal or climatic shortage vulnerability.

Table 4.13-1: EID Water Supply Reliability Summary

Surface Water Supply Sources	Normal Water Year Acre-Feet	Single-Dry Water Year Acre-Feet
Sly Park	23,000	21,000
USBR-Folsom Lake	7,550	5,660
Project 184 Forebay	15,080	15,080
Weber Reservoir / Ditch-Folsom Lake	4,560	4,560
Permit 21112-Folsom Lake	17,000	17,000
PL101-514-Folsom Lake	7,500	5,625
SMUD-El Dorado Agreement	20,000	15,000
Recycled Water	6,963	6,963
Water loss reduction	2,000	2,000
Total	103,653	92,888
Source: EID Final Urban Water Management Plan 2005 Update, January 2006.		

Water Balance

Table 4.13-2 summarizes EID's current and projected normal year water supplies versus demand. The table indicates that EID has sufficient water to meet the projected demand of its service area during the indicated time period.

Table 4.13-2: EID Normal Year Water Supply and Demand Comparison

EID Surface Water	Current 2005 Year Acre-Feet	Projected 2010 Year Acre-Feet	Projected 2015 Year Acre-Feet	Projected 2020 Year Acre-Feet	Projected 2025 Year Acre-Feet	Projected 2030 Year Acre-Feet
Supply Totals	70,200	82,065	83,362	103,653	103,653	103,653
Demand Totals	47,782	56,094	64,406	72,718	81,030	89,342
Difference	22,418	25,971	18,956	30,935	22,623	14,311
Source: EID Final Urban Water Management Plan 2005 Update, January 2006.						

Table 4.13-3 summarizes EID's current and projected single-dry year water supplies versus demand. The table indicates that EID has sufficient water to meet the projected demand of its service area during the indicated time period.

Table 4.13-3: EID Single-Dry Year Water Supply and Demand Comparison

EID Surface Water	Current 2005 Year Acre-Feet	Projected 2010 Year Acre-Feet	Projected 2015 Year Acre-Feet	Projected 2020 Year Acre-Feet	Projected 2025 Year Acre-Feet	Projected 2030 Year Acre-Feet
Supply Totals	66,310	76,300	77,597	92,888	92,888	92,888
Demand Totals	47,782	56,094	64,406	72,718	81,030	89,342
Difference	18,528	20,206	13,191	20,170	11,858	3,546
Source: EID Final Urban Water Management Plan 2005 Update, dated January 2006.						

Project Site Potable Water Facilities

The project study area consists of commercially and industrially zoned parcels (used for various purposes) and existing rights-of-way (ROWs) for roads and utilities. Potable water facilities are connected to each parcel via underground distribution pipelines. As discussed previously, existing EID infrastructure includes undersized 6-inch and 8-inch waterlines within the Diamond Road/SR-49 ROW, a 12-inch waterline within the Diamond Road/SR-49 ROW near Pleasant Valley Road, and an 18-inch waterline in Missouri Flat Road ROW.

Wastewater

The EID operates two wastewater treatment plants in Cameron Park and El Dorado Hills: the Deer Creek Wastewater Treatment Plant (Deer Creek WWTP) and the El Dorado Hills Wastewater

Treatment Plant (El Dorado Hills WWTP). Flows to both wastewater treatment plants originate from three drainage basins within EID's service area. The Deer Creek WWTP originates from the Deer Creek Basin (Cameron Park and Shingle Springs) and Motherlode Basin (El Dorado and Diamond Springs), and discharges treated effluent into Deer Creek, with a portion of the flow recycled for irrigation. The El Dorado Hills WWTP originates from the El Dorado Hills Basin, and discharges treated effluent to Carson Creek, with a portion of the flow recycled for urban irrigation at a golf course for dual-plumbed homes in the Serrano development and for industrial uses (HDR Engineering, Inc. 2001). The Deer Creek WWTP, located two miles south of U.S. Highway 50 (US-50) off Deer Creek Road, provides wastewater treatment service to the project area and is described in more detail below.

Collection and Treatment

The EID wastewater collection system consists of a series of lift stations, force mains, and gravity mains that collect wastewater from the El Dorado Hills, Deer Creek, and Motherlode drainage basins. The Deer Creek WWTP service area, which includes the project area, encompasses approximately 24 square miles with approximately 95 miles of pipelines ranging from 4 to 30 inches in diameter. Pipe materials consist of asbestos cement and vitreous clay. Newer portions of pipeline are PVC and high-density polyethylene (HDR Engineering, Inc. 2001).

EID tracks the condition of the existing collection system and maintains data describing the capacity of the existing lift stations and the current system demands. In addition, EID conducts an evaluation to compare system buildout demands with the capacity of the existing facilities based on existing land use. EID has targeted main lift stations and sewers for upgrades and replacement or rehabilitation within the next 20 years. The phased expansion and total buildout of the collection system will depend on factors such as development potential, phasing of collection system improvements, and increasing needs for system capacity (HDR Engineering, Inc. 2001).

The EID Wastewater Master Plan Update provides an overview of the existing collection system, an analysis of capacity improvements and a summary of recommended improvements. Wastewater flows in the collection system are calculated by converting equivalent dwelling units (EDU) to an equivalent flow. A flow of 240 gallons per day (based on average dry weather flow) per EDU matches flows recorded at the treatment plant (HDR Engineering, Inc. 2001).

The Deer Creek WWTP provides an average dry weather flow (ADWF) capacity of 3.6 million gallons per day (mgd). As of 2005, the ADWF to the plant was approximately 2.5 mgd, leaving approximately 1.1 mgd remaining capacity (EID 2005). Table 4.13-4 summarizes the Deer Creek WWTP flow and EDU data along with treatment plant capacity projections.

Table 4.13-4: EID Wastewater Low and High Flow Projections Summary

Treatment Plant	Year	Low Flow Projection	High Flow Projection
Deer Creek WWTP	2015	3.1 mgd (13,000 EDU)	3.1 mgd (13,100 EDU)
Deer Creek WWTP	2025	3.6 mgd (15,000 EDU)	3.6 mgd (15,100 EDU)
Notes: Deer Creek WWTP Flows based on 240 GPD/EDU Source: EID, 2001.			

Stormwater

The project area is located within the Weber Creek drainage area, in the American River Watershed, and is included as part of the Cosumnes, American, Bear and Yuba Watersheds (CABY) Integrated Regional Water Management Plan. The majority of the project area's stormwater drains in a northerly direction by means of a storm drain system, which eventually discharges stormwater to Weber Creek. A small portion of the project study area, near the intersection of Diamond Road/SR-49 and Pleasant Valley Road, drains in a southerly direction. Refer to Section 4.8, Hydrology and Water Quality, for details related to stormwater management in the project area.

Solid Waste

Construction waste pickup for the project would be provided by El Dorado Disposal Inc., which provides comprehensive solid waste and recycling services to unincorporated El Dorado County including construction, demolition, and debris recycling.

In accordance with Assembly Bill 939, the County prepared an Integrated Waste Management Plan, which includes a Source Reduction and Recycling Element (SRRE). In order to meet its diversion goals, the County has implemented a number of SRRE programs, including the establishment of two Material Recovery Facilities (MRFs).

The Western El Dorado County MRF is located at 4100 Throwita Way, directly adjacent to the project study area. The MRF assists the County in accomplishing waste diversion goals through the implementation of successful programs for source reduction, composting, and recycling. The MRF processes solid wastes through a sorting line, and recyclables are diverted to market. The MRF was originally designed to accommodate 400 tons of waste per day and is currently operating near or above its capacity.

As of 2006, the unincorporated areas of El Dorado County were diverting 54 percent of solid waste from landfills, which meets the 50 percent diversion rate mandated by Assembly Bill 939 (CIWMB 2008). In 2007 and 2008, unincorporated areas diverted 43 percent of solid waste. Note that diversion statistics for 2007 and 2008 have not been formally reviewed or approved by CalRecycle.

After recyclable materials are separated from the waste stream at the MRF, solid waste is taken to Lockwood landfill in Nevada for disposal.

Landfill Capacity

Waste Management of Nevada owns and operates the Lockwood Landfill, which is currently permitted for disposal on 555 acres of its 1,535-acre facility. Lockwood Landfill is located in Storey County approximately 12 miles east of Reno, Nevada.

The Lockwood Landfill is a regional sanitary landfill that receives solid waste from several counties in Nevada and California. The permitted total capacity is approximately 43 million tons, with a remaining capacity of approximately 33.8 million tons (EDAW 2003). The existing permit does not restrict the maximum daily and yearly tonnage that may be received at the landfill; instead, it sets the closure date at 2025. In 2003, the Lockwood landfill received approximately 1.4 million tons of solid waste per year, with a daily average of 5,700 tons. El Dorado County solid waste accounted for approximately 5.8 percent of the solid waste received by the Lockwood Landfill. Waste Management, Inc. expects to expand the landfill before 2025 and provide an additional capacity of approximately 200 million tons (EDAW 2003). Table 4.13-5 provides a capacity summary of the Lockwood Landfill.

Table 4.13-5: Lockwood Landfill Summary

Landfill	Location	Maximum Daily Throughput	Approximate Yearly Throughout (2003)	Remaining Capacity (2003)	Estimated Closure Date
Lockwood Landfill	Near Reno Nevada	Not restricted	1.4 million tons	33.8 million tons	2025
Source: California Integrated Waste Management Board. 2008.					

Electricity

PG&E provides electricity to all or part of 47 counties in California, constituting most of the northern and central portions of the State. In 2007, PG&E obtained 32 percent of electricity from its own generation sources and the remaining 68 percent from outside sources. Outside suppliers to PG&E include the California Department of Water Resources, irrigation districts, renewable energy suppliers, and other fossil fuel-fired suppliers.

PG&E-owned generating facilities include nuclear, natural gas, and hydroelectric, with a net generating capacity of more than 6,200 megawatts. PG&E operates approximately 159,000 circuit miles of transmission and distribution lines. PG&E is interconnected with electric power systems in the Western Electricity Coordinating Council, which includes 14 western states, Alberta and British

Columbia, Canada, and parts of Mexico. In 2007, PG&E delivered 86,179 gigawatt-hours of electricity to its customers. Commercial customers account for the largest segment of demand.

PG&E owns and operates electric facilities which are located within and adjacent to the proposed project, some of which will need to be relocated to accommodate the project (Exhibits 3-8a, 3-8b, 3-8c, and 3-8d). Electricity is provided to the project area from the Diamond Springs Substation located on China Garden Road in Diamond Springs. The substation has two 115/12 kilovolt (kV) transformers that feed four circuits consisting of an overhead transmission line adjacent to Forni Road and an existing 12 kV underground line adjacent to Missouri Flat Road (EDAW 1998). The County proposes to pursue two Underground Utility Districts (UUD), per PUC Rule 20A and 32, to underground the existing overhead lines into a joint trench within the right-of-way or public service easement (Exhibits 3-8b and 3-8d). If the UUDs are not formed, the project will relocate the existing poles in the public service easements along the right-of-way (Exhibits 3-8a and 3-8c).

Telephone and Cable

Telephone service is provided to the project area by SBC, AT&T and other local and long-distance phone services. AT&T and Comcast provide cable television and broadband internet service. Telephone and cable utility poles are located within the project area and are also included in the proposed UUDs or will require relocation.

4.13.3 - Regulatory Framework

Federal

Integrated Waste Management Act of 1989 (AB 939)

Assembly Bill 939 (AB 939) requires all cities and counties in California to divert 50 percent of their waste stream from conventional landfills to alternative means of disposal by 2000. Cities and counties are also required to prepare Source Reduction and Recycling Elements (SRRE). The SRRE requires that counties demonstrate how they would achieve the mandated goals through the implementation of diversion programs.

State

California Urban Water Management Planning Act

The Urban Water Management Planning Act (California Water Code Sections 10610-10656) requires that all urban water suppliers prepare urban water management plans and update them every 5 years.

California Integrated Waste Management Act

To minimize the amount of solid waste that must be disposed of by transformation and land disposal, the State Legislature passed the California Integrated Waste Management Act of 1989, effective January 1990. The legislation required each local jurisdiction in the State to set diversion requirements of 25 percent in 1995 and 50 percent in 2000; established a comprehensive statewide

system of permitting, inspections, enforcement, and maintenance for solid waste facilities; and authorized local jurisdictions to impose fees based on the types or amounts of solid waste generated.

California Public Utilities Commission

The California Public Utilities Commission (CPUC) regulates privately owned telecommunication, electric, natural gas, water, railroad, rail transit, and passenger transportation companies. It is the responsibility of the CPUC to assure California utility customers of safe, reliable utility service at reasonable rates; protect utility customers from fraud; and promote a healthy California economy.

PG&E is a California-based utility, regulated by the CPUC. The CPUC mandates that PG&E obtain specific clearance requirements between utility facilities and surrounding objects or construction activities. The CPUC recommends a reasonable amount of clearance beyond the minimum requirements to allow for several years worth of vegetation growth, potential wind sway and other environmental factors. Distances obtained from the line after a pruning cycle may be more than 20 feet for fast-growing species such as mulberry or eucalyptus trees along distribution lines, and 4 years or 40 feet of clearance is required for high-voltage transmission lines.

In addition, relocations of PG&E's electric transmission and substation facilities (50,000 volts and above) could also require formal approval from the CPUC. The County proposes to pursue two Underground Utility Districts (UUD), per PUC Rule 20A and 32, to underground the existing overhead lines into a joint trench within the right-of-way or public service easement (Exhibits 3-8b and 3-8d). If required, this approval process could take up to 2 years to complete. If the UUD is not formed, the project will relocate the existing poles in the public service easements along the right-of-way (Exhibits 3-8a and 3-8c).

Local

El Dorado County General Plan

Utilities and service systems are addressed in the El Dorado County General Plan's Public Services and Utilities Element. The rate of growth experienced by El Dorado County over the last decade has left many of the County's public services straining to meet demand. Many of the public services are currently operating close to, or exceeding, their capacity level. The purpose of the Public Services and Utilities Element is to promote a pattern of development, which maximizes the use of existing services while minimizing the costs of providing new facilities and services.

Appendix J of this Draft EIR provides a matrix that lists the policies determined to have relevance to this proposed project and provides a summary of the County's determination of project consistency with each relevant goal and policy. As shown in Appendix J, the project is consistent with all applicable goals and policies of the General Plan, including those related to utilities and services.

4.13.4 - Project Impact Analysis

Methodology for Analysis

Michael Brandman Associates (MBA) evaluated the potential for utility and service system impacts through site reconnaissance and review of applicable documents. MBA personnel performed site reconnaissance of the project study area and surrounding land uses in March 2008 and reviewed the El Dorado County General Plan and the County Zoning Code to identify applicable policies and provisions that pertain to the proposed project.

Thresholds of Significance

According to the CEQA Guidelines' Appendix G Environmental Checklist, to determine whether impacts to utilities and service systems are significant environmental effects, the following questions are analyzed and evaluated. Would the project:

- a.) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?
- b.) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?
- c.) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?
- d.) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?
- e.) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?
- f.) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?
- g.) Comply with federal, state, and local statutes and regulations related to solid waste?

Energy Efficiency

In accordance with Appendix F of the CEQA Guidelines, project impacts to energy resources are considered to be potentially significant if a project would:

- a.) Not demonstrate the wise and efficient use of energy by such means as:
 - i) Decreasing overall per capita energy consumption.
 - ii) Decreasing reliance on natural gas and oil
 - iii) Increasing reliance on renewable energy resources.

- b.) Result in wasteful, inefficient, and unnecessary consumption of energy during the project construction, operation, maintenance, and/or removal that cannot be feasibly mitigated.
- c.) Preempt future energy development or future energy conservation.

Impact Statements and Mitigation Discussions

This section discusses potential impacts on utilities and services systems that would result from construction and operation of the project and provides mitigation measures where appropriate. The MC&FP EIR impact assessment and mitigation measures are included where appropriate, since the proposed project must comply with regulations set forth by the prior programmatic-level EIR. Further analysis or mitigation required beyond that of the MC&FP EIR is included where necessary. Potential cumulative effects are discussed in Section 6, CEQA Required Conclusions, of this report.

Wastewater Treatment

Impact 4.13-1:	The project would have the potential to exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board or wastewater treatment capacity. (Less than Significant)
-----------------------	--

Impact Analysis

The MC&FP EIR concluded that development within the MC&FP Area would exceed wastewater treatment requirements upon buildout, but no impacts were specifically related to construction of the roadways. This project would construct a new roadway as well as roadway improvements in an existing right-of-way. The proposed project does not include any residential, industrial, or commercial development and would not generate any wastewater. Therefore, the proposed project would not exceed wastewater treatment requirements of the Regional Water Quality Control Board or exceed existing wastewater treatment capacity.

Significance Determination Before Mitigation

Less than significant impact.

Mitigation Measures from the MC&FP EIR

N/A

Significance Determination After MC&FP Mitigation, and Supporting Rationale

Less than significant impact.

Additional Mitigation Measures

N/A

Significance Determination After Additional Mitigation, and Supporting Rationale

Less than significant impact.

Utilities and Service Systems

EID Intertie Improvements

Installation of the EID Intertie Improvements would not directly increase the demand for wastewater capacity. However, the increase in service capacity provided by the improvements would allow more connections to potable water and thereby could result in additional creation of wastewater. However, new development in the project area and vicinity that requires potable water would need to be approved by the County, during which time individual impacts to wastewater capacity would be considered. As such, impacts to wastewater treatment requirements from the EID Intertie Improvements would be less than significant.

Water or Wastewater Treatment Facilities

Impact 4.13-2: The project has the potential to require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. (Less than Significant)

Impact Analysis

In accordance with the MC&FP EIR, easements for new sanitary sewer facilities (whether onsite or offsite) constructed to serve the project area must be granted to the EID prior to final map approval. In addition, because of either nonexistent or prescriptive easements for some older facilities, any existing onsite EID facilities that would remain in place after project implementation must also have an easement granted to EID. In accordance with EID requirements, compliance with the easement and infrastructure specifications would ensure that adequate sewer system infrastructure is in place prior to construction and that all appropriate easements are granted to EID.

EID operates and maintains wastewater infrastructure throughout the project area. Sewer mains are located in portions of Missouri Flat Road, Forni Road, and El Dorado Road, with branch sewer lines off the mains to adjacent roadways and properties (EDAW 1998). Several lift stations within the MC&FP Area convey sewage to the Deer Creek WWTP. The MC&FP EIR concluded that wastewater treatment impacts associated with retail development anticipated in the MC&FP Area would be potentially significant (EDAW 1998).

However, wastewater treatment facility impacts resulting from the MC&FP were considered in relationship to the contemplated commercial land uses and not by roadway projects alone. The proposed project involves construction of a new roadway and does not include residential, industrial, or commercial development. Furthermore, proposed project would not affect any lift stations as there are no lift stations in the project study area. Therefore, no additional water or wastewater treatment facilities impact analyses are anticipated.

Significance Determination Before Mitigation

Less than significant impact.

Mitigation Measures from the MC&FP EIR

N/A

Significance Determination After MC&FP Mitigation, and Supporting Rationale

Less than significant impact.

Additional Mitigation Measures

N/A

Significance Determination After Additional Mitigation, and Supporting Rationale

Less than significant impact.

EID Intertie Improvements

The proposed EID Intertie Improvements would replace existing undersized waterlines and provide water for growth as allowed by the General Plan and included in EID's 2010-2014 CIP. Adequate wastewater services are already in place to serve existing land uses. Capacity exists at the Deer Creek WWTP to serve land uses contemplated by the County's General Plan; future development applications that are reviewed by the County would be required to prepare project specific environmental impact analysis documents and identify any mitigation measures on a project-by-project basis. Therefore, the proposed project would not require the construction of new water or wastewater treatment facilities or expansion of existing facilities other than what is included in the EID Intertie Improvements and considered in this Draft EIR. Impacts would be less than significant.

Stormwater Drainage Facilities

Impact 4.13-3:	The project has the potential to require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. (Less than Significant)
-----------------------	---

Impact Analysis

The MC&FP EIR concluded that construction of roadways within the MC&FP area would result in an increase in impervious surfaces, and therefore, an increase in stormwater drainage. However, the environmental effects of constructing new stormwater drainage facilities were not considered.

Under the proposed project, roadway construction would result in minor changes to drainage patterns in the vicinity (CTA 2009). Roadway construction would include installation of drainage inlets and culverts. Individual drainage crossings along the Parkway corridor would consist of closed conduit culverts and open bottom crossings. A discussion of potential stormwater drainage facility impacts and mitigation measures are provided in Section 4.8, Hydrology and Water Quality.

A Preliminary Drainage Report has been prepared for the proposed project (CTA 2009) that indicates that the proposed project, specifically the proposed Parkway drainage system has been designed to convey a 10-year storm per the El Dorado County Drainage Manual, Section 4. The Preliminary Drainage Report also indicates that the proposed stormwater facilities are designed to pass a 100-year event without damage to structures or flooding of roadways. Stormwater would be conveyed into existing ditches and catch basins of adequate capacity for the increase in peak flows. All new

Utilities and Service Systems

stormwater conveyance facilities would be constructed as part of the proposed project. Accordingly, construction of the new stormwater drainage facilities would be less than significant.

Significance Determination Before Mitigation

Less than significant.

Mitigation Measures from the MC&FP EIR

Mitigation addressing stormwater was included in Section 4.8 of the MC&FP EIR; however, the impacts and mitigation measures included references to roadways related to retail development. Furthermore, the mitigation required that a drainage report be submitted to the El Dorado County DOT. Since the proposed project is under the oversight of the El Dorado County Department of Transportation (DOT), and a Preliminary Drainage Report has been prepared by the DOT for the proposed project, mitigation requiring submittal of a drainage report is unnecessary.

Significance Determination After MC&FP Mitigation, and Supporting Rationale

Less than significant.

Additional Mitigation Measures

N/A

Significance Determination After Additional Mitigation, and Supporting Rationale

Less than significant impact.

EID Intertie Improvements

The proposed EID Intertie Improvements would not require or result in the construction of new stormwater drainage facilities or the expansion of existing facilities. No impacts to stormwater drainage beyond those related those described above would occur.

Water Supplies

Impact 4.13-4: The project has the potential to require new or expanded entitlements to ensure sufficient water supplies available to serve the project. (Less than Significant)

Impact Analysis

Construction of the proposed project would require water for dust control. Such water use would be minimal and temporary in nature, and therefore less than significant. Upon completion, the proposed project would not require potable water services.

Significance Determination Before Mitigation

Less than significant impact.

Mitigation Measures from the MC&FP EIR

N/A

Significance Determination After MC&FP Mitigation, and Supporting Rationale

Less than significant impact.

Additional Mitigation Measures

No mitigation is necessary.

Significance Determination After Additional Mitigation, and Supporting Rationale

Less than significant impact.

EID Intertie Improvements

The proposed EID Intertie Improvements would improve the reliability of existing water supplies to existing customers and provide water for growth as allowed by the General Plan and County regulations. New or expanded entitlements would therefore not be necessary.

Landfill Capacity

Impact 4.13-5: The project may not be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs. (Less than Significant)

Impact Analysis

The landfill capacity analysis identifies the existing conditions relative to solid waste disposal services, including landfill and MRF capacity, and evaluates any impacts that may occur as a result of the proposed project. Solid waste generated by the project would be limited to construction debris, including asphalt and concrete generated by the excavation of existing roadway and construction of the proposed Parkway. Solid waste disposal would occur in accordance with federal, state and local regulations. Furthermore, the proposed project's increase in solid waste would be temporary, occurring only during the construction phase. Upon completion, no solid waste services would be required.

As shown in Table 4.13-5, sufficient landfill capacity would be available at Lockwood Landfill to meet the demand during construction of the proposed project. As such, impacts would be less than significant.

Significance Determination Before Mitigation

Less than significant impact.

Mitigation Measures from the MC&FP EIR

N/A

Significance Determination After MC&FP Mitigation, and Supporting Rationale

Less than significant impact.

Utilities and Service Systems

Additional Mitigation Measures

Mitigation Measure 4.3-8b in Section 4.3, Air Quality, requires the project to have a County-approved Solid Waste Diversion and Recycling Plan (or such other documentation to the satisfaction of the County) in place prior to commencement of construction. Implementation of this mitigation measure would ensure that potential impacts related to solid waste service would be less than significant.

Significance Determination After Additional Mitigation, and Supporting Rationale

Less than significant impact.

EID Intertie Improvements

Impacts resulting from the EID Intertie Improvements regarding the generation of solid waste during construction activities would be similar to those described above. Application of Mitigation Measure 4.3-8b would reduce these potential impacts to a less than significant level.

Compliance with Solid Waste Regulations and Statutes

Impact 4.13-6: The project may not comply with federal, state, and local statutes and regulations related to solid waste. (No impact)

Impact Analysis

The County is currently in compliance with AB 939, the California Integrated Waste Management Act. The MC&FP EIR concluded that the proposed project was consistent with the 1996 General Plan. The 1996 General Plan goals, objectives, and policies concerning utilities and service systems are substantially similar to the equivalent goals, objectives, and policies included in the 2004 General Plan. No inconsistencies with relevant General Plan solid waste provisions are anticipated. No impact would occur.

Significance Determination Before Mitigation

No impact.

Mitigation Measures from the MC&FP EIR

N/A

Significance Determination After MC&FP Mitigation, and Supporting Rationale

No impact.

Additional Mitigation Measures

N/A

Significance Determination After Additional Mitigation, and Supporting Rationale

No impact.

EID Intertie Improvements

Impacts resulting from the EID Intertie Improvements regarding compliance with federal, state, and local statutes and regulations related to solid waste would be similar to those described above. No impact would occur.

Disruption of Utility Service

Impact 4.13-7: **The project has the potential to result in temporary disruption of electrical, cable, telephone, and water service. (Less than Significant)**

Impact Analysis

The proposed project would include the removal of approximately 38 utility poles if UUDs are established. If UUDs are not established and pole replacement is required, approximately 12 utility poles would be relocated within the new ROW (Exhibits 3-8a, 3-8b, 3-8c, and 3-8d). It is possible that short-term disruption of service would potentially occur during connection of the new facilities. Any disruptions would be of short duration and all potential affected property owners would be notified by DOT, the utility company or its contractors approximately one week prior to the service interruption. Accordingly, impacts would be less than significant.

Significance Determination Before Mitigation

Less than significant impact.

Mitigation Measures from the MC&FP EIR

N/A

Significance Determination After MC&FP Mitigation, and Supporting Rationale

Less than significant impact.

Additional Mitigation Measures

N/A

Significance Determination After Additional Mitigation, and Supporting Rationale

Less than significant impact.

EID Intertie Improvements

Construction of the EID Intertie Improvements may result in temporary service disruptions to areas served by the existing EID waterlines. The disruptions would be temporary and minimized in length to the maximum extent possible. Those affected by the service disruptions would be notified in advance. Accordingly, impacts would be less than significant.

Efficient Energy Use

Impact 4.13-8: **The Project may not demonstrate the wise and efficient use of energy by such means as:**

- i) decreasing overall per capita energy consumptions. (No impact)**
- II) decreasing reliance on natural gas and oil. (No impact)**
- III) increasing reliance on renewable energy resources. (No impact)**

Impact Analysis

The proposed project would not increase the amount of traffic but would redirect existing traffic to ease congestion in Diamond Springs. While the proposed project would not use any form of energy, cars traveling along the roadway would use gas or oil. The proposed project would ease congestion within the Diamond Springs area and therefore would decrease idling time spent by cars waiting in traffic at existing intersections and streets that are currently operating at less than acceptable LOS. Decreasing the amount of time automobiles spend idling would result in higher efficiency of gasoline use, thereby decreasing overall energy consumption. Accordingly, no negative impact would occur.

Significance Determination Before Mitigation

No impact.

Mitigation Measures from the MC&FP EIR

N/A

Significance Determination After MC&FP Mitigation, and Supporting Rationale

No impact.

Additional Mitigation Measures

N/A

Significance Determination After Additional Mitigation, and Supporting Rationale

No impact.

EID Intertie Improvements

Impacts resulting from the EID Intertie Improvements would not affect energy use. No impact would occur.

Energy Consumption

Impact 4.13-9: **The project has the potential to result in the inefficient, unnecessary, or wasteful consumption of energy. (Less than Significant)**

Impact Analysis

The proposed project would require the use of diesel and gas in construction equipment during construction. Section 4.3, Air Quality, contains mitigation that would contribute to efficient equipment operation thereby reducing the chance of wasteful, inefficient or unnecessary consumption of diesel/gas. As such, impacts would be less than significant.

Upon project completion, the roadway would not require the use of electricity. As such, no net new demand for electricity would result.

Significance Determination Before Mitigation

Less than significant impact.

Mitigation Measures from the MC&FP EIR

N/A

Significance Determination After MC&FP Mitigation, and Supporting Rationale

Less than significant impact.

Additional Mitigation Measures

No mitigation is necessary.

Significance Determination After Additional Mitigation, and Supporting Rationale

Less than significant impact.

EID Intertie Improvements

Impacts resulting from construction of the EID Intertie Improvements would be similar to those described above and the EID Intertie Improvements would not require the use of energy upon project completion.

Preempt Future Energy

Impact 4.13-10: The project has the potential to preempt future energy development or future energy conservation. (Less than Significant)

Impact Analysis

Existing overhead utilities along Missouri Flat Road, near China Garden Road, and along SR-49, between Bradley Drive and Pleasant Valley Road, are in conflict with the proposed project (refer to Exhibits 3-8a, 3-8b, 3-8c, and 3-8d). Construction of the proposed project would require adjustments to existing grade and the project would require the realignment and/or relocation of various existing utilities, including electricity. All proposed roadways and associated roadway improvements would be constructed to meet minimal utility line clearances. The County proposes to pursue two Underground Utility Districts (UUD), per PUC Rule 20A and 32, to underground the existing overhead lines into a joint trench within the right-of-way or public service easement (Exhibits 3-8b and 3-8d). If the UUD is not formed, the project will relocate the existing poles in the public service easements along the right-of-way (Exhibits 3-8a and 3-8c). The impacts associated with pole relocation are minimized by pole relocation areas being confined to existing utility ROWs or public service easements.

PG&E is aware that expansion of distribution and transmission lines and related facilities is a necessary consequence of growth and development. Projects that qualify under Rule 20A are

Utilities and Service Systems

typically in areas of a community that are used most by the public. A roadway that would carry a heavy volume of vehicular traffic, similar to the proposed project, would fall into this category. The County has obtained concurrence from the affected utilities that the proposed relocation areas meet the UUD criteria. The formation of the UUD requires that the district boundaries be agreed upon; the affected property owners approve the formation of the district by a simple majority based on land values; and a public hearing is held to adopt the formation of the district. If adopted, the underground facilities would be designed, coordinated with private properties, and constructed. The County would coordinate with the appropriate utility service providers throughout utility relocation or undergrounding to minimize utility service disruption.

PG&E states that impacts to its electric systems may require on- and off-site additions and improvements and may include upgrading transmission line equipment and interconnecting transmission lines. To ensure compliance with standards and assess potential utility facility impacts, the DOT would coordinate with appropriate utility service providers during development planning and prior to construction activities in order to reduce potential impacts to a less than significant level. As such, the proposed project would not preempt future energy infrastructure development or energy conservation and impacts would be less than significant.

Significance Determination Before Mitigation

Less than significant impact.

Mitigation Measures from the MC&FP EIR

N/A

Significance Determination After MC&FP Mitigation, and Supporting Rationale

Less than significant impact.

Additional Mitigation Measures

No mitigation is necessary.

Significance Determination After Additional Mitigation, and Supporting Rationale

Less than significant impact.

EID Intertie Improvements

Impacts resulting from the EID Intertie Improvements would not require that existing utility infrastructure be relocated to accommodate the proposed alignment. No impacts would occur.

SECTION 5: ALTERNATIVES TO THE PROPOSED PROJECT

5.1 - Introduction

In accordance with CEQA Guidelines Section 15126.6, this Environmental Impact Report (EIR) contains a comparative impact assessment of alternatives to the proposed project. The primary purpose of this section is to provide decision makers and the public with a reasonable range of feasible alternatives that could attain most of the basic project objectives, while avoiding or reducing one or more of the project's significant adverse environmental effects. Important considerations for these alternatives analyses are noted below (as stated in CEQA Guidelines Section 15126.6):

- An EIR need not consider every conceivable alternative to a project;
- An EIR should identify alternatives that were considered by the lead agency, but rejected as infeasible during the scoping process;
- Reasons for rejecting an alternative include:
 - Failure to meet most of the basic project objectives;
 - Infeasibility; or
 - Inability to avoid significant environmental effects.

5.2 - Project Objectives

As stated in Section 3, Project Description, the objectives of the proposed project are to:

Objective 1a. Improve traffic safety and operations on portions of Pleasant Valley Road (SR-49) in the vicinity of Diamond Springs as provided in the County's 2004 General Plan (Policy 10.2.7.3) including:

- Provide parallel capacity for SR-49 between Missouri Flat Road and Diamond Road (SR-49) and alternate access to US-50 via Missouri Flat Road to relieve traffic congestion and provide an acceptable level of service through the historic town of Diamond Springs to meet the General Plan Policy TC-1.
- Provide a safe, efficient, and convenient roadway that meets the travel needs of people and goods
- Improve safety by reducing residential driveway access to Diamond Road (SR-49) between Pleasant Valley Road (SR-49) and Black Rice Lane by provision of a frontage road.

Objective 1b. Implement the Parkway as included in the County's 2004 General Plan (Policy 10.2.7.3) and the County's CIP in the most cost effective manner.

Alternatives to the Proposed Project

- Objective 1c.** Improve roadway and intersection capacities along Missouri Flat Road, south of US-50, to support the anticipated commercial/retail square footage development identified and planned for in the 1998 MC&FP and the 2004 El Dorado General Plan.
- Objective 1d.** Provide opportunities for improved bicycle, pedestrian and transit facilities consistent with the 2004 El Dorado County General Plan and coordinate the construction of the Parkway with the El Dorado Multi-Use Trail (EDMUT).
- Objective 1e.** Protect natural resources, including local wetlands, riparian features, and oak woodlands by aligning the project to avoid these features, to the extent feasible, by providing transportation services facilities that cause the least amount of environmental damage and yield environmental benefits wherever feasible.

The proposed project fulfills each of these project objectives.

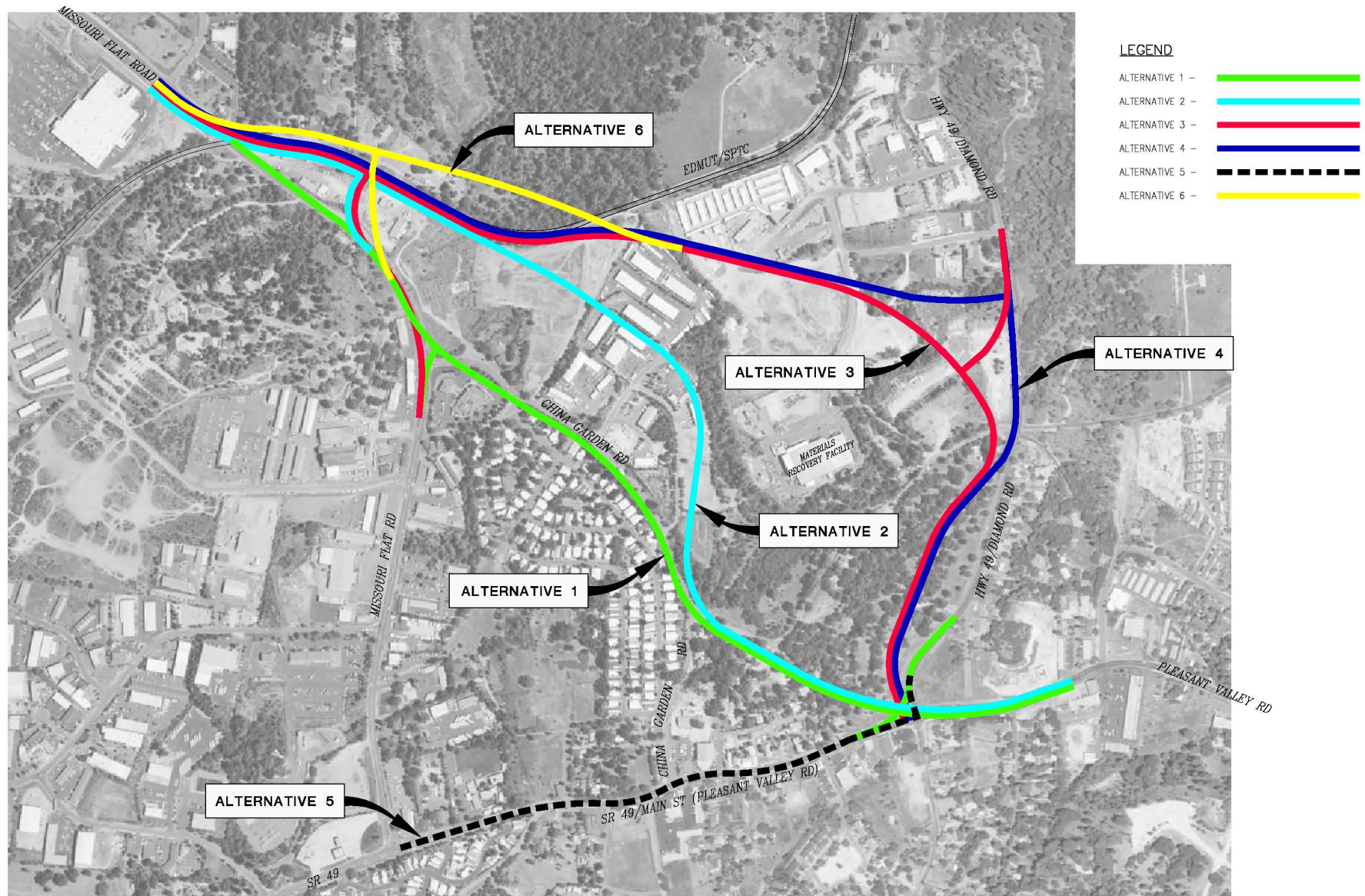
5.2.1 - Significant Unavoidable Impacts

No significant unavoidable impacts would occur as a result of project construction and use.

5.3 - Previously Considered and Rejected Alternatives

The existing SR-49 presents significant design constraints to connector projects. SR-49 is two lanes and cannot provide the capacity for the heavy commute traffic between southeastern El Dorado County and US-50 at an acceptable level of service. The historic significance of the area precludes widening the existing roadway, specifically within the Diamond Springs Community, where buildings of historical importance are located directly adjacent to the roadway. In 1997, a Technical Memorandum was prepared by the El Dorado County Department of Transportation (DOT) that identified six potential connector alignments between Missouri Flat and Pleasant Valley roads, four that were considered “viable” and two that were considered “nonviable” (Board of Supervisors Agenda June 17, 1997). The six alternatives were identified based on preliminary technical analysis, including alignment geometrics, topographic constraints, and historical resource sensitivity (Exhibit 5-1). From the six alternative alignments, the County Board of Supervisors selected one alignment as the preferred alternative, in consideration of transportation needs, impacts to existing residential areas, and public input. The preferred alignment, designated as “Alternative 3,” was selected with the condition that if the State (California Department of Transportation [Caltrans]) objected, the DOT would return to the Board to consider amending this direction (Board of Supervisors Agenda June 17, 1997).

In accordance with the Board’s recommendation, the DOT pursued Alternative 3 as the selected alternative. Alternative 3 was analyzed as the preferred alternative in the MC&FP EIR (EDAW 1998).



Source: El Dorado County Department of Transportation 2010.



Michael Brandman Associates

11730025 • 3/2010 | 5-1_MC&FP EIR Alternatives.ai

Exhibit 5-1 MC&FP EIR Alternatives

COUNTY OF EL DORADO DEPARTMENT OF TRANSPORTATION
DIAMOND SPRINGS PARKWAY PROJECT
ENVIRONMENTAL IMPACT REPORT

Alternative 3 provided a continuous roadway for the heavy commuter traffic from southeast El Dorado County to US Highway 50 (US-50) and required SR-49 through-traffic to turn at a new intersection, thereby segmenting SR-49.

Because of Alternative 3's realignment and improvements to SR-49, the County began formal coordination with Caltrans and initiated a Cooperative Agreement and Project Study Report. After review of Alternative 3, Caltrans requested that DOT evaluate alternatives that did not segment SR-49. Alternative 4 from the 1997 Technical Memorandum satisfied Caltrans requirements as well as the traffic circulation, congestion reduction, and improved safety needs.

However, new studies prepared in 2007 and 2008 indicate that Alternative 4 would not require significant realignment of SR-49; rather, only widening and minor realignment to SR-49 north of the Fowler Lane intersection would be required to mitigate the impacts resulting from the new intersection of the proposed Parkway and SR-49 under forecasted 2030 conditions. Further, Caltrans has recently indicated during a conceptual approval that the revised improvements to SR-49 between the proposed Parkway and Fowler Lane intersection would require only an encroachment permit through Caltrans's new Permit Engineering Evaluation Report (PEER) process, instead of the previous formal process requiring a Cooperative Agreement, Project Study Report, Project Report, and Route Adoption. These changes have significantly reduced the costs of implementing Alternative 4, both in terms of project costs and delivery time.

Another significant difference between Alternative 3 from the MC&FP EIR and Alternative 4 is the impact to developable land. Alternative 3 featured a sweeping alignment that bisected several properties. Alternative 4 follows property lines with a straighter "T" alignment, resulting in less property fragmentation. The proposed Parkway lies within the MC&FP Area, which recognizes and supports the economic development of the area as included in the General Plan. The reduction of right-of-way (ROW) needs and property segmentation maximizes potential land use and economic development of the area, consistent with the intent of the MC&FP.

The six alternatives were presented to the Board of Supervisors again on April 21, 2008, along with DOT's recommendation that Alternative 4 be selected as the preferred alignment in order to capitalize on the potential cost savings, reduced ROW impacts, streamlined processing with Caltrans, and greater potential economic development in accordance with the General Plan (Board of Supervisors Agenda, April 29, 2008). The Board approved this action. Since then, minor changes have been made to Alternative 4's alignment, resulting in the proposed project. Therefore, this EIR includes the previously proposed Alternative 3 and Alternative 4 as alternatives to the proposed project and renames them Alternative A, and Alternative B, respectively. In addition, this EIR analyzes Alternative C, which includes a lower vertical alignment, and a No Project Alternative.

A summary of the remaining four other alternatives previously considered by the Board of Supervisors in the 1997 Technical Memorandum, including the reasons for rejecting those alternatives, is included below.

5.3.1 - Interconnector Alternative 1 (China Garden Road)

Alternative 1 (China Garden Road) would use a portion of Missouri Flat Road (south of the Sacramento-Placerville Transportation Corridor [SPTC]) to China Garden Road, then would route traffic along China Garden Road to just north of Lime Kiln Road. The route would then parallel Lime Kiln Road in an easterly direction to and across Odd Fellows Road, along the Odd Fellows Cemetery, to the Pleasant Valley Road/SR-49 intersection. According to the 1997 Technical Memorandum, this alternative would meet the operational goal of re-routing the projected high volume of traffic around Main Street in Diamond Springs; it would use a large portion of existing County ROW and was the most direct route from Missouri Flat Road crossing the railroad corridor to Pleasant Valley Road at State Route (SR) 49. This alternative was also the least costly alternative. However, this alternative had a greater impact on residential areas, required relocation of the Fowler Lane access, and did not have a high level of community support. According to the MC&FP EIR, the County DOT rejected this alternative because the alignment was not favored by the local residents due to its increased proximity and therefore increased impacts (such as noise and traffic) to residences. Furthermore, this alternative would increase access to only a small portion of developable lands within the MC&FP area and would therefore not fulfill Objective 1c to the greatest extent possible.

5.3.2 - Interconnector Alternative 2 (Chuck Wagon Way)

Alternative 2 (Chuck Wagon Way) was a proposed alignment from Missouri Flat Road extending in a southeasterly direction across Old Depot Road, then using an approximately 500 feet portion of the SPTC corridor before traveling to and cross Stage Court to Chuck Wagon Way. The alignment would make use of Chuck Wagon Way to just before the China Garden Road intersection, then would parallel Lime Kiln Road easterly to and across Odd Fellows Road, then along the Odd Fellows Cemetery to the Pleasant Valley Road and SR-49 intersection. As noted in the 1997 Technical Memorandum and the MC&FP EIR, this alternative would meet the operational goal of re-routing the projected high volume of traffic around Main Street in Diamond Springs and was the second most direct route from Missouri Flat Road, crossing the railroad corridor to Pleasant Valley Road at SR-49. However, the 1997 Technical Memorandum and the MC&FP EIR indicated that this alternative was rejected because it had a greater impact on existing industrially developed areas, would require relocation of the Fowler Lane access, and had high costs related to acquiring the ROW for the alignment. Furthermore, this alternative would not be consistent with Objective 1d of this Draft EIR because it would require roadway construction within the existing EDMUT right-of-way.

5.3.3 - Interconnector Alternative 5

Alternative 5 would have been located generally along Pleasant Valley Road, through the historic downtown area of the unincorporated Diamond Springs community (Main Street). According to the 1997 Technical Memorandum, this alternative was not considered viable because it would have resulted in an unacceptable level of historical and community resource damage due to ROW requirements along Pleasant Valley Road (Main Street). The MC&FP EIR also indicated that this alternative was rejected by County DOT because it would have essentially “destroyed historic downtown Diamond Springs,” would have required the relocation of many existing businesses, and, therefore, would have resulted in an unacceptable level of disturbance to historic and community resources. Furthermore, this alternative is not consistent with Objectives 1a and 1b of this Draft EIR because it would not provide parallel capacity to Pleasant Valley Road, and would not implement an additional roadway as envisioned in the El Dorado County General Plan.

5.3.4 - Interconnector Alternative 6

Alternative 6 would have been located north of the EDMUT corridor, with linkages to Missouri Flat Road and China Garden Road. As noted in the 1997 Technical Memorandum and MC&FP EIR, this alternative was not considered viable because it would have required two overcrossing structures for the EDMUT corridor. The 1997 Technical Memorandum indicated this alternative was rejected because it was cost prohibitive due to the need to create two new overcrossing structures; would have resulted in impacts to EID’s Master Plan for the Bray Reservoir site; and had a greater impact on developed properties than the other alternatives that were considered. Furthermore, this alternative is not consistent with Objectives 1b and 1e of this Draft EIR because of the additional infrastructure cost and increased impacts on natural resources near Bray Reservoir.

5.4 - Alternatives to the Proposed Project

The following alternatives to the proposed project are fully analyzed in this Draft EIR:

- **No Project Alternative:** Under the No Project Alternative, the project site would remain in its existing condition, and the proposed parkway and associated roadway improvements would not be constructed. No right-of-way acquisition would be required.
- **Alternative A:** Under Alternative A (previously considered in the MC&FP EIR as the preferred alignment and included in the 1997 Technical Memorandum as Alternative 3), the proposed Parkway would be constructed according to the third conceptual alignment presented to the Board of Supervisors in the April 9, 1997 Technical Memorandum. Alternative A would extend east from Missouri Flat Road, south of the EDMUT corridor and cross Old Depot Road. The alignment would then use a portion of the EDMUT corridor for approximately 1,500 feet, after which it would curve in an east-southeasterly direction (south of Bradley Drive) to continue parallel to Diamond Road (SR-49), ending at the Fowler Lane and Pleasant Valley Road (SR-49) intersection. This alignment would require substantial realignment of Diamond

Road (SR-49) between Bradley Drive and Pleasant Valley Road (SR-49) thereby bisecting/fragmenting several properties and requiring DOT to secure a greater amount of right-of-way. This alternative creates a new intersection of the Parkway and SR-49, requiring cars traveling on SR-49 to make a left turn to continue south or a right turn to continue north, further segmenting SR-49. Significant right-of-way acquisitions for Diamond Road (SR-49) would be required under this alternative; however, converse to the proposed project, this alternative would not potentially require the relocation of businesses located near Old Depot Road. This alternative would be required to follow Caltran's formal process and oversight requiring a Cooperative Agreement, Project Study Report, and Route Adoption. EID Intertie and overhead utility undergrounding or relocations would occur under this alternative.

- **Alternative B:** Under Alternative B (previously considered in the MC&FP EIR as Alternative 4) the proposed Parkway would be constructed according to the fourth conceptual alignment presented to the Board of Supervisors in the April 9, 1997 Technical Memorandum. As described previously, this alignment was approved by the County Board of Supervisors in 2008. Similar to Alternative A, Alternative B would extend east from Missouri Flat Road, south of the EDMUT corridor and cross Old Depot Road. The alignment would then use a portion of the EDMUT corridor for approximately 1,500 feet, after which it would continue east, intersecting with Diamond Road (SR 49) south of Bradley Drive. Alternative B would continue south, utilizing a portion of the existing Diamond Road (SR 49) ROW, and then diverge slightly to the west after Lime Kiln Road. Alternative B would then continue south, parallel to and west of Diamond Road (SR 49), finally intersecting with Pleasant Valley Road (SR 49) at the Fowler Lane intersection. EID Intertie and overhead utility undergrounding or relocations would occur. Alternative B's alignment is very similar to the alignment proposed in this Draft EIR with the exception of the EDMUT corridor usage and realignment of Diamond Road (SR 49) between Lime Kiln Road and Diamond Road (SR 49). Right-of-way acquisitions would be similar to that of the proposed project; however, this alternative would not result in the potential relocation of businesses located near Old Depot Road.
- **Alternative C: Lower Vertical Profile Alternative:** Under Alternative C (also known as the Lower Vertical Profile Alternative), the proposed Parkway and all associated roadway improvements would be constructed at a lower topographic elevation, up to five feet lower, than the proposed project. Accordingly, this alternative's vertical profile would more closely mimic the existing topography of the project site and reduce required soil grading. The lower vertical profile would slightly reduce the size of the required roadway prism thereby resulting in a fractionally smaller footprint than the proposed project. All other features of the proposed project would be included in this alternative, including creation of the frontage road, three new signalized intersections, additional bicycle, pedestrian and transit facilities, EID Intertie, and overhead utility undergrounding or relocations. Right-of-way acquisitions and potential business relocations would be similar to that of the proposed project.

These four alternatives to the proposed project are analyzed below. The analyses compare the proposed project and each individual project alternative. In several cases, the description of the impact may be the same under each alternative when compared with the CEQA Thresholds of Significance (i.e., both project and the alternative would result in a less than significant impact). The actual severity of impact may be slightly different between the proposed project and each alternative, and this relative difference is the basis for a conclusion of greater or lesser impacts.

5.5 - No Project Alternative

Under the No Project Alternative, the project site would remain in its current state and maintain existing land uses for the foreseeable future. As such, the proposed Parkway and associated roadway improvements would not be constructed, and no alterations to the project site would occur. The No Project Alternative would not attain the project objectives and would not be compliant with the 2004 County General Plan.

5.5.1 - Aesthetics

As discussed in Section 4.2, the proposed project would result in less than significant impacts to scenic vistas, visual character, and nighttime views surrounding the project area. Temporary impacts to visual character would result from construction activities, but would remain less than significant. Nighttime views surrounding the area would be minimally impacted by additional intersection lighting. The proposed project could potentially result in beneficial impacts to scenic vistas if the proposed Underground Utility Districts (UUDs) are approved.

Under the No Project Alternative, the project site would remain undeveloped and the existing aesthetics, light and glare environment would remain the same. Scenic vistas, visual character, and nighttime lighting would remain unchanged. No UUDs would be created and existing overhead utilities would remain in their current locations. Therefore, this alternative would have fewer impacts on aesthetics, light and glare, but the potential beneficial impacts of undergrounding existing overhead utilities would not be realized.

5.5.2 - Air Quality

As discussed in Section 4.3, the proposed project would result in less than significant impacts to climate change after mitigation. The proposed project would also result in less than significant impacts to reactive organic gasses (ROG), nitrogen oxides (NO_x), construction- and operational-related carbon monoxide (CO), diesel particulate matter, fugitive dust impacts, naturally occurring asbestos (NOA), sensitive receptors, and odors.

Under the No Project Alternative, the project site would remain undeveloped. Climate change mitigation required under the proposed project would not be required. The No Project Alternative would not result in any impacts related to construction- or operational-related carbon monoxide (CO), diesel particulate matter, fugitive dust impacts, naturally occurring asbestos (NOA), sensitive

receptors or odors. However, the existing traffic congestion and related air quality impacts would continue to occur in the project area and increase as population growth approved by the General Plan occurs. While the proposed project would not decrease trips or trip lengths, it would decrease existing traffic congestion, thereby decreasing the potential for traffic emissions to exceed local carbon monoxide standards and create CO₂ hotspots. Accordingly, the No Project Alternative would result in greater impacts to air quality than the proposed project.

5.5.3 - Biological Resources

As discussed in Section 4.4, construction and operation of the project would result in less than significant impacts on state and federally designated special status species, riparian habitat, federally protected wetlands, and oak woodlands after mitigation. Less than significant impacts would result in relation to the movement of species, established wildlife corridors, and wildlife nursery sites.

Under the No Project Alternative, the proposed project would not be constructed and existing biological resources would not be disturbed. Accordingly, this alternative would result in fewer impacts to biological resources.

5.5.4 - Cultural Resources

As discussed in Section 4.5, the proposed project would result in potentially significant impacts if subsurface construction activities were to inadvertently damage or destroy previously undiscovered historic resources, archaeological resources, unique paleontological or geologic resources, or human remains. Implementation of mitigation would reduce the magnitude of these impacts to a less than significant level. The proposed project would result in less than significant impacts to two historic resources within the project area.

Under the No Project Alternative, the proposed project would not be constructed and there would be no potential for damage to previously undiscovered cultural resources and no impacts to the two existing historic resources. Accordingly, this alternative would result in fewer impacts to cultural resources.

5.5.5 - Geology and Soils

As discussed in Section 4.6, implementation of the proposed project would result in less than significant impacts related to fault rupture, strong seismic ground shaking, seismic-related ground failure and landslides due to the low seismicity of the project area. Impacts related to erosion would be less than significant due to the implementation of a SWPPP and incorporated BMPs. Impacts related to undocumented fill and expansive soils would be reduced to less than significant with the implementation of mitigation.

Under the No Project Alternative, the proposed project would not be constructed. Accordingly, potential impacts related to existing geologic and soil conditions would not occur. Accordingly, the No Project Alternative would result in fewer impacts to geology and soils.

5.5.6 - Hazards and Hazardous Materials

As discussed in Section 4.7, construction of the proposed project may disturb soils or building materials containing hazardous materials such as lead, asbestos or agricultural chemicals. Mitigation implementation would reduce the magnitude of these impacts to a less than significant level. The proposed project would result in less than significant impacts related to the routine transport, use or disposal of hazardous materials, and accidental upset involving hazardous materials.

Under the No Project Alternative, the proposed project would not be constructed. Potential impacts related to soils or buildings containing hazardous materials would not occur and no mitigation would be necessary. The No Project Alternative would not result in impacts related to the routine transport, use or disposal of hazardous materials or accidental upset involving hazardous materials. Accordingly, the No Project Alternative would result in fewer impacts to hazards and hazardous materials.

5.5.7 - Hydrology and Water Quality

As discussed in Section 4.8, Hydrology and Water Quality, the proposed project would result in no impact to groundwater supplies, flood hazards, seiches, tsunamis, or mudflows. Adherence to standard County practices and permit requirements would ensure that the project would result in less than significant impacts to water quality, drainage and drainage capacity.

Under the No Project Alternative, potential increases in stormwater runoff and degradation of water quality would not occur. Accordingly, the No Project Alternative would result in fewer impacts to hydrology and water quality.

5.5.8 - Land Use

As discussed in Section 4.9, the proposed project would result in less than significant impacts related to the division of an established community and existing conservation plans. No impact would occur regarding compliance with applicable plans, policies or regulations.

Under the No Project Alternative, no impacts related to the division of an established community or existing conservation plans would occur. However, the proposed Parkway is included in the 2004 General Plan Circulation Element as a planned roadway and is shown as such on the County General Plan Circulation Map. The proposed project is also part of DOT's 2009 Capital Improvement Plan (CIP). Without the construction of the proposed project, land use development approved by the General Plan and CIP would continue to occur, but would be limited by access and lead to additional

congestion. Accordingly, the No Project Alternative would be inconsistent with County and DOT plans resulting in greater land use impacts than the proposed project.

5.5.9 - Noise

As discussed in Section 4.10, the proposed project would result in impacts related to local noise standards, temporary noise increases and permanent noise increases. The incorporation of rubberized asphalt at one location within the study area would reduce impacts related to the permanent exceedance of local noise criteria at a single project-area residence to a less than significant level. The proper maintenance and muffling of sound producing construction equipment would reduce temporary construction noise impacts to a less than significant level.

Under the No Project Alternative, the proposed Parkway, roadway improvements and EID Intertie Improvements would not occur and, therefore, impacts to the existing noise environment would not occur. Accordingly, the No Project Alternative would result in fewer impacts to noise.

5.5.10 - Public Services

As discussed in Section 4.11, construction of the proposed project would result in impacts related to fire protection, police protection, and schools due to temporary traffic congestion. The inclusion of a traffic management plan in all construction contracts would ensure that adequate access is provided at all times and that impacts would be less than significant. Upon completion, the proposed project would result in beneficial impacts related to emergency services due to increase traffic circulation and increased fire suppression abilities due to newly constructed and upgraded EID Intertie Improvements.

Under the No Project Alternative, potential construction related impacts to public services would not occur. However, beneficial impacts to emergency services and fire suppression water flow would not occur and planned growth in the project area would be negatively affected in the future. Accordingly, impacts to public services under the No Project Alternative would be greater than the proposed project.

5.5.11 - Traffic and Transportation

As discussed in Section 4.12, the proposed project would result in less than significant impacts related to existing, and cumulative roadway operations. Less than significant impacts would also occur related to queuing, construction traffic, staging and parking; safety and roadway hazards; emergency access; conflicts with alternative transportation; and recreational facilities. Beneficial impacts would result from increased safety and circulation, including optimized signalization and the construction of connections to the El Dorado Multi-Use Trail.

Under the No Project Alternative, the proposed project would not be constructed. As such, current and unacceptable LOS would remain on roadways in the project area and existing traffic congestion

would continue to worsen as growth occurs in accordance with the General Plan. This would result in impacts to existing, interim, and cumulative roadway operations, queuing lengths, roadway hazards, and emergency access. Furthermore, beneficial impacts resulting from increased safety and circulation, including optimized signalization, on project area roadways would not occur, and connections to the El Dorado Multi-Use Trail would not be constructed. Accordingly, impacts related to Traffic and Transportation resulting from the No Project Alternative would be greater than the proposed project.

5.5.12 - Utilities and Service Systems

As discussed in Section 4.13, the proposed project would not directly result in additional demand for utilities and service systems. As a road improvement project, such services would not be required. Accordingly, less than significant impacts would occur related to wastewater treatment, water treatment facilities, stormwater drainage, water supplies, solid waste and energy consumption. Existing utility poles in the project area would require relocation due to conflict with proposed roadway construction. Relocating the poles or forming two UUDs would update the existing transmission lines and would therefore have a beneficial impact. Implementation of the proposed EID Intertie Improvements would also result in beneficial impacts by improving the reliability of water supplies to existing customers and providing water for growth as allowed by the General Plan and County Regulations. Minor water, electricity, cable, and telephone interruptions may occur as a result of the project but would be temporary and less than significant.

Under the No Project Alternative, no temporary impacts to utilities and service systems would occur. However, long-term beneficial impacts related to the relocation of existing utility poles and increased water supply reliability would not occur. Accordingly, impacts related to utilities and service systems under the No Project Alternative would be greater than the proposed project.

5.5.13 - Conclusions

Under this alternative, the proposed Parkway would not be constructed and the project site would be left as is. Accordingly, none of the project objectives would be met and existing LOS deficiencies would continue to worsen on Missouri Flat Road and SR-49.

In summary, the No Project Alternative would result in greater impacts than the proposed project to air quality, land use, public services, traffic, and utilities because existing level of service deficiencies would not be improved (and continue to worsen), and existing utilities would not be upgraded. Conversely, the No Project Alternative would result in lesser impacts than the proposed project in the areas of aesthetics, biology, cultural resources, geology, hazards, hydrology, and noise because no changes or disturbances to the existing project site would occur. However, the proposed project would result in fewer overall environmental impacts than the No Project Alternative because the proposed project would implement mitigation to lessen all impacts to less than significant, would increase roadway level of service (LOS), and update utilities.

5.6 - Alternative A (MC&FP Proposed Project)

Under Alternative A, the proposed Parkway would be constructed according to the third conceptual alignment presented to the Board of Supervisors in the April 9, 1997 Technical Memorandum. Alternative A was selected as the preferred alignment and was programmatically analyzed in the MC&FP EIR. This alternative received a high level of community support, and was determined to be acceptable from a functional, technical, and financial standpoint.

5.6.1 - Aesthetics

Under Alternative A, the roadway would be constructed according to the alignment included as Alternative 3 in DOT's 1997 Technical Memorandum. Similar to the proposed project, Alternative A would result in less than significant impacts to scenic vistas, and nighttime views. Also similar to the proposed project, beneficial impacts to scenic vistas would occur if the proposed Underground Utility Districts (UDDs) are approved. However, a portion of the EDMUT trail right-of-way ROW would be utilized. This would require recently constructed trail facilities to be reconstructed directly adjacent to the roadway or realigned to a different location. In either circumstance, the views from the existing EDMUT would likely be deteriorated by removal of existing vegetation and trees that provide visual screening and by an increased proximity to a greater length of the proposed Parkway. Furthermore, Alternative A would require the construction of a roadway in a previously undeveloped, wooded area between Lime Kiln Road and Pleasant Valley Road (SR-49), resulting in potentially significant impacts to the existing visual character at this location. Accordingly, impacts to aesthetics under Alternative A would be greater than the proposed project.

5.6.2 - Air Quality

Under Alternative A, the proposed project would be constructed along a slightly different alignment, but construction and operation of the project would be mostly the same. Due to the similarities to the proposed project, Alternative A would likely require similar climate change mitigation, and would result in less than significant impacts to ROG, NO_x, CO, diesel particulate matter, fugitive dust impacts, NOA, sensitive receptors and odors. As such, this alternative's air quality impacts would be similar to the proposed project.

5.6.3 - Biological Resources

Under Alternative A, the project would utilize a portion of the EDMUT right-of-way and an area covered by annual grasslands and oak trees west of Diamond Road (SR-49) between Lime Kiln Road and Pleasant Valley Road. Alternative A would have impacts similar to those of the proposed project regarding state and federally designated special status species and would require mitigation similar to the proposed project in order to ensure impacts are less than significant. However, Alternative A would affect several seasonal wetlands and ephemeral drainages in the northwestern section of the project study area that are outside of the proposed project's footprint. While the proposed project may also affect these seasonal wetlands and ephemeral drainages, Alternative A would place the

roadway directly adjacent to or on top of these features. Furthermore, Alternative A would affect greater amounts of oak woodland canopy near both the EDMUT and along Diamond Road (SR-49). Accordingly, impacts to oak woodland canopy under Alternative A would be greater than that of the proposed project. Therefore, this alternative would have greater impacts on biological resources than the proposed project.

5.6.4 - Cultural Resources

Under Alternative A, and similar to the proposed project, potentially significant impacts would occur if subsurface construction activities were to inadvertently damage or destroy previously undiscovered historic resources, archaeological resources, unique paleontological or geologic resources, or human remains. Also similar to the proposed project, standard mitigation would be implemented to reduce the magnitude of these impacts to a less than significant level. Accordingly, this alternative would result in similar impact to cultural resources.

5.6.5 - Geology and Soils

As discussed in Section 4.6, implementation of the proposed project would result in less than significant impacts related to fault rupture, strong seismic ground shaking, seismic-related ground failure, and landslides due to the low seismicity of the project area. Impacts related to erosion would be less than significant due to the implementation of a SWPPP and incorporated BMPs. Impacts related to unstable soils and expansive soils would be less than significant due to the implementation of mitigation. Because Alternative A is relatively similar in location to the proposed project, and would also be required to implement a SWPPP, BMPs, and mitigation, impacts to geology and soils would be similar to that of the proposed project.

5.6.6 - Hazards and Hazardous Materials

Alternative A would be located in the same general vicinity as the proposed project, with slight changes in the alignment. Similar to the proposed project, construction of Alternative A would result in the disturbance of soils or building materials that may contain hazardous materials and, therefore, mitigation similar to that of the proposed project would be required to ensure impacts are less than significant. Also similar to the proposed project, Alternative A would result in less than significant impacts related to the routine transport, use or disposal of hazardous materials, and accidental upset involving hazardous materials. Accordingly, impacts related to hazards and hazardous materials resulting from this alternative would be similar to the proposed project.

5.6.7 - Hydrology and Water Quality

Alternative A would be located in the same general vicinity as the proposed, albeit with slight changes in the alignment. Accordingly, Alternative A would result in similar impacts to hydrology and water quality as the proposed project, including no impacts to groundwater supplies, flood hazards, seiches, tsunamis, or mudflows. Also similar to the proposed project, Alternative A would be required to adhere to standard County practices and permit requirements that would ensure less

than significant impacts to water quality, drainage and drainage capacity would occur. As such, impacts resulting from this alternative would be similar to the proposed project.

5.6.8 - Land Use

As discussed in Section 4.9, the proposed project would result in less than significant impacts related to the division of an established community and existing conservation plans. No impact would occur regarding compliance with applicable plans, policies or regulations.

Because Alternative A is located similarly to the proposed project, it would not divide an established community. Alternative A would, however, result in the displacement of the EDMUT and, therefore, would not be compliant with several General Plan Objectives and Policies including Objective 9.1.2, which requires the County to provide a multi-purpose trail system; Policy 9.1.2.8, which requires the County to integrate and link existing and proposed trails; and Objective 9.1.3 which requires the incorporation of trails into urban and rural areas. Furthermore, Alternative A would segment greater amounts of developable land thereby reducing full build-out potential as envisioned in the General Plan. Accordingly, Alternative A would not be consistent with the General Plan and impacts to land use under Alternative A would be greater than the proposed project.

5.6.9 - Noise

Similar to the proposed project, Alternative A would result in impacts related to local noise standards, temporary noise increases and permanent noise increases. The proper maintenance and muffling of sound producing construction equipment would reduce temporary construction noise impacts to a less than significant level. Exceedance of local noise standards near a single residence along the east side of Diamond Road (SR-49) may not occur under Alternative A because the roadway would be shifted to the west, further way from the existing residences. However, the roadway would be shifted closer to several residences north of Old Depot Road. It is likely that, mitigation similar to the proposed project would be used to reduce permanent noise increases in this area to a less than significant level. Therefore, resulting noise impacts would be similar to the proposed project.

5.6.10 - Public Services

Similar to the proposed project, temporary impacts to fire protection, police protection, and schools would result due to temporary traffic congestion during construction of Alternative A. A traffic management plan would reduce these impacts to less than significant. Also similar to the proposed project, beneficial impacts related to emergency services due to increased traffic circulation and increased fire suppression due to newly constructed and upgraded EID Intertie Improvements would result. Accordingly, impacts to public services would be similar to proposed project.

5.6.11 - Traffic and Transportation

Similar to the proposed project, Alternative A would result in less than significant impacts related to existing, and cumulative roadway operations. Also similar to the proposed project, less than

significant impacts would occur related to queuing, construction traffic, staging and parking; safety and roadway hazards; emergency access; and conflicts with alternative transportation. However, Alternative A would displace the EDMUT by utilizing a portion of the trail's right-of-way for the proposed roadway, thereby significantly altering and reducing pedestrian mobility in the project area. Furthermore, Alternative A would require the creation of a new intersection of the Parkway and SR-49, requiring drivers traveling on SR-49 to make a left turn to continue south or a right turn to continue north, further segmenting SR-49. Accordingly, impacts to traffic and transportation would be greater than the proposed project.

5.6.12 - Utilities and Service Systems

Similar to the proposed project, Alternative A would not directly result in additional demand for utilities and service systems. As a road improvement project, such services would not be required. Accordingly, less than significant impacts would occur related to wastewater treatment, water treatment facilities, stormwater drainage, water supplies, solid waste, and energy consumption. Also similar to the proposed project, Alternative A would result in a beneficial impact due to relocation or undergrounding of existing transmission lines. Alternative A would also implement the proposed EID Intertie Improvements, resulting in additional beneficial impacts related to water supply. Minor water, electricity, cable, and telephone interruptions may occur as a result of the project but would be temporary and less than significant. As such, impacts to utilities and service systems would be similar to the proposed project.

5.6.13 - Conclusions

Alternative A provides a continuous roadway for the heavy commuter traffic from southeast El Dorado County to US-50 but requires SR-49 through-traffic to turn at a new intersection. After review of Alternative A, Caltrans requested that DOT evaluate alternatives that did not segment SR-49. Alternative A featured a sweeping alignment that bisected or fragmented several properties, would have required DOT to secure a greater amount of ROW, and would result in greater impacts on land with development potential. Alternative A was also determined by the County to be a more costly alternative than the proposed project, from the perspective of both project construction costs and time. Alternative A was rejected for these reasons, and because it would have been required to follow Caltrans's lengthy formal process requiring a Cooperative Agreement, Project Study Report, Project Report, and Route Adoption. It was also rejected because the proposed project was estimated to cost less when compared with the programmed costs for Alternative A. This alternative would not meet all the project objectives, as it would not coordinate the construction of the Parkway with the EDMUT (Objective 1d) and would result in greater impacts to biological resources (Objective 1e).

In summary, Alternative A would result in greater impacts to aesthetics, biologic resources, land use, and traffic and transportation due to its alignment along the EDMUT corridor, relocation of the SR-49 ROW between Lime Kiln Road and Pleasant Valley Road, and the addition of an intersection for SR-49 thru-traffic. Alternative A would result in impacts similar to the proposed project with regard to

air quality, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, noise, public services, and utilities and services systems. Alternative A would not result in fewer impacts to any resource areas when compared to the proposed project. Accordingly, the proposed project would result in fewer overall environmental impacts than Alternative A.

5.7 - Alternative B (MC&FP Alternative 4)

Under Alternative B (previously considered in the MC&FP EIR as Alternative 4), the proposed Parkway would be constructed according to the fourth conceptual alignment presented to the Board of Supervisors in the April 9, 1997 Technical Memorandum.

The Board of Supervisors selected this alternative on April 29, 2008 as the preferred alignment, rescinding its previous decision to move forward alignment included as the proposed project in the MC&FP EIR. New studies indicate that this alignment, Alternative B, may not require significant realignment of Diamond Road (SR-49), and would only require widening and minor realignment to SR-49; Caltrans also indicated that the revised improvements to SR-49 would only require an encroachment permit through Caltrans's new Permit Engineering Evaluation Report (PEER) process, resulting in significant cost savings.

This alignment is similar to the proposed project with the exception of its use of the EDMUT corridor, east of Missouri Flat Road, and a realignment of Diamond Road (SR-49) between Lime Kiln Road and Pleasant Valley Road (SR-49).

5.7.1 - Aesthetics

Under Alternative B, the roadway would be constructed according to the alignment included as Alternative 4 in DOT's 1997 Technical Memorandum. Similar to the proposed project, Alternative B would result in less than significant impacts to scenic vistas, and nighttime views. Also similar to the proposed project, beneficial impacts to scenic vistas would occur if the proposed Underground Utility Districts (UDDs) are approved. However, a portion of the EDMUT trail right-of-way would be utilized. This would require recently constructed trail facilities to be reconstructed directly adjacent to the roadway or realigned in a different location. In either circumstance, the views from the existing EDMUT would likely be deteriorated by removal of existing vegetation and trees that provide visual screening and by an increased proximity to a greater length of the proposed Parkway. Furthermore, Alternative B would require the construction of a roadway in a previously undeveloped, wooded area between Lime Kiln Road and Pleasant Valley Road (SR-49), resulting in potentially significant impacts to the existing visual character at this location. Accordingly, impacts to aesthetics under Alternative B would be greater than the proposed project.

5.7.2 - Air Quality

Under Alternative B, the proposed project would be constructed along a slightly different alignment, but construction and operation of the project would be mostly the same. Due to the similarities to the

proposed project, Alternative B would likely require similar climate change mitigation, and would result in less than significant impacts to ROG, NO_x, CO, diesel particulate matter, fugitive dust impacts, NOA, sensitive receptors and odors. As such, this alternative's air quality impacts would be similar to the proposed project.

5.7.3 - Biological Resources

Under Alternative B, the project would utilize a portion of the EDMUT right-of-way and an area covered by annual grasslands and oak trees west of Diamond Road (SR-49) between Lime Kiln Road and Pleasant Valley Road. Alternative B would have impacts similar to those of the proposed project regarding state and federally designated special status species and would require mitigation similar to the proposed project in order to ensure impacts are less than significant. However, Alternative B would affect several seasonal wetlands and ephemeral drainages in the northwestern section of the project study area that are outside of the proposed project's footprint. While the proposed project may also affect these seasonal wetlands and ephemeral drainages, Alternative B would place the roadway directly adjacent to or on top of these features. Furthermore, Alternative B would affect greater amounts of oak woodland canopy near both the EDMUT and along Diamond Road (SR-49). Accordingly, impacts to oak woodland canopy under Alternative B would be greater than that of the proposed project. Therefore, this alternative would have greater impacts on biological resources than the proposed project.

5.7.4 - Cultural Resources

Under Alternative B, and similar to the proposed project, potentially significant impacts would occur if subsurface construction activities were to inadvertently damage or destroy previously undiscovered historic resources, archaeological resources, unique paleontological or geologic resources, or human remains. Also similar to the proposed project, standard mitigation would be implemented to reduce the magnitude of these impacts to a less than significant level. Accordingly, this alternative would result in similar impact to cultural resources.

5.7.5 - Geology and Soils

As discussed in Section 4.6, implementation of the proposed project would result in less than significant impacts related to fault rupture, strong seismic ground shaking, seismic-related ground failure, and landslides due to the low seismicity of the project area. Impacts related to erosion would be less than significant due to the implementation of a SWPPP and incorporated BMPs. Impacts related to unstable soils and expansive soils would be less than significant due to the implementation of mitigation. Because Alternative B is relatively similar in location to the proposed project, and would also be required to implement a SWPPP, BMPs, and mitigation, impacts to geology and soils would be similar to that of the proposed project.

5.7.6 - Hazards and Hazardous Materials

Alternative B would be located in the same general vicinity as the proposed project, with slight changes in the alignment. Similar to the proposed project, construction of Alternative B would result in the disturbance of soils or building materials that may contain hazardous materials and, therefore, mitigation similar to that of the proposed project would be required to ensure impacts are less than significant. Also similar to the proposed project, Alternative B would result in less than significant impacts related to the routine transport, use or disposal of hazardous materials, and accidental upset involving hazardous materials. Accordingly, impacts related to hazards and hazardous materials resulting from this alternative would be similar to the proposed project.

5.7.7 - Hydrology and Water Quality

Alternative B would be located in the same general vicinity as the proposed project, with slight changes in the alignment. Accordingly, Alternative B would result in similar impacts to hydrology and water quality as the proposed project, including no impacts to groundwater supplies, flood hazards, seiches, tsunamis, or mudflows. Also similar to the proposed project, Alternative B would be required to adhere to standard County practices and permit requirements that would ensure less than significant impacts to water quality, drainage and drainage capacity would occur. As such, impacts resulting from this alternative would be similar to the proposed project.

5.7.8 - Land Use

As discussed in Section 4.9, the proposed project would result in less than significant impacts related to the division of an established community and existing conservation plans. No impact would occur regarding compliance with applicable plans, policies or regulations.

Because Alternative B is located similarly to the proposed project, it would not divide an established community. Alternative B would, however, result in the displacement of the EDMUT and, therefore, would not be compliant with several General Plan Objectives and Policies including Objective 9.1.2, which requires the County to provide a multi-purpose trail system; Policy 9.1.2.8, which requires the County to integrate and link existing and proposed trails; and Objective 9.1.3 which requires the incorporation of trails into urban and rural areas. Accordingly, Alternative B would not be consistent with the General Plan and impacts to land use under Alternative B would be greater than the proposed project.

5.7.9 - Noise

Similar to the proposed project, Alternative B would result in impacts related to local noise standards, temporary noise increases, and permanent noise increases. The proper maintenance and muffling of sound producing construction equipment would reduce temporary construction noise impacts to a less than significant level. Exceedance of local noise standards near residences along the east side of Diamond Road (SR-49) may not occur under Alternative B because the roadway would be shifted to the west, further way from the existing residences. However, the roadway would be shifted closer to

several residences north of Old Depot Road. It is likely that, mitigation similar to the proposed project would be used to reduce permanent noise increases in this area to a less than significant level. Therefore, resulting noise impacts would be similar to the proposed project.

5.7.10 - Public Services

Similar to the proposed project, temporary impacts to fire protection, police protection, and schools would result due to temporary traffic congestion during construction of Alternative B. A traffic management plan would reduce these impacts to less than significant. Also similar to the proposed project, beneficial impacts related to emergency services due to increased traffic circulation and increased fire suppression due to newly constructed and upgraded EID Intertie Improvements would result. Accordingly, impacts to public services would be similar to proposed project.

5.7.11 - Traffic and Transportation

Similar to the proposed project, Alternative B would result in less than significant impacts related to existing and cumulative roadway operations. Also similar to the proposed project, less than significant impacts would occur related to queuing, construction traffic, staging and parking; safety and roadway hazards; emergency access; and conflicts with alternative transportation. However, Alternative B would displace the EDMUT by utilizing a portion of the trail's right-of-way for the proposed roadway, thereby significantly altering and reducing pedestrian mobility in the project area. Accordingly, impacts to traffic and transportation would be greater than the proposed project.

5.7.12 - Utilities and Service Systems

Similar to the proposed project, Alternative B would not directly result in additional demand for utilities and service systems. As a road improvement project, such services would not be required. Accordingly, less than significant impacts would occur related to wastewater treatment, water treatment facilities, stormwater drainage, water supplies, solid waste, and energy consumption. Also similar to the proposed project, Alternative B would result in a beneficial impact due to relocation or undergrounding of existing transmission lines. Alternative B would also implement the proposed EID Intertie Improvements, resulting in additional beneficial impacts related to water supply. Minor water, electricity, cable and telephone interruptions may occur as a result of the project but would be temporary and less than significant. As such, impacts to utilities and service systems would be similar to the proposed project.

5.7.13 - Conclusions

This alignment would be substantially similar to the proposed project, but would utilize a portion of the recently constructed EDMUT and would therefore displace the recently constructed trail facility. Additionally, a slight realignment of Diamond Road (SR-49) between the proposed Parkway intersection and Pleasant Valley Road (SR-49) would be required, necessitating additional right-of-way ROW acquisition. This alternative would not meet all the project objectives, as it would not

coordinate the construction of the Parkway with the EDMUT and would require additional funding for right-of-way acquisition along Diamond Road (SR-49).

In summary, Alternative B would result in greater impacts to aesthetics, biologic resources, land use, and traffic and transportation due to its alignment along the EDMUT corridor and the relocation of the SR-49 ROW between Lime Kiln Road and Pleasant Valley Road. Alternative B would result in impacts similar to the proposed project with regard to air quality, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, noise, public services, and utilities and services systems. Alternative B would not result in fewer impacts to any resource areas when compared to the proposed project. Accordingly, Alternative B the proposed project would result in fewer overall environmental impacts than Alternative B.

5.8 - Alternative C (Lower Vertical Profile)

Under Alternative C, all features of the proposed project would be constructed. However, Alternative C would construct the Parkway with a lower vertical profile, up to five feet lower than the proposed project. Accordingly, less fill would be placed in the ROW to obtain the proposed roadway prism.

5.8.1 - Aesthetics

Under Alternative C, all features of the proposed project would be constructed including the creation of the frontage road; three new signalized intersections; additional bicycle, pedestrian and transit facilities; EID intertie improvements; and utility undergrounding or relocations. However, in some locations, the road way would be up to five feet lower than the proposed project. This would not result in substantially different impacts from the proposed project, because views of the roadway would not be substantially changed. Accordingly, impacts to aesthetics under Alternative C would be similar to the proposed project.

5.8.2 - Air Quality

Under Alternative C, the roadway would be located along the same alignment as the proposed project. Due to the similarities to the proposed project, Alternative C would likely require similar climate change mitigation, and would result in less than significant impacts to ROG, NO_x, CO, diesel particulate matter, fugitive dust impacts, NOA, sensitive receptors, and odors. However, less fill would be required to complete the desired roadway prism and, therefore, less earth moving and grading would be required. A reduction in required earth movement and fill would result in a direct reduction of exhaust emission. Therefore, Alternative C would result in fewer air quality impacts than the proposed project.

5.8.3 - Biological Resources

Alternative C would be located along the same alignment as the proposed project and result in substantially similar ground disturbing activities. Accordingly, this alternative would result in less

than significant impacts on state and federally designated special status species, riparian habitat, federally protected wetlands and oak woodlands after mitigation. Also similar to the proposed project, less than significant impacts would result in relation to the movement of species, established wildlife corridors, and wildlife nursery sites. Therefore, this alternative would result in biological resource impacts that are similar to the proposed project.

5.8.4 - Cultural Resources

This alternative would result in ground-disturbing activities substantially similar to the proposed project. As such, it would have the potential to damage or destroy undiscovered cultural resources or burial sites. Mitigation similar to that of the proposed project would be implemented to ensure that undiscovered cultural resources would not be adversely affected by this alternative's construction activities. Therefore, this alternative would have cultural resources impacts similar to the proposed project.

5.8.5 - Geology and Soils

As discussed in Section 4.6, implementation of the proposed project would result in less than significant impacts related to fault rupture, strong seismic ground shaking, seismic-related ground failure, and landslides due to the low seismicity of the project area. Impacts related to erosion would be less than significant due to the implementation of a SWPPP and incorporated BMPs. Impacts related to unstable soils and expansive soils would be less than significant due to the implementation of mitigation. Because Alternative C would result in substantially similar ground disturbing activities, and would also be required to implement a SWPPP, BMPs, and mitigation, impacts to geology and soils would be similar to that of the proposed project.

5.8.6 - Hazards and Hazardous Materials

Alternative C would be located along the same alignment as the proposed project, with slight changes in the roadway's elevation. Similar to the proposed project, construction of Alternative C would result in the disturbance of soils or building materials that may contain hazardous materials and, therefore, mitigation similar to that of the proposed project would be required to ensure impacts are less than significant. Also similar to the proposed project, Alternative C would result in less than significant impacts related to the routine transport, use or disposal of hazardous materials, and accidental upset involving hazardous materials. Accordingly, impacts related to hazards and hazardous materials resulting from this alternative would be similar to the proposed project.

5.8.7 - Hydrology and Water Quality

Alternative C would be located along the same alignment as the proposed project, with slight changes in the final roadway's elevation. Accordingly, Alternative C would result in similar impacts to hydrology and water quality as the proposed project, including no impacts to groundwater supplies, flood hazards, seiches, tsunamis, or mudflows. Also similar to the proposed project, Alternative C would be required to adhere to standard County practices and permit requirements that would ensure

less than significant impacts to water quality, drainage and drainage capacity would occur. As such, impacts resulting from this alternative would be similar to the proposed project.

5.8.8 - Land Use

As discussed in Section 4.9, the proposed project would result in less than significant impacts related to the division of an established community and existing conservation plans. No impact would occur regarding compliance with applicable plans, policies or regulations. Because Alternative C is located along the same alignment as the proposed project, it would not divide an established community. Similar to the proposed project, Alternative C would not result in impacts to the EDMUT corridor and would therefore be consistent with the El Dorado County General Plan. Accordingly, this alternative would have land use impacts similar to the proposed project.

5.8.9 - Noise

Similar to the proposed project, Alternative C would result in impacts related to local noise standards, temporary noise increases, and permanent noise increases. However, because this alternative would require less fill and therefore less grading, temporary noise increases related to grading equipment would be shorter in duration than the proposed project. Nonetheless, similar to the proposed project, mitigation requiring the proper maintenance and muffling of sound producing construction equipment would be required to reduce temporary construction noise impacts to a less than significant level. Also similar to the proposed project, the exceedance of local noise standards near a single residence along the east side of Diamond Road (SR-49) would occur. Mitigation similar to that used in the proposed project would be implemented to reduce impacts to less than significant levels. Therefore, resulting noise impacts would be similar to the proposed project.

5.8.10 - Public Services

Similar to the proposed project, temporary impacts to fire protection, police protection, and schools would result due to temporary traffic congestion during construction of Alternative C. A traffic management plan would reduce these impacts to less than significant. Also similar to the proposed project, beneficial impacts related to emergency services due to increased traffic circulation and increased fire suppression due to newly constructed and upgraded EID Intertie Improvements would result. Accordingly, impacts to public services would be similar to proposed project.

5.8.11 - Traffic and Transportation

Similar to the proposed project, Alternative C would result in less than significant impacts related to existing, and cumulative roadway operations. Also similar to the proposed project, less than significant impacts would occur related to queuing, construction traffic, staging and parking; safety and roadway hazards; emergency access; and conflicts with alternative transportation. Accordingly, impacts to traffic and transportation would be similar to the proposed project.

5.8.12 - Utilities and Service Systems

Similar to the proposed project, Alternative C would not directly result in additional demand for utilities and service systems. As a road improvement project, such services would not be required. Accordingly, less than significant impacts would occur related to wastewater treatment, water treatment facilities, stormwater drainage, water supplies, solid waste, and energy consumption. Also similar to the proposed project, Alternative C would result in a beneficial impact due to relocation or undergrounding of existing transmission lines. Alternative C would also implement the proposed EID Intertie Improvements, resulting in additional beneficial impacts related to water supply. Minor water, electricity, cable, and telephone interruptions may occur as a result of the project but would be temporary and less than significant. As such, impacts to utilities and service systems would be similar to the proposed project.

5.8.13 - Conclusions

In summary, Alternative C (Lower Vertical Alignment) would result in the similar impacts to aesthetics, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use, noise, public services, traffic and transportation, and utilities and service systems. Alternative C would result in fewer impacts related to air quality because less earth movement and grading would be required.

Because Alternative C is located in the same location as the proposed project, it would meet all project objectives.

5.9 - Environmentally Superior Alternative

CEQA Guidelines Section 15126(e)(2) requires an EIR to identify an “environmentally superior alternative.” The qualitative environmental effects of each alternative in relation to the proposed project are summarized in Table 5-1. To quantitatively identify an environmentally superior alternative a numeric value has been applied to each qualitative environmental effect: +1 for greater impacts, 0 for similar impacts, and -1 for fewer impacts. Accordingly, the alternative with the lowest score is the environmentally superior alternative.

Table 5-1: Alternatives Impact Comparison Summary

Environmental Topic Area	Proposed Project	No Project Alternative	Alternative A	Alternative B	Alternative C
Aesthetics, Light, and Glare	Less than significant impact	Fewer -1	Greater +1	Greater +1	Similar 0
Air Quality	Less than significant impact with mitigation	Greater +1	Similar 0	Similar 0	Fewer -1
Biological Resources	Less than significant impact with mitigation	Fewer -1	Greater +1	Greater +1	Similar 0

Table 5-1 (cont.): Alternatives Impact Comparison Summary

Environmental Topic Area	Proposed Project	No Project Alternative	Alternative A	Alternative B	Alternative C
Cultural Resources	Less than significant impact	Fewer -1	Similar 0	Similar 0	Similar 0
Geology, Soils, and Seismicity	Less than significant impact	Fewer -1	Similar 0	Similar 0	Similar 0
Hazards and Hazardous Materials	Less than significant impact with mitigation	Fewer -1	Similar 0	Similar 0	Similar 0
Hydrology and Water Quality	Less than significant impact	Fewer -1	Similar 0	Similar 0	Similar 0
Land Use	Less than significant impact	Greater +1	Greater +1	Greater +1	Similar 0
Noise	Less than significant impact with mitigation	Fewer -1	Similar 0	Similar 0	Similar 0
Public Services	Less than significant impact / Beneficial impact	Greater +1	Similar 0	Similar 0	Similar 0
Traffic and Transportation	Less than significant impact with mitigation / Beneficial impact	Greater +1	Greater +1	Greater +1	Similar 0
Utilities and Service Systems	Less than significant impact / potential Beneficial impact	Greater +1	Similar 0	Similar 0	Similar 0
Score	~	-2	4	4	-1

As shown in Table 5-1, the No Project Alternative is the environmentally superior alternative because it would result in seven fewer impacts than the proposed project, which would outweigh the No Project Alternative's five greater impacts. However, note that the No Project Alternative would not meet any of the project objectives and would not provide the opportunity for existing LOS deficiencies to be mitigated or for new utilities to be constructed.

Section 15126(d)(2) of the CEQA Guidelines states, "if the environmentally superior alternative is the 'no project' alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives." Accordingly, Alternative C would be the environmentally superior alternative among the other alternatives because it would result in similar impacts to the proposed project with the exception of a reduction in air quality impacts. In addition, Alternative C would meet all of the project objects, including increasing circulation and constructing updated utility infrastructure (EID interties and utility lines).

Neither Alternative A nor Alternative B would be considered the environmentally superior alternative because each would result in greater impacts to aesthetics, biological resources, land use, and traffic and transportation, and would not avoid or reduce any of the proposed project's impacts.

The environmental issues considered in this Draft EIR are only a portion of the factors that must be considered by the public and the decision makers in deliberations on the proposed project and alternatives. Other factors of importance include economics, social factors, and fiscal considerations. Accordingly, the environmentally superior alternative is not necessarily the alternative that will or should be approved for implementation.

SECTION 6: CEQA REQUIRED CONCLUSIONS

Section 15126 of the California Environmental Quality Act (CEQA) requires that a series of environmental considerations be discussed in an environmental impact report (EIR) to document the full effect of a project's planning, acquisition, development, and operation. This chapter includes all of the required discussions pursuant to CEQA Section 15126.

6.1 - Significant Unavoidable Impacts of the Project

CEQA Section 15126.2(b) requires that an EIR disclose all significant impacts, including those that cannot be mitigated to a less than significant level, where no feasible mitigation measures exist to further reduce these impacts (California Public Resources Code Section 21000). The proposed project would not result in any significant unavoidable impacts.

6.2 - Growth-Inducing Impacts

CEQA Section 15126.2(d) requires that an EIR discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. CEQA Guidelines Section 15126(d) indicates, "it must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment."

In general, town planners meet land use demands by opening up new areas for development on the suburban fringe, and transport planners apply the "predict and provide" model to "predict traffic increases and provide new roads to accommodate the predicted increase" (Mees 2000). While the Parkway would not provide access to lands previously inaccessible, it would implement a large-volume roadway in an industrial area previously accessed only by smaller roadways. Further, while current conditions do not preclude development from occurring and direct access to adjacent lands from the Parkway would be limited, it is reasonable to conclude that increased circulation in the area would foster further development on adjacent properties, some of which are currently vacant. In addition, increased access can cause an increase in land values, thereby creating economic pressures to develop. The 2004 El Dorado County General Plan designates parcels adjacent to the Parkway as industrial and programmatic impacts associated with the buildout of the General Plan were evaluated in the General Plan EIR.

Development on parcels along the Parkway may result in adverse environmental effects associated with short-term construction activities (e.g. air pollutant emissions, grading, vegetation removal, habitat disturbance, and noise), and long-term land use activities (e.g., aesthetics, air pollutant emissions, habitat loss, noise, traffic, increased stormwater, and increased demand on public services and utilities). Development of these parcels would be subject to approval by El Dorado County and

considered under applicable CEQA regulations, thereby identifying any potential project-specific environmental impacts.

The proposed project would improve circulation and relieve congestion in the Diamond Springs area and has been designed to accommodate future growth included in the 2004 El Dorado County General Plan. The proposed project is consistent with the El Dorado County General Plan, MC&FP, and 2009 CIP. Furthermore, the Parkway is identified on Figure TC-1 of the General Plan as a future 4-lane, divided road. Accordingly, the El Dorado County General Plan EIR (EDAW 2003) included consideration of the proposed project and future development that could occur on parcels adjacent to the new roadway and in the project's general vicinity. As such, the proposed Parkway and associated roadway improvements would allow for future growth as included in the General Plan.

The EID Intertie Improvements would update existing water supply infrastructure and provide new water infrastructure beneath the Parkway right-of-way. Existing development surrounding the Parkway is already served by EID; therefore, the project would not extend water supply services to an area previously not served. However, the upgraded and new EID Intertie Improvements would increase existing water supply reliability and provide water for future growth that has been planned for in the 2004 County General Plan and analyzed in the General Plan EIR (EDAW 2003). As such, the EID Intertie Improvements would allow for future growth as included in the General Plan.

6.3 - Cumulative Effects of the Project

This Draft EIR provides an analysis of the overall cumulative impacts of the proposed project taken together with other past, present, and probable future projects producing related impacts, as required under Section 15130 of the CEQA Guidelines. The goal of such an exercise is twofold: first, to determine whether the overall long-term impacts of all such projects would be cumulatively significant; and second, to determine whether the proposed project itself would cause a "cumulatively considerable" (and thus significant) incremental contribution to any such cumulatively significant impacts. Refer to CEQA Guidelines Sections 15130(a)–(b), 15355(b), 15064(h), and 15065(c), and *Communities for a Better Environment v. California Resources Agency* [2002] 103 Cal. App. 4th 98, 120. In other words, the required analysis intends first to create a broad context in which to assess the project's incremental contribution to anticipated cumulative impacts, viewed on a geographic scale well beyond the project site itself, and then to determine whether the project's incremental contribution to any significant cumulative impacts from all projects is itself significant (i.e., "cumulatively considerable").

Cumulative impacts are defined in CEQA Guidelines Section 15355 as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." A cumulative impact occurs from "the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually

minor but collectively significant projects taking place over a period of time” (CEQA Guidelines Section 15355(b)).

Consistent with CEQA Guidelines Section 15130, the discussion of cumulative impacts in this Draft EIR focuses on significant and potentially significant cumulative impacts. Section 15130(b) of the CEQA Guidelines, in part, provides the following:

The discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone. The discussion should be guided by the standards of practicality and reasonableness, and should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact.

A proposed project is considered to have a significant cumulative effect if:

- The cumulative effects of development without the project are not significant and the project’s additional impact is substantial enough, when added to the cumulative effects, to result in a significant impact; or
- The cumulative effects of development without the project are already significant and the project contributes measurably to the effect.

The term “measurably” is subject to interpretation. The standards used herein to determine measurability are that the impact must be noticeable to a reasonable person or must exceed an established threshold of significance.

A cumulative impact consists of an impact that is created as a result of the combination of a project together with other projects causing related impacts. In the evaluation of cumulative impacts, CEQA requires that the discussion be guided by the standards of practicality and reasonableness, and that the discussion focus on those cumulative impacts to which other projects contribute. In general, cumulative impacts are identified using a list of other past, present, and reasonably foreseeable future projects, or using projections for growth contained in an adopted general plan or related planning document. This EIR uses a list approach. A list of planned developments was compiled from input from the County and DOT for this analysis.

The spatial boundary for the study of a project’s cumulative impacts varies depending on the resource of concern. Impacts related to geology and archeological resources for example are generally site-specific, while air and noise impacts can travel greater distances. Most site-specific impacts have too limited a geographical area of influence to compound, or interrelate with impacts caused by other projects, with the result that the project’s impacts do not worsen or exacerbate the impacts of those

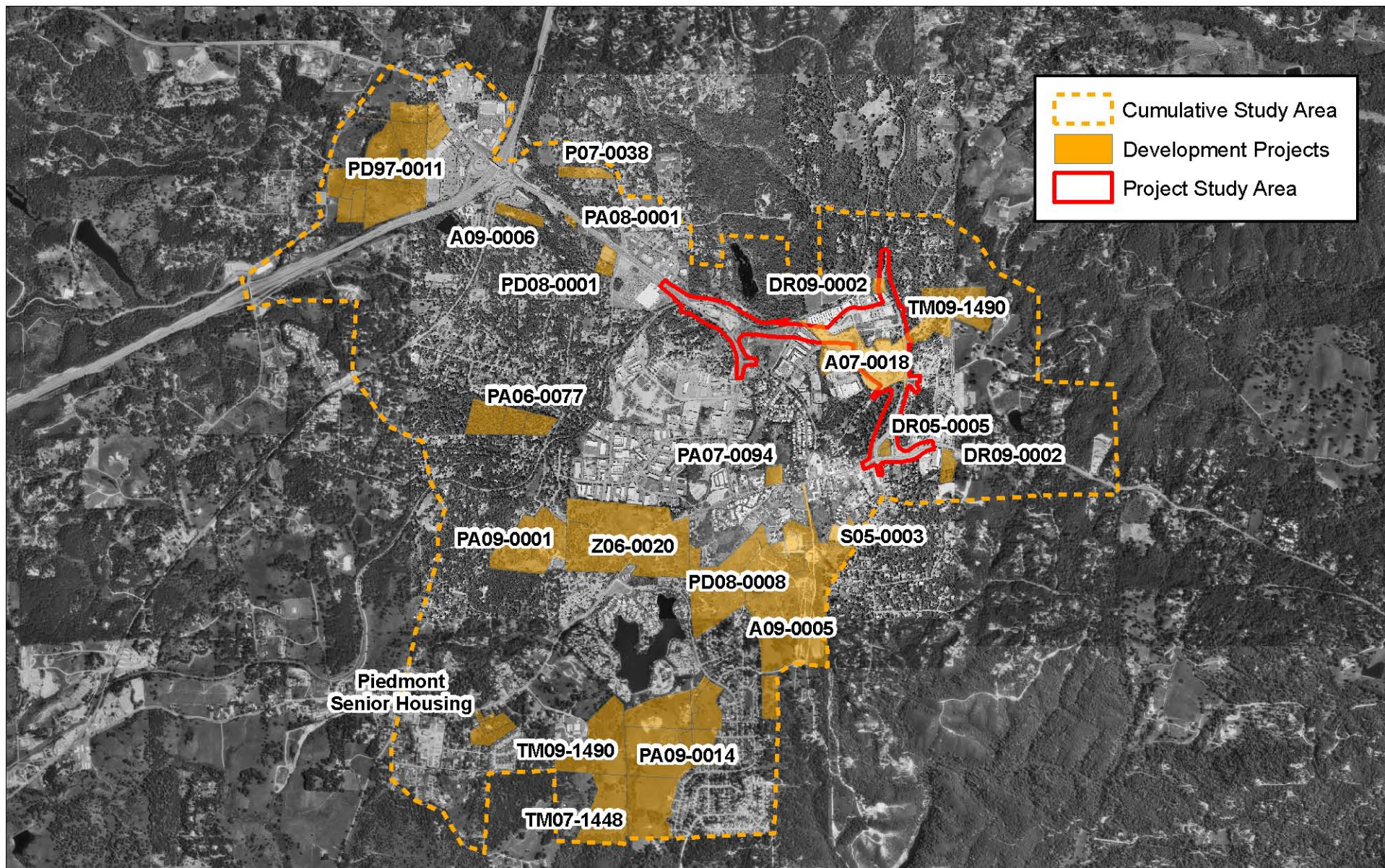
other projects. Exhibits 6-1a and 6-1b illustrate the location of the Cumulative Study Area and all the proposed and pending projects analyzed in this cumulative impact analysis. Under CEQA, a lead agency need not address such impacts in detail, as the project will not contribute to any cumulative impacts with respect to such impact categories. Refer to CEQA Guidelines, Section 15130(a), which states that “[w]here a lead agency is examining a project with an incremental effect that is not ‘cumulatively considerable,’ a lead agency need not consider that effect significant, but shall briefly describe its basis for concluding that the incremental effect is not cumulatively considerable,” and Section 15130(a)(1), which states that “[a]n EIR should not discuss impacts which do not result in part from the project evaluated in the EIR.”

6.3.1 - Projects Considered in the Cumulative Analysis

Transportation Projects in the Vicinity of the Proposed Project

Major transportation projects planned in the project vicinity, per the Department of Transportation Adopted 2010 Capital Improvement Program, include:

- **Headington Road Extension:** The project would extend Headington Road from its existing intersection with Missouri Flat Road westward approximately 0.6 mile to connect with the proposed realigned El Dorado Road. This is currently in the planning and environmental phase and has a scheduled completion date of 2010 (El Dorado County 2008b). This project is currently scheduled for future construction between 2014 and 2019.
- **US-50/Missouri Flat Road Interchange Improvements:** The California Transportation Commission recently allocated \$35,456,000 to the Missouri Flat Interchange Project, including \$5 million in federal economic stimulus funding. Phase 1A project improvements include widening Missouri Flat Road from two to four lanes from Prospector Plaza to Mother Lode Drive and replacing the existing overcrossing structure at Highway 50 (US-50). Additional intersection improvements that have been completed include channelization and signalization at Prospector’s Plaza Drive, US-50 eastbound and westbound ramps, and Mother Lode Drive and Perks Court intersections (El Dorado County 2008b). Construction of Phase 1A was completed in 2009. Phase 1B includes the reconfiguration of the interchange to a four-lane tight diamond, construction of auxiliary lanes between the interchange and the Forni Road/Western Placerville Drive Interchange, and widening and seismic retrofitting of the Weber Creek bridges on US-50 (El Dorado County 2008b). The El Dorado County Board of Supervisors approved the Phase 1B project the construction contract was awarded at the end of October 2009. Phase 1B is estimated to be complete by 2012.
- **Pleasant Valley Road (SR-49)/Patterson Drive Intersection Signalization:** This project is the signalization of the intersection and associated improvements, including channelization. This project is currently scheduled for construction in 2012.



Source: CTA 2008; MBA 2008; El Dorado County DOT 2009.



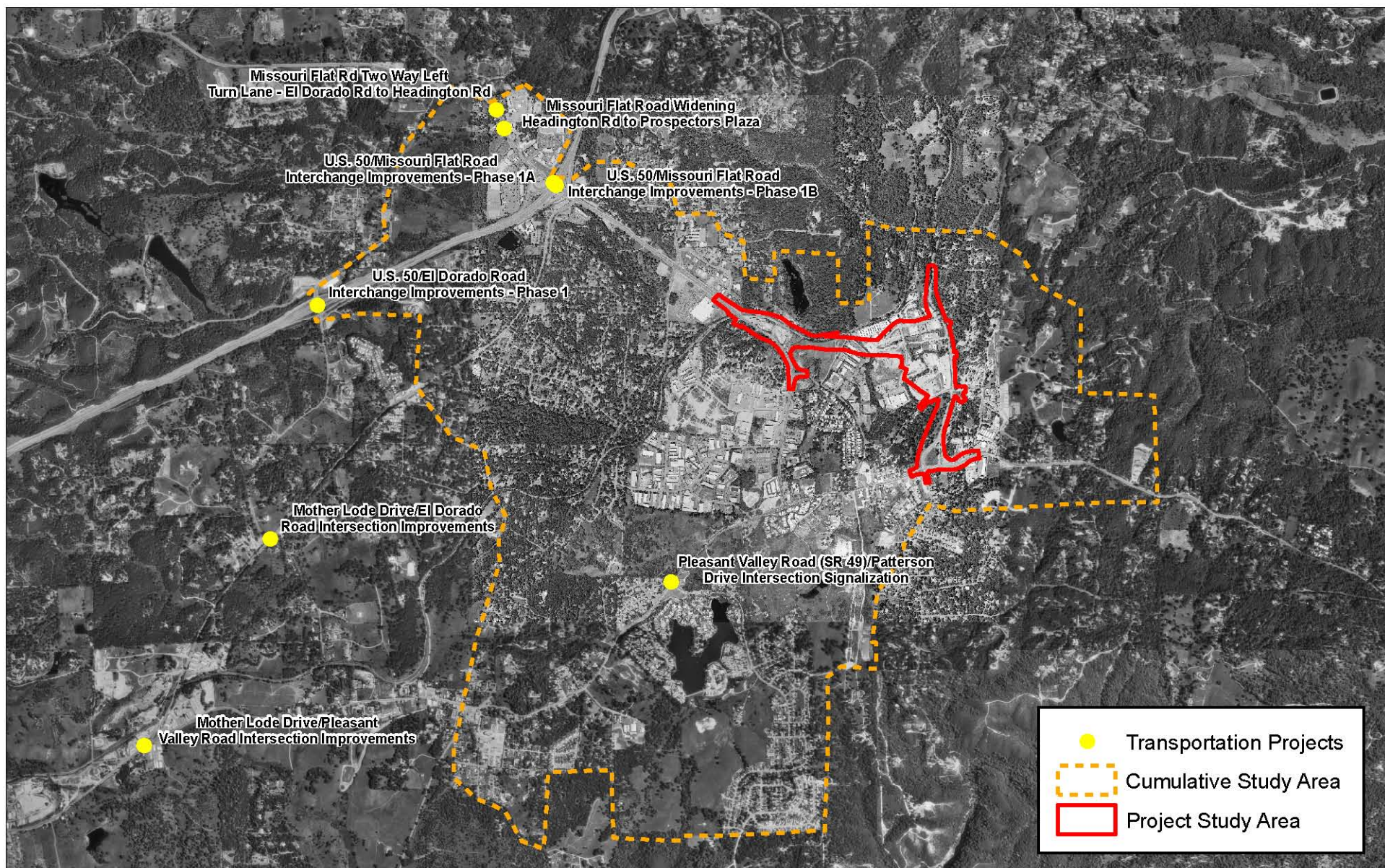
11730025 • 4/2010 | 6-1A_Cumulative_development.mxd



Exhibit 6-1a Cumulative Study Area - Development Projects

COUNTY OF EL DORADO DEPARTMENT OF TRANSPORTATION
DIAMOND SPRINGS PARKWAY PROJECT
ENVIRONMENTAL IMPACT REPORT

11-0448.C.469



Source: CTA 2008; MBA 2008; El Dorado County DOT 2009.



2,000 1,000 0 2,000 4,000 Feet

Exhibit 6-1b Cumulative Study Area - Transportation Projects

11730025 • 05/2010 | 6-1b_Cumulative_transporationmxd.mxd

COUNTY OF EL DORADO DEPARTMENT OF TRANSPORTATION
DIAMOND SPRINGS PARKWAY PROJECT
ENVIRONMENTAL IMPACT REPORT

11-0448.C.471

- **Pleasant Valley Road at Oak Hill Road Intersection Improvements:** Intersection improvements including alignment improvements and additional turn lanes would be implemented under this project. This project is currently scheduled for construction in 2011.
- **Mother Lode Drive/Pleasant Valley Road Intersection Improvements:** In 2006, an all-way, stop-sign controlled intersection was implemented in this location. Future improvements may include the reconfiguration of the existing “Y” intersection to a signalized “T” intersection, including turn pockets and shoulder improvements. Project construction is expected to occur after 2019.
- **Missouri Flat Road Two-Way, Left Turn Lane (El Dorado Road to Headington Road):** This project includes the addition of a two-way, left turn lane on Missouri Flat Road between El Dorado Road and Headington Road. The project is in the preliminary planning phase and will be partially constructed with the Placerville Marketplace development project. This future project does not have a scheduled start date.
- **Missouri Flat Road Widening, Headington Road to Prospector’s Plaza:** Missouri Flat Road will be widened to five lanes—two lanes in each direction with a center, two-way left-turn lane—between Headington Road and Prospector’s Plaza’s north driveway. This future project does not have a scheduled start date.

Residential and Commercial Projects in the Vicinity of the Proposed Project

Residential Projects

There are 10 proposed or approved residential projects in El Dorado County in the project vicinity (all located within the Diamond Springs area). Combined, these residential projects represent 1,231 additional units within the County. Table 6-1 identifies the Residential Projects in the Cumulative Study area.

Table 6-1: Residential Projects in the Parkway Cumulative Study Area

Project	APN	Project Description	Application Status
A09-0005, SPR06-0019	054-402-18, 329-301-15 and -20; 329-310-10, -11, and -12.	Stonehenge Springs Subdivision. General Plan Amendment/Site Plan Review, number of lots unknown.	Processing
PD08-0008, TM08-1469, Z08-0008	329-290-01 and -03; 329-301-19	Oak Highlands. Development plan/Tentative parcel map/Rezone for 220 single-family lots and 48 condominiums.	Processing
PA06-0077	329-181-13, -14, and -15;	Pre-application meeting for proposed zone change and 4 lot subdivision map.	Completed
TM09-1490, PD09-0004, Z09-0006, A09-0003	051-550-40, -47, -48, and -51	Piedmont Oak Estates. Tentative Parcel Map/Planned Development/Zone Change/General Plan Amendment for 295 lots.	Processing
PD09-0007, Z09-0008	331-400-02	Diamond Dorado Subdivision. Tentative Parcel Map/Rezone for 77 standard lots and 32 cluster lots, for a total of 109 lots.	Processing
TM07-1448, PD07-0020, Z07-0033	331-420-12	McCann Subdivision. Tentative Parcel Map/Planned Development/Rezone for 72 residential lots.	Processing
Traffic study only - no formal application submitted at this time	331-221-27, -30	Piedmont Senior Housing. 100 assisted living rooms in one building, 85 apartments.	TIS processing
PA09-0001	329-201-65	Diamond View Subdivision. Pre-application for 26 residential lots.	Completed
PA09-0014	331-390-07, -09, and -11; 331-400-05, and -07, -09; 331-430-15, and -11	Lake Oaks Diamond Dorado. Pre-application for 270 residential lots.	Completed
P07-0038	327-200-01	Waltner Parcel Map to create two parcels.	Approved
S05-0003	054-431-21	Diamond Villas Senior Housing. Special Use Permit application to permit the construction of 100-unit senior adult residential care facility	Approved
Notes: All projects were identified by the El Dorado County Planning and El Dorado County DOT as having the potential to affect the cumulative impacts of the Parkway.			

Commercial Projects

There are 11 commercial/industrial/retail projects within the cumulative study area. Combined, these commercial/industrial/office projects represent over 850,000 square feet of development within El Dorado County. Table 6-2 identifies the commercial projects in the Cumulative Study area.

Table 6-2: Commercial Projects in the Parkway Cumulative Study Area

Project	APN	Project Description	Application Status
A07-0018, P08-0017, PD07-0034, Z07-0054	051-250-12, -46, -51, and -54	Diamond Dorado Retail Center. General Plan Amendment/Planned Development/Tentative parcel/Rezone for the development of up to 290,000 square feet of retail space.	Processing
Z06-0020, P05-0004	329-280-15 and -16	Harrington Business Park. Parcel map and zone change request to create 42 industrial/commercial lots.	Processing
A09-0006, Z09-0012	327-140-07	Pierce Trust. General Plan Amendment and Rezone from medium density residential to commercial.	Processing
PD09-0001	327-240-23	Planned Development for 2,248-square-foot Panda Express Restaurant.	Approved
DR09-0002	097-020-46	Diamond Springs Center. One 10,000-square-foot, one-story retail building and one 20,000-square-foot two-story office building.	Processing
DR00-0028	051-461-04	Fusano Commercial Buildings. Two commercial buildings totaling 9,590 square feet.	Approved
DR05-0005	054-342-18 and -19	Diamond Springs Retail. Twelve-pump gas station with 8,600 square feet of retail space.	Approved
PA07-0094	054-371-19	Diamond Springs Plaza. Pre-application meeting for proposed 22,500-square-foot retail center.	Completed
PA08-0001	327-213-03	Missouri Flat Automotive. Pre-application meeting for proposed automotive service center with eight service bays and 1,250 square feet of retail space.	Completed
PD97-0011-R, P07-0047	325-220-49; 327-110-02, -04, and -06, 327-120-19, -20, -21, and -22; 327-130-01, -02, and 03	El Dorado Crossing. Planned Development revision and Tentative Parcel Map to create 15 parcels that include an approximately 450,000-square-foot regional shopping center and hotel.	Processing
PD08-0001	327-213-10, -11, and -12	Walgreens. Planned Development to create a 36,237-square-foot retail center.	Completed
Notes: All projects were identified by the El Dorado County Planning and El Dorado County DOT, as having the potential to affect the cumulative impacts of the Parkway.			

General Plan Buildout and Growth Policies

The El Dorado County General Plan underwent a comprehensive update that began in 1990 and was completed in 2004. The El Dorado County 2004 General Plan projected that the current County population of approximately 183,000, as determined by the State Department of Finance, would grow by 30,000 households to a population of approximately 242,000 over the next 20 years.

According to the 2004 General Plan, the projected growth for the County can be accommodated over the 20-year planning time horizon. However, the General Plan notes that the actual number of years to reach a particular population projection is not critical to the validity of the General Plan. Many other factors, such as water availability, creation of local jobs and economic conditions will determine the period of time over which the County's General Plan remains valid (El Dorado County 2004).

Past growth in the County resulted in compact development patterns, where residents lived, worked, and shopped. Present growth has included urban-like development in the foothills, that has introduced a more rural lifestyle throughout the County and has slowly transformed rural areas into areas characterized with dispersed large-lot, low-density residential uses. During the General Plan public participation process, residents generally agreed that compatible infill development and a growth in existing communities is a mechanism to preserve the County's overall rural character and maintain a sense of place within communities. In addition, it was recognized that promoting business and industry and having well-balanced communities will afford residents the opportunity to work, shop, and recreate close to where they live (El Dorado County 2004).

The 2004 General Plan Housing Element addressed regional housing needs for the period of 2003-2008, as allocated by the Sacramento Area Council of Governments (SACOG). El Dorado County adopted a new General Plan Housing Element on July 1, 2008. The 2008 Housing Element addresses the housing needs of residents of unincorporated areas of the County through June 2013. According to the Housing Element, a population estimate was generated by Economic & Planning Systems, Inc. in 2002. The estimate indicated, based on market research, historical growth patterns, and SACOG projections that the West Slope of El Dorado County (excluding the north mountain range and Lake Tahoe areas of the County) could be home to an additional 78,000 persons by 2025. The Housing Element states that in 2000, the average countywide household size was 2.63 persons per occupied unit and 2.73 persons per occupied unit in renter-occupied units. The persons per household unit was determined by dividing the total number of occupied housing units by the population. Table 6-3 summarizes the housing and population growth as determined by the State Department of Finance and the County's 2008 Housing Element.

Table 6-3: West Slope of El Dorado County Population Projections to Year 2025

Year	Average Annual Growth Rate	Housing ²	Population
2000	2.1% ¹	45,185	122,000
2005	3.0%	53,333	144,000
2010	1.2%	56,667	153,000
2020	1.7%	68,519	185,000
2025	1.5%	74,074	200,000

Notes:
¹ Average annual growth rate in 2000 based on a 1990 population of 96,000 from the 2000 U.S. Census Bureau data.
² Housing calculation determined by the 2008 Housing Element unincorporated area average household size of 2.73 persons per occupied unit.
Sources: El Dorado County, 2008; State of California, Department of Finance, 2007.

Discussion of Cumulative Impact by Topic Area

For each environmental issue area, this section summarizes the relevant MC&FP EIR cumulative impact conclusions and discusses whether the project impacts, as described in Section 4.0 of this EIR, are cumulatively considerable based on their contribution to cumulative impacts. This discussion encompasses the proposed project and associated improvements including the Diamond Springs Parkway, SR-49 Improvements, EID Intertie Improvements, and the replacement or undergrounding of existing overhead utility lines near Missouri Flat Road and SR-49 (refer to Table 2-1, Definitions, in Section 2, Introduction).

Aesthetics

MC&FP EIR

The MC&FP concluded that roadway improvements in the MC&FP area would contribute to significant and unavoidable cumulative impacts with respect to short-term visual character (during construction), long-term visual character, and nighttime lighting.

Diamond Springs Parkway Project

As discussed in Section 4.2, Aesthetics, Light, and Glare, the proposed project would not result in any potentially significant impacts to scenic vistas, scenic resources, existing visual character, or light and glare. No mitigation was required. However, because the MC&FP concluded that cumulative impacts with respect to short-term visual character (during construction), long term visual character, and nighttime lighting, each is discussed below.

While the proposed project would result in individually less than significant impacts to visual character (both short- and long-term), it would contribute to cumulatively considerable impacts to visual character when combined with the construction and operation of other projects in the Diamond Springs area through the development of previously undeveloped lands. Accordingly, the Diamond

Springs Parkway Project would contribute to cumulatively considerable impacts with respect to changes in visual character.

The proposed project would result in individually less than significant impacts to light and glare, but may contribute to cumulatively considerable impacts when combined with other projects involving additional lighting in the Diamond Springs area. However, the project would not be introducing light into a previously unlit area and would not include any street lighting beyond that which is required for safety purposes. Furthermore, projects examined in the MC&FP EIR included retail projects that generally include much higher levels of lighting than the proposed roadway and roadway improvements. Therefore, the proposed project's contribution to cumulative light and glare impacts would be less than significant.

Air Quality

MC&FP EIR

The MC&FP concluded that roadway improvements in the MC&FP area would contribute to significant and unavoidable cumulative impacts with respect to construction emissions of ozone precursors and fugitive dust.

Diamond Springs Parkway Project

As discussed in Section 4.3, Air Quality the proposed project would not generate new operational emissions in the form of new traffic and would therefore have a less than significant impact in this respect. However, the proposed project would result in short-term potentially significant impacts related to construction emissions and fugitive dust that would be reduced to less than significant after mitigation. The proposed project would also result in potentially significant impacts to climate change that would be reduced to less than significant after mitigation. Each is discussed below in relation to cumulative impacts.

The proposed project would result in short-term potentially significant construction emissions and fugitive dust. Mitigation is proposed that would require the project to implement various construction air pollution control measures set forth by the AQMD. Fugitive dust impacts are reduced to a less than significant level with incorporation of mitigation measures, including the application of water or dust palliatives during construction and limitations on the operation and maintenance of construction equipment. Other projects occurring in the air basin may result in impacts related to construction emissions and fugitive dust. These projects would be required to mitigate for impacts in accordance with state, federal and local regulations. The MC&FP EIR concluded that the MC&FP roadway projects would result in cumulatively significant impacts related to ozone precursors (a result of construction emissions) and fugitive dust. While the proposed project's impacts are considered individually less than significant, they would contribute to cumulative impacts when considered in conjunction with other planned or approved projects in the air basin. However, due to the

implementation of mitigation, the proposed project's contribution to these cumulative impacts would be less than significant.

The proposed project would have the potential to adversely affect climate change as a result of its contribution to greenhouse gas emissions. Mitigation is proposed that would require the project to reduce its greenhouse gas emissions, thereby reducing impacts to a less than significant level. Other projects occurring in the cumulative study area may result in impacts to climate change. These projects would also be required to mitigate for impacts in accordance with state, federal and local regulations. The MC&FP EIR did not evaluate climate change impacts resulting from construction of roadways; therefore, no conclusions were drawn regarding contributions to cumulative impacts. While the proposed project's impacts are individually less than significant, they would contribute to cumulative impacts when considered in conjunction with other planned or approved projects in the air basin. However, due to the implementation of mitigation, the proposed project's contribution to these cumulative impacts would be less than significant.

Biological Resources

MC&FP EIR

The MC&FP EIR concluded that roadway improvements in the MC&FP area would contribute to significant and unavoidable cumulative impacts to California red-legged frog and valley elderberry longhorn beetle.

Diamond Springs Parkway Project

As discussed in Section 4.4, Biological Resources, the proposed project would result in potentially significant impacts to special-status species, riparian habitat, federally protected wetlands, and oak woodlands that would be reduced to less than significant after mitigation. Each is discussed below in relation to cumulative impacts.

The proposed project would have the potential to adversely affect special status species (California red-legged frog, nesting birds, and roosting bats). Protocol level surveys have been conducted near the project site and did not indicate the presence of California red-legged frog. It has been determined that no impact to the elderberry longhorn beetle would occur from the proposed project. Mitigation is proposed that would reduce potential impacts on special-status species to a level of less than significant. Other projects occurring in the cumulative study area may result in impacts to special-status species. These projects would also be required to mitigate for impacts in accordance with state, federal and local regulations. The MC&FP EIR concluded that the MC&FP roadway projects would result in cumulatively significant impacts to special status species. However, with additional surveys and proposed mitigation measures, it is determined that the proposed project, in conjunction with other projects, would not contribute to cumulatively considerable impacts to special-status species.

The proposed project may result in the temporary removal of up to 2.22 acres of valley foothill riparian habitat and direct impacts to 0.28 acres of federally jurisdictional wetland features. Mitigation from the MC&FP EIR would require the replacement of riparian plants removed during project construction, and would improve the marginal habitat associated with the onsite drainage (ED3) by providing a 50-foot setback where feasible. Mitigation proposed in this Draft EIR would require drainage setbacks, water quality protection and a USACE Section 404 permit implementing no-net-loss of wetlands. Implementation of the mitigation measures would ensure impacts would be reduced to less than significant and no net loss would occur. Other projects occurring in the cumulative study area may result in impacts to riparian habitat or wetlands. These projects would also be required to comply with all state, federal, and local regulations regarding riparian habitat and wetlands, and, if necessary, include mitigation measures in order to reduce or eliminate impacts and ensure no net loss. Therefore, since no net loss would occur, the proposed project, in conjunction with other planned or approved projects, would not contribute to cumulatively considerable impacts to riparian habitat or wetland impacts.

The proposed project may result in the removal of up to 13.21 acres of oak woodland. Mitigation proposed in this Draft EIR would require compliance with the Oak Woodland Management Plan including on-site replanting and replacement or provision of a conservation fund in-lieu fee. Implementation of the mitigation measures would ensure impacts to oak woodlands would be reduced to less than significant. Other projects occurring in the cumulative project area may result in impacts to oak woodlands. These projects would also be required to comply with El Dorado County's Oak Woodland Management Plan, and, if necessary, include mitigation measures to reduce or eliminate impacts to oak woodland canopy. Therefore, the proposed project, in conjunction with other planned or approved projects, would not contribute to cumulatively considerable impacts to oak woodlands.

Cultural Resources

MC&FP EIR

The MC&FP EIR concluded that roadway improvements in the MC&FP area would contribute to significant and unavoidable cumulative impacts to known or previously undiscovered important cultural resources.

Diamond Springs Parkway Project

As discussed in Section 4.5, Cultural Resources, the proposed project would result in potentially significant impacts to previously undiscovered cultural resources including historical, archeological, and paleontological resources that would be reduced to less than significant after mitigation.

Surveys of the project site have indicated that no known cultural resources would be impacted by the proposed project. Nonetheless, the proposed project would have the potential to adversely affect undiscovered cultural resources. Mitigation is proposed that would reduce potential impacts to a less than significant level. Other projects occurring in the cumulative study area may result in impacts to

undiscovered cultural resources. These projects would also be required to mitigate for impacts in accordance with state, federal and local regulations to ensure preservation of cultural resources. The MC&FP EIR concluded that the MC&FP roadway projects would result in cumulatively significant impacts to both known or previously undiscovered important cultural resources. However, due to the on-site surveys performed as a part of the proposed project (Appendix F) and future implementation of mitigation proposed in this Draft EIR, it is determined that the proposed project, in conjunction with other projects, would not contribute to cumulatively considerable impacts to cultural resources.

Geology and Soils

MC&FP EIR

The MC&FP EIR indicated that roadway improvements may result in significant or potentially significant impacts related to ground shaking and slope instability/erosion, but that these would be site-specific and therefore would not affect areas outside of the MC&FP Area. Therefore, the MC&FP EIR concluded that roadway improvements in the MC&FP area would not contribute to cumulatively significant impacts pertaining to geology and soils.

Diamond Springs Parkway Project

As discussed in Section 4.6, Geology and Soils, the proposed project would result in potentially significant impacts related to the presence of undocumented fill or tailings, and expansive soils that would be reduced to less than significant after mitigation. The preparation of a final geotechnical report would address the location and depth of fill, tailings and expansive soils. Mitigation is proposed requiring the incorporation of soil stabilizing procedures provided in the report, thereby reducing impacts to less than significant level. The potential for significant impacts to occur as a result of undocumented fill and tailings and expansive soils is a site specific constraint that can be mitigated on a project-by-project basis. Nonetheless, other projects occurring in the cumulative study area may also be adversely affected by undocumented fill, tailings and expansive soils. These projects would also be required to mitigate for impacts in accordance with state, federal, and local regulations. Accordingly, it is determined that the proposed project, in conjunction with other projects, would not contribute to cumulatively considerable impacts to geology and soils.

Hazards and Hazardous Materials

MC&FP EIR

The MC&FP EIR indicated that potential significant impacts related to the exposure of workers to contaminated soils would be a site-specific and therefore would not affect the potential for exposure of workers outside the MC&FP area to hazardous materials. Therefore, the MC&FP EIR concluded that roadway improvements in the MC&FP area would not contribute to cumulatively significant impacts pertaining to related to hazards and hazardous materials.

Diamond Springs Parkway Project

As discussed in Section 4.7, Hazards and Hazardous Materials, the proposed project would result in potentially significant impacts from the release of or exposure to hazardous materials, which would be reduced to less than significant after mitigation.

The proposed project would potentially expose workers to hazardous materials (including contaminated soil and groundwater, lead, asbestos, agricultural chemicals, and hydrocarbons) during construction activities that involve earthwork or demolition. Furthermore, the proposed project would place vehicle traffic within close proximity of an existing large-volume propane tank. Mitigation is proposed that would require on-site monitoring, risk assessment, soil or material sampling, site remediation, and proper demolition and disposal thereby reducing potential impacts to a less than significant level. The potential for significant impacts to occur as a result of onsite hazards and hazardous materials is a site specific constraint that can be mitigated on a project-by-project basis. Nonetheless, other projects occurring in the cumulative study area may also be adversely affected by hazards and hazardous materials. These projects would also be required to mitigate for impacts in accordance with state, federal, and local regulations. Accordingly, it is determined that the proposed project, in conjunction with other projects, would not contribute to cumulatively considerable impacts to hazards and hazardous materials.

Hydrology and Water Quality

MC&FP EIR

The MC&FP EIR indicated that roadway improvements in the MC&FP area may contribute to significant and unavoidable cumulative impacts related to increased runoff volumes and surface water quality impacts, but that that implementation of no-net-increase in peak runoff volumes and BMPs would reduce the contribution to these cumulative impacts to a less than significant level.

Diamond Springs Parkway Project

As discussed in Section 4.8, Hydrology and Water Quality, the proposed project would not result in any potentially significant impacts to hydrology or water quality.

The proposed project would generally maintain the existing drainage patterns but would result in an increased peak runoff volume between 2.3 and 2.7 cfs during a 100-year storm event. However, as determined by the Preliminary Drainage Report (Appendix I), existing drainage infrastructure is sufficient to accommodate this increase. Stormwater would eventually flow to Weber Creek, which has a 100-year storm flow level of approximately 7,381 cfs. Therefore, the additional 2.3 to 2.7 cfs would be a minimal increase. Other project occurring within the same watershed may result in increased peak runoff volumes. These projects would be required to minimize or prevent increases in runoff volumes in accordance with applicable regulations. The MC&FP concluded that implementation of no-net-increase in peak runoff volumes would reduce MC&FP roadway projects contribution to cumulative impacts to less than significant. However, the proposed project would

result in a slight increase and, while the contribution to runoff volumes is individually less than significant, it would contribute cumulatively to increases in peak-flows downstream of the project when combined with potentially increased runoff volumes of other projects in the watershed. Accordingly, the Diamond Springs Parkway project would contribute to cumulatively considerable impacts with respect to peak runoff volumes.

The proposed project would implement a SWPPP and associated BMPs to ensure surface water quality impacts would be less than significant. Construction activities would adhere to County policies and regulations, specifically the County's Grading Ordinance and Storm Water Management Plan for Western El Dorado County. Other projects occurring in the same watershed may result in surface water quality impacts, but would be required to adhere to the Grading Ordinance and Stormwater Management Plan, and other applicable federal, state, and local regulations. The MC&FP EIR concluded that mitigation would reduce MC&FP roadway project contributions to cumulative impacts to a less than significant level. Since the proposed project would implement mitigation, it would not contribute to cumulative considerable impacts to surface water quality.

Land Use, Population and Housing

MC&FP EIR

The MC&FP EIR concluded that roadway improvements in the MC&FP area would contribute to significant and unavoidable cumulative impacts related to changes in land use and land use compatibility. The MC&FP EIR also concluded that roadway improvements would contribute to cumulative impacts to displacement of residents, but that implementation of mitigation would reduce the contribution to this cumulative impact to a less than significant level.

Diamond Springs Parkway Project

As discussed in Section 4.9, Land Use and Planning, the proposed project would not result in any potentially significant impacts to land use.

The proposed project would convert vacant land and previously developed land to a roadway in accordance with the General Plan as well as the long-range transportation plans of the County and the State. Other projects in the MC&FP area would also convert vacant lands to roadways, commercial, industrial, and residential land uses in accordance with the General Plan. The MC&FP EIR concluded that the MC&FP roadway projects would result in cumulatively significant impacts to changes in land use. While the proposed project is individually less than significant with respect to changes in land use, it would contribute to overall changes and therefore would contribute to cumulatively considerable impacts.

The proposed project is designed to be compatible with existing land uses and zoning designations to the maximum extent feasible. Other projects in the cumulative study area may result in impacts to land use compatibly. These projects would be required to mitigation for impacts in accordance with state, federal and local regulations. The MC&FP EIR concluded that the MC&FP roadway projects

would contribute to cumulative impacts to land use compatibility because land use compatibility impacts may occur with other planned development in unincorporated El Dorado County. However, because the proposed project is designed to be compatible with existing land uses and zoning designations its contribution to cumulative impacts in this respect would be less than significant.

The proposed project would not result in the displacement of residences but may require the relocation of businesses on several parcels. Other roadway projects occurring in the cumulative study area may result in the displacement of residence and/or businesses. These projects would be required to mitigate for impacts in accordance with state, federal and local regulations. The MC&FP EIR concluded that the MC&FP roadway projects would result in less than significant contribution to cumulative impacts in regards to displacement of residents. Because the proposed project would abide by all federal and state law regarding relocation of businesses, it is determined that the proposed project, in conjunction with other projects, would not result in cumulatively considerable impacts to displacement of residents.

Noise

MC&FP EIR

The MC&FP EIR concluded that roadway improvements in the MC&FP area would contribute to cumulative impacts with regards to construction noise, stationary noise, and traffic noise, but that the contributions would be mitigated to a less than significant level.

Diamond Springs Parkway Project

As discussed in Section 4.10, Noise, the proposed project would result in potentially significant impacts with regards to exceeding local noise standards, permanent increase in ambient noise levels, and temporary construction noise. Mitigation has been proposed that would reduce each of these potentially significant impacts to less than significant. Other projects occurring in the cumulative study area may result in noise impacts. These projects would also be required to mitigate for impacts in accordance with applicable state, federal and local regulations. The MC&FP EIR concluded that the MC&FP roadway projects would contribute to cumulative noise impacts but that the contributions would be mitigated to less than significant levels. While the proposed project would contribute to cumulative impacts to noise, the implementation of mitigation would reduce its contribution to cumulative impacts to less than significant.

Public Services

MC&FP EIR

The MC&FP EIR concluded that roadway improvements in the MC&FP area would not contribute to significant cumulative impacts related to law enforcement response times, fire service response times, and fire flow requirements.

Diamond Springs Parkway Project

As discussed in Section 4.11, Public Services, the project would not result in significant impacts to public services. The project would result in a beneficial impact on the provision of police, fire, and emergency services by relieving traffic congestion and providing alternative routes, thereby reducing service response time when compared to future conditions without the project. Other projects in the MC&FP area may result in cumulatively significant impacts to public services. These projects would be required to mitigate for impacts in accordance with state, federal and local regulations. Because the proposed project would not result in significant impacts to public services and would actually benefit these services, the proposed project would not contribute to cumulatively considerable impacts to public services.

Transportation and Traffic

MC&FP EIR

The purpose of roadway improvements included in the MC&FP EIR was to increase level of services (LOS) in the MC&FP area. Therefore, roadway improvements included in the MC&FP EIR would not contribute to or result in cumulative impacts.

Diamond Springs Parkway Project

Section 4.12, Traffic and Transportation, of this Draft EIR analyzes the cumulative impacts related to traffic and transportation. As discussed in Section 4.12, under Impact 4.12-3, Cumulative (2030) Plus Project Intersection and Roadway Operations, cumulative impacts would be less than significant because several improvements included in Phase 1 and Phase 2 of the proposed project would increase capacity of the roadways, including the widening of the Parkway to a Divided, Four Lane Arterial. In general, the project would result in a beneficial cumulative impact in the project area by relieving traffic congestion and providing alternative routes, thereby reducing traffic and increasing LOS grades when compared to future conditions without the project. Following construction, the project would provide improved bicycle and pedestrian access and circulation through connectivity to the El Dorado Multi-Use Trail. Other planned development in unincorporated El Dorado County that would generate vehicle trips may contribute to unacceptable intersection and roadway operations, or queuing. All projects would be required to mitigate for their fair share of impacts, and the traffic modeling conducted for this project is based on County-wide projections. Because the proposed project would not result in significant impacts to transportation and traffic and would actually provide beneficial impacts, the proposed project would not contribute to cumulatively considerable impacts in this respect.

Utilities and Service Systems

MC&FP EIR

The MC&FP EIR concluded that roadway improvements in the MC&FP area would contribute to significant cumulative impacts to wastewater infrastructure and treatment, but that mitigation would reduce the contribution to this cumulative impact to a less than significant level.

Diamond Springs Parkway Project

As discussed in Section 4.13, Utilities and Services, the proposed project would result in less than significant impacts from the temporary disruption in existing utilities during pole replacement and EID waterline replacement. Other projects in the cumulative study area may result in impacts to utilities and services systems, including the temporary interruption of services. These projects would be required to mitigate for impacts in accordance with state, federal and local regulations and would not be likely to create temporary interruptions during the proposed projects temporary interruptions. Accordingly, it is determined that the proposed project would not contribute to cumulative impacts and, in conjunction with other projects, would not result in cumulatively considerable impacts to utilities and service systems.

SECTION 7: LIST OF PREPARERS

7.1 - EIR Preparation Personnel

7.1.1 - Lead Agency

El Dorado County Department of Transportation

Director.....James Ware
Deputy Director.....Matthew Smeltzer
Senior Civil Engineer.....Jennifer Maxwell
Supervising Civil Engineer.....Kris Payne
Principal Planner.....Janet Postelwait

7.1.2 - Consultant Team

Michael Brandman Associates

Project Director.....Jason Brandman
Project Manager, Environmental and Transportation Planner.....Trevor Macenski, R.E.A.
Assistant Project Manager, Environmental Analyst and Cartographer.....Janna Waligorski
Regulatory Specialist.....Paul Mead
Regulatory Specialist.....Ken Lord
Ecologist/Botanist/ISA Certified Arborist.....Deborah Stout (Formerly with MBA)
Principal Archaeological Investigator.....Carrie D. Wills, RPA
Air Quality Analyst.....Elena Nuño
Senior Editor / Document Processor.....Sandra L. Tomlin
Reprographics.....José Morelos
Cole Forbes

7.1.3 - Subconsultant Team

Bollard Acoustical Consultants, Inc.

Vice President.....Jason Mirise

Youngdahl Consulting Group, Inc

Senior Engineering Geologist.....David Sederquist, C.E.G.
Senior Environmental Scientist.....Laurie B. Israel, R.E.A.
Senior Engineer.....Brandon K. Shimizu, P.E., G.E.
Associate Engineer.....Martha A. McDonnel, P.E.

CTA Engineering

President.....Dave Crosariol
Project Engineer.....Aaron Brusatori
Civil Designer.....Kevin Wipf

List of Preparers

Kimley-Horn and Associates, Inc

Traffic Engineer Matthew Weir, Civil Engineer

SECTION 8: PERSONS AND ORGANIZATIONS CONSULTED

8.1 - Public Agencies

8.1.1 - County of El Dorado

El Dorado Irrigation District

Environmental Division Manager Dan Corcoran
Water/Hydro Engineering Manager Cindy Megerdigian, PE
Assistant Engineer Andy Urteaga

Diamond Springs-El Dorado Fire Protection District

Fire Chief..... Todd Cunningham
Assistant Fire Chief – Fire Marshal..... Erik Peterson

Sheriff - Coroner

Undersheriff..... Fred Kollar
Staff Member..... Laura Lyons

8.1.2 - State of California

Native American Heritage Commission

Environmental Specialist III..... Debbie Pilas-Treadway

North Central Information Center

Researcher Ellen Bowden

8.1.3 - United States

U.S. Fish and Wildlife Service, Sacramento Office

Deputy Assistant Field Supervisor Chris Nagano
Biologist Jeremiah Karuzas

U.S. Army Corps of Engineers

Chief, California North Branch Nancy A. Haley

8.2 - Private Parties and Organizations

Pacific Gas & Electric

Land Agent, Technical and Land Services Paul Fluckey
Project Manager, Technical and Land Services Jenny Perez
Project Manager, Service Planning Department..... Brian Ritchie

Persons and Organizations Consulted

Remy, Thomas, Moose and Manley, LLP.

Attorney James G. Moose

Consulting Paleontologist

Paleontologist..... Kenneth L. Finger, Ph.D.

SECTION 9: REFERENCES

- Beardsley, R.K. 1948. "Cultural Sequences in Central California Archaeology." American Antiquity 14:1-28.
- Beardsley, R.K. 1954. Temporal and Areal Relationships in Central California Archaeology. Berkeley: University of California Archaeological Survey Reports 25.
- Beck, W. and Y.D. Haase. 1974. Historical Atlas of California. University of Oklahoma Press. Norman, Oklahoma.
- Bennyhoff, J. 1950. Californian Fish Spears and Harpoons. University of California Anthropological Records 9(4):295-338.
- Board of Supervisors, El Dorado County. 1997. Agenda. June 17.
- Board of Supervisors, El Dorado County. 2008. Agenda. April 29.
- Bollard Acoustical Consultants. December 2009. Environmental Noise Assessment, Diamond Springs Parkway EIR. December 16 (included in this EIR as Appendix K).
- California Air Pollution Control Officers Association. 2008. CEQA & Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act. Website <http://www.climatechange.ca.gov/publications/others/CAPCOA-1000-2008-010.PDF>. Accessed September 8, 2008.
- California Air Resources Board. 2000. Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles. October.
- California Air Resources Board. 2003. Revised Staff Report: Initial Statement of Reasons for Proposed Rulemaking Airborne Toxic Control Measure for In-use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator sets, and Facilities Where TRUs Operate, Section 5E. Website: <http://www.arb.ca.gov/regact/trude03/isor.pdf>. Accessed October 21, 2008.
- California Air Resources Board. 2005. Review of the California Ambient Air Quality Standards for Ozone – Staff Report. March 11.
- California Air Resources Board. 2006a. Area Designation Maps/State and National. 2004 State Area Designations. Website: <http://www.arb.ca.gov/desig/adm/adm.htm> updated September 29, 2006.
- California Air Resources Board. 2006b. The California Almanac of Emissions and Air Quality. 2006 Edition. Website <http://www.arb.ca.gov/aqd/almanac/almanac.htm>
- California Air Resources Board. 2006c. EMFAC2007 Mobile Source Emission Model. Website: http://www.arb.ca.gov/msei/onroad/latest_version.htm

References

- California Air Resources Board. 2007a. Proposed Early Actions to Mitigate Climate Change in California. April 20, 2007.
- California Air Resources Board. 2007b. California Greenhouse Gas Inventory (millions of metric tons of CO₂ equivalent)—By IPCC Category. August 22, 2007.
- California Air Resources Board. 2008a. URBEMIS Model Version 9.2.4. Website: <http://www.urbemis.com/>
- California Air Resources Board. 2008b. Aerometric Data Analysis and management System (ADAM) Air Quality Data/Statistics/Top 4 Summary. Website: <http://www.arb.ca.gov/adam/welcom.html>. Accessed June 16, 2008.
- California Attorney General's Office. January 7, 2008. The California Environmental Quality Act Mitigation for Global Warming Impacts.
- California Code of Regulations, Title 14, Section 15000, et seq. 2008 CEQA Guidelines.
- California Code of Regulations, Title 17, Section 93106. 2005. Asbestos Airborne Toxic Control Measure (ATCM) for Surfacing Applications. Website: <http://www.arb.ca.gov/toxics/atcm/asbeatcm.htm>. Accessed October 21, 2008.
- California Department of Conservation, Division of Mines and Geology. 2002. Areas More Likely to Contain Natural Occurrences of Asbestos in Western El Dorado County, California.
- California Department of Fish and Game (CDFG). 1988a. California's Wildlife, Volume I: Amphibians and Reptiles. State of California Resources Agency. Sacramento, California.
- California Department of Fish and Game (CDFG). 1988b. California's Wildlife, Volume II: Birds. State of California Resources Agency. Sacramento, California.
- California Department of Fish and Game (CDFG). 1988c. California's Wildlife, Volume III: Mammals. State of California Resources Agency. Sacramento, California.
- California Department of Fish and Game (CDFG). 2008a. Special Animals List. The Resources Agency of California, Department of Fish and Game, Natural Heritage Division, Natural Diversity Data Base. Sacramento, California.
- California Department of Fish and Game (CDFG). 2008b. Special Vascular Plants, Bryophytes, and Lichens List. The Resources Agency of California, Department of Fish and Game, Natural Heritage Division, Natural Diversity Data Base. Sacramento, California.
- California Department of Fish and Game (CDFG). California Interagency Wildlife Task Group. 2005. CWHR Version 8.1 personal computer program. Sacramento, California.
- California Department of Health and Human Services, Centers for Disease Control & Prevention, the National Institute for Occupational Safety and Health. Preventing Death from Excessive Exposure to Chlorofluorocarbon 113 (CFC-113). NIOSH ALERT: May 1989. DHHS (NIOSH) Publication No. 89-109. Website: <http://www.cdc.gov/niosh/89-109.html>. Accessed April 8, 2008.

- California Department of Health and Human Services, Centers for Disease Control & Prevention, the National Institute for Occupational Safety and Health. Carbon Dioxide. September 2005. Website: <http://www.cdc.gov/niosh/npg/npgd0103.html>, Accessed April 8, 2008.
- California Department of Mines and Geology. 2000. Areas More Likely to Contain Natural Occurrences of Asbestos in Western El Dorado County.
- California Department of Transportation. 1999. Project Development Procedures Manual, Appendix DD, Hazardous Waste, Preparation Guidelines for Initial Site Assessment (ISA) Checklist for Hazardous Waste. July.
- California Department of Transportation. 2000. Transportation Concept Report (TCR) for SR-49.
- California Department of Transportation. 2004. American Association of State Highway and Transportation Officials policy on Geometric Design of Highway Streets.
- California Department of Transportation. 2008. Caltrans's Highway Design Manual, Sixth Edition.
- California Department of Water Resources (DWR). 1989. Mountain Counties Water Management Studies-El Dorado County Draft Report. Central District. Sacramento, CA.
- California Department of Water Resources (DWR). 1990. Hard Rock Wells in the Sierra Nevada. San Joaquin District. Fresno, CA.
- California Energy Commission. 2006. Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004. Staff Final Report. CEC-600-2006-013-SF. December.
- California Environmental Protection Agency, Climate Action Team. 2006. Climate Action Team Report to Governor Schwarzenegger and the California Legislature. Website: www.climatechange.ca.gov/climate_action_team/reports/index.html. March. Accessed April 8, 2008.
- California Fire Alliance. 2004. Website: <http://wildfire.cr.usgs.gov/fireplanning>. Accessed February 2, 2008.
- California Native Plant Society (CNPS). 2008. Inventory of Rare and Endangered Plants (online edition, v7-08c). California Native Plant Society. Sacramento, California. Website: <http://www.cnps.org/inventory>. Accessed October 21, 2008.
- California Natural Diversity Data Base (CNDDB). 2009. Biogeographic Data Branch. Department of Fish and Game. Version 3.1.0. November.
- California Public Resources Code, Section 21000, et seq.
- California State Scenic Highway Mapping System. 2008. Website: http://www.dot.ca.gov/hq/LandArch/scenic_highways/. Accessed January 21, 2008.
- California State Water Resources Control Board, 2008. Website: http://www.waterboards.ca.gov/water_issues/programs/tmdl/. Accessed October 16, 2008.

References

- Chartkoff, J.L. and K.K. Chartkoff. 1984. *The Archaeology of California*. Menlo Park. Stanford University Press.
- City-Data, 2008. Website <http://www.city-data.com/city/Diamond-Springs-California.html>. Accessed October 16, 2008.
- Clean Air, Cool Planet. A Consumer's Guide to Retail Carbon Offset Providers. 2006. Website: www.cleanaircoolplanet.org/ConsumersGuidetoCarbonOffsets.pdf. Accessed April 8, 2008.
- Combs, Rob. Assistant Chief/Fire Marshal, Diamond Springs / El Dorado Fire Protection District Fire Prevention Division. Personal communication: written response letter. March 29, 2010 (included in this EIR as Appendix L).
- Cook, S.F. 1976. *The Population of the California Indians 1769-1970*. University of California Press. Berkeley, California.
- Cooper Thorne Associates (CTA). 2008. Plan Lines for the Diamond Spring Parkway.
- Cooper Thorne Associates (CTA). 2009. Preliminary Drainage Report for Diamond Springs Parkway. May 2009 (included in this EIR as Appendix I).
- Cunningham, Todd. Fire Chief, Diamond Springs-El Dorado Fire Protection District. Personal communication: written response letter. March 24, 2008 (included in this EIR as Appendix L).
- Dickel, D.N., P. D. Schulz, and H.M. McHenry. 1984. "Central California: Prehistoric Subsistence Changes and Health." In *Paleopathology at the Origins of Agriculture*, edited by Mark Nathan Cohen and George J. Armelagos, pp. 439-462. Academic Press, Inc., Orlando, FL.
- Economic & Planning Systems, Inc. (EPS) 1998. April 1998. Missouri Flat Master Circulation and Funding Plan, Final Report. Adopted December 15, 1998.
- Economic & Planning Systems, Inc. (EPS) 2000. Economic & Planning Systems, Inc. Final Report Update: Missouri Flat Master Circulation and Funding Plan. November 20, 2000.
- EDAW. 1998a. Missouri Flat Area Master Circulation and Financial Plan (MC&FP) and Sundance Plaza and El Dorado Villages Shopping Center Projects Draft Environmental Impact Report.
- EDAW. 2003. El Dorado County General Plan Draft Environmental Impact Report. State Clearinghouse No. 2001082030.
- El Dorado County Air Quality Management District. 1994. Sacramento Regional Clean Air Plan.
- El Dorado County Air Quality Management District. 2002. Guide to Air Quality Assessment - Determining Significance of Air Quality Impacts Under the California Environmental Quality Act. First Edition. February.
- El Dorado County Air Quality Management District. 2008. Asbestos Parcel Lookup El Dorado County AQMD. Website: <http://www.co.el-dorado.ca.us/emd/apcd/gpchecklist.asp>.

- El Dorado County Board of Supervisors. 1997. Agenda. June 17.
- El Dorado County Board of Supervisors. 2008. Agenda. April 29.
- El Dorado County Board of Supervisors. 2008. Board of Supervisors Meeting Minutes. Legislative File Number 08-0628. April 29.
- El Dorado County Board of Supervisors. 2008. Master Report (08-0628). Legislative File Number 08-0628. April 29.
- El Dorado County Code. 2005. El Dorado County Zoning Ordinance, Title 17.
- El Dorado County Department of Transportation. 2009. Adopted 2009 Capital Improvement Programs For: West Slope Road/Bridge/Trail CIP; Capital Overlay and Rehabilitation (CORP); Environmental Improvement Program (Tahoe EIP); Airports (ACIP). May 5, 2009. Website: <http://co.el-dorado.ca.us/DOT/CIP2009/2009CIP.pdf>.
- El Dorado County DOT. 2008. Annual Accident Location Study 2007. March 28.
- El Dorado County Emergency Medical Services (EMS) Plan Update. 2007. http://www.co.el-dorado.ca.us/ems/pdf/EMS_Plan_Update5_07.pdf. Accessed September 10, 2008.
- El Dorado County Human Resources Department. 2008. Personnel Allocation report from the Final Fiscal Year 2008-2009 approved budget. Website: <http://www.co.el-dorado.ca.us/humanresources/PDF/PersonnelAllocations.pdf>. Accessed September 10, 2008.
- El Dorado County Transportation Commission (EDCTC). 2005. 2005 Bicycle Transportation Plan.
- El Dorado County Zoning Ordinance. 2008. Website: <http://www.co.el-dorado.ca.us/planning/ZOchap.htm>. Accessed January 21, 2008.
- El Dorado County. 1995. County of El Dorado Drainage Manual.
- El Dorado County. 2004, as amended 2008. El Dorado County General Plan. July 19.
- El Dorado County. 2007a. Missouri Flat Design Guidelines. October 23.
- El Dorado County. 2007b. Initial Study/Mitigated Negative Declaration for the El Dorado Trail Improvement Project Forni Road to Missouri Flat Road.
- El Dorado County. 2008. Notice of Preparation of an Environmental Impact report for the Headington Road Extension Project. April 7. Website: http://www.co.el-dorado.ca.us/dot/CEQA/HeadingtonNOP_040408.pdf.
- El Dorado County. 2008a. El Dorado County Oak Woodlands Management Plan. May.

References

- El Dorado County. 2008b. 20-Year Traffic Impact Mitigation (TIM) Plan. Website: <http://www.co.el-dorado.ca.us/DOT/TIMfees.html>.
- El Dorado Irrigation District (EID). 2001. Administrative Draft Water Supply Master Plan. December 2001. Website: http://www.eid.org/doc_lib/02_dist_info/EID_WaterSupplyMasterPlanAdminDraft.pdf. Accessed: November 13, 2009.
- El Dorado Irrigation District (EID). 2005. 2005 Comprehensive Annual Financial Report.
- El Dorado Irrigation District (EID). 2009. 2009 Water Resources and Service Reliability Report.
- El Dorado Irrigation District (EID). 2010. 2010-2014 Capital Improvement Plan. February 22.
- Federal Emergency Management Agency (FEMA). 1988 (May). Guide to Flood Insurance Rate Maps.
- Federal Emergency Management Agency (FEMA). 1983 (Oct.). Flood Insurance Rate Map: El Dorado County, California (Unincorporated Areas)—Panels 425, 450, and 750 of 1100.
- Federal Emergency Management Agency (FEMA). 1986 (Dec.). Flood Insurance Rate Map: El Dorado County, California (Unincorporated Areas)—Panel 725 of 1100.
- Fluckey, P. Land Agent, Land Rights Protection, El Dorado County-Solano County, PG&E. Personal communication: written response to Notice of Preparation. December 26, 2007.
- Frederickson, D.A. 1973. Early Cultures of the North Coast Ranges, California. Unpublished Ph.D. dissertation, Department of Anthropology, University of California, Davis.
- Gerow, B.A. 1954. The Problem of Cultural Sequences in Central California Archaeology. Paper presented at the Annual Meeting of the American Association for the Advancement of Sciences.
- Gerow, B.A. 1974. "Comments on Fredrickson's Cultural Diversity." *The Journal of California Anthropology* 1(2):239-246.
- Gerow, B.A., with R. Force. 1968. *An Analysis of the University Village Complex with a Reappraisal of Central California Archaeology*. Stanford University Press. Stanford., California.
- Google. Undated. Google Earth version 4.0.2722.
- Governor's Office of Planning and Research. 2007. Addressing Naturally Occurring Asbestos in CEQA Documents. August 1, 2007.
- Governor's Office of Planning and Research. 2008. Technical Advisory. CEQA AND CLIMATE CHANGE: Addressing Climate Change Through California Environmental Quality Act (CEQA) Review. Website: www.opr.ca.gov/index.php?a=ceqa/index.html. Accessed June 19, 2008.

- HDR Engineering, Inc. 2001. Wastewater Master Plan Update for El Dorado Irrigation District.
- HDR Engineering, Inc. 2002. El Dorado Irrigation District Recycled Water Master Plan.
- Hickman, James C. ed. 1993. The Jepson Manual, Higher Plants of California. University of California Press. Berkeley, California.
- Hilton, Jim. EID Office of the General Counsel/Real Estate Services. Personal communication: Phone call. April 27, 2009. Re: State Route 49 – Diamond Springs Parkway.
- Holland, R.F. 1986 (updated 1996). Preliminary Descriptions of the Terrestrial Natural Communities of California. Non-game Heritage Program. California Department of Fish and Game. Sacramento, California.
- Hughes, R.E. (editor). 1994. Toward a New Taxonomic Framework for Central California Archaeology: Essays by James A. Bennyhoff and David A. Fredrickson. Assembled and edited by Richard E. Hughes. Contributions of the University of California No. 52, Archaeological Research Facility, Berkeley, CA.
- Intergovernmental Panel on Climate Change. 2001. Climate Change 2001: The Scientific Basis. Contribution of Working Group I to the Third Assessment Report of the Intergovernmental Panel on Climate Change. Houghton, J.T., Y. Ding, D.J. Griggs, M. Noguer, P.J. van der Linden, X. Dai, K. Maskell, and C.A. Johnson, eds. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, 881 pp.
www.grida.no/CLIMATE/IPCC_TAR/WG1/index.htm, Accessed April 8, 2008.
- Intergovernmental Panel on Climate Change. Summary for Policymakers. In: Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller [eds.]). Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA. Website: <http://www.ipcc.ch/pdf/assessment-report/ar4/wg1/ar4-wg1-spm.pdf>. Accessed April 8, 2008.
- Jacobson, Mark Z. 2002. Atmospheric Pollution, History, Science, and Regulation. Cambridge University Press, New York.
- Jennings, M.R. and M.P. Hayes. 1994. Amphibian and Reptile Species of Special Concern in California. California Department of Fish and Game. Rancho Cordova, California.
- Johnson, J.J. 1976. Archaeological Investigations at the Blodgett Site (CA-SAC-267), Sloughhouse Locality, California. Report to the U.S. National Parks Service, Western Regional Office, Tucson, AZ.
- Jones and Stokes (ICF International). 2003. U.S. Highway 50/Missouri Flat Road Interchange EIR. El Dorado County, California. July.
- Karuzas, Jeremiah. Biologist, Sacramento Fish and Wildlife Office. Personal communication: telephone call. October 14, 2008.

References

- Kimley-Horn and Associates. 2009. Traffic Impact Analysis for the Diamond Springs Parkway; Diamond Springs, California. October 29, 2009 (included in this EIR as Appendix M).
- Kollar, F. Undersheriff, County of El Dorado Sheriff—Coroner. Personal communication: written response letter. September 26, 2008 (included in this EIR as Appendix L).
- Kollar, F. Undersheriff, County of El Dorado Sheriff—Coroner. Personal communication: written response letter. March 19, 2010 (included in this EIR as Appendix L).
- Kroeber, A.L. 1925. Handbook of the Indians of California. Bulletin 78. Bureau of American Ethnology. Washington, DC. Smithsonian Institution.
- Kyle, D.E., M.B. Hoover, H.E. Rensch, E.G. Rensch, and W.N. Abeloe. 1990. Historical Spots in California. Stanford. Stanford University Press.
- Lillard, J.B. and W.K. Purves. 1936. "The Archaeology of the Deer Creek-Cosumnes Area, Sacramento Co., California." Sacramento. Sacramento Junior College, Department of Anthropology Bulletin 1.
- Lillard, J.B., R.F. Heizer, and F. Fenenga. 1939. An Introduction to the Archaeology of Central California. Sacramento Junior College, Department of Anthropology, Bulletin 2. Sacramento.
- Lyons, L. County of El Dorado Sheriff-Coroner's office. Personal Communication: Phone call. March 19, 2010.
- Mayer, K.E., and W.F. Laudenslayer, Jr. (eds.). 1989. A Guide to Wildlife Habitats of California. California Dept. of Forestry, Sacramento.
- Mees, P. 2000. A Very Public Solution. Transport in the Dispersed City, Melbourne University Press, Carlton South, Victoria.
- Michael Brandman Associates (MBA). 2008a. Air Quality Analysis for the Highway 49 Intertie Improvements (included in this EIR as Appendix C).
- Michael Brandman Associates (MBA). 2008b. Biological Resources Assessment for the Diamond Springs Parkway Project (included in this EIR as Appendix D).
- Michael Brandman Associates (MBA). 2008c. Biological Resources Assessment for the Highway 49 Intertie Improvements (included in this EIR as Appendix D).
- Michael Brandman Associates (MBA). 2008d. Section 106 - Cultural Resources Assessment for the Diamond Springs Parkway Project (included in this EIR as Appendix F).
- Michael Brandman Associates (MBA). 2008e. Cultural Resources Memorandum for the Highway 49 Intertie Project (included in this EIR as Appendix F).
- Michael Brandman Associates (MBA). 2008f. Delineation of Jurisdictional Waters and Wetlands (included in this EIR as Appendix D).

- Michael Brandman Associates (MBA). 2009a. Air Quality Analysis for the Diamond Springs Parkway Project (included in this EIR as Appendix C).
- Michael Brandman Associates (MBA). 2009b. California Red-Legged Frog Protocol Survey Report, Diamond Springs Parkway Project, Unincorporated Missouri Flat Area of El Dorado County, California (included in this EIR as Appendix D).
- Michael Brandman Associates (MBA). 2009c. Notice of Revisions to the Diamond Springs Parkway Project Study Area Delineation Map (USACE ID 200900188). March 24, 2009 (included in this EIR as Appendix D).
- Moratto, M.J. 1984. California Archaeology. San Diego. Academic Press.
- National Research Council of the National Academies, Climate Research Committee, Board on Atmospheric Sciences and Climate, Committee on Radiative Forcing Effects on Climate. 2005. Radiative Forcing of Climate Change: Expanding the Concept and Addressing Uncertainties. The National Academies Press, Washington, D.C.
- Padre Associates, Inc. 2008. Jurisdictional Delineation of Waters of the United States and Wetlands for the El Dorado Trail Improvement Project – Forni Road to Missouri Flat Road, Placerville, California. Prepared November 2007, verified October 2008.
- Padre Associates, Inc. 2007. Phase I Environmental Site Assessment for the El Dorado Trail Improvement Project. November 2007.
- Payne, Kris. 1997. Project memorandum to the Board of Supervisors. April 9.
- Ragir, S.R. 1972. The Early Horizon in Central California Prehistory. Contributions of the University of California Archaeological Research Facility 15. Berkeley, CA.
- Remsen, J.V. 1978. Bird Species of Special Concern in California. California Department of Fish and Game. Rancho Cordova, California.
- Sacramento Municipal Utility District. 2007. Shade Trees: Tree Benefits Estimator. <https://usage.smud.org/treebenefit/>. Accessed October 18, 2008.
- Schenck, W.E., and E.J. Dawson. 1929. "Archaeology of the Northern San Joaquin Valley." American Archaeology and Ethnology 25:286-413.
- Selsky, P., Brown and Caldwell. 2006. El Dorado Irrigation District Final Urban Water Management Plan 2005 Update.
- Shoup, L.H., and R.T. Milliken. 1999. Inigo of Rancho Posolmi: the Life and Times of a Mission Indian. Novato. Ballena Press.
- Sioli, Paolo. 1883. History of El Dorado County. Cedar Ridge Publishing. 1998 reprint of original 1883 edition.
- Small, A. 1994. California Birds: Their Status and Distribution. Ibis Publishing, Vista, California.

References

- U.S. Department of Agriculture. 2008. Natural Resources Conservation Service, Soil Survey Staff. Web Soil Survey. Available online at <http://websoilsurvey.nrcs.usda.gov>.
- U.S. Department of Transportation. 2008. FHWA Environmental Guidebook Chapter Two Aesthetics in the Design Process. Website: <http://www.fhwa.dot.gov/environment/visql/visql02.htm>. Accessed October 1, 2008.
- U.S. Environmental Protection Agency (US EPA). 2007 Website: <http://www.epa.gov/ebtpages/pollutionprevention.html>. Accessed October 16, 2008.
- U.S. Environmental Protection Agency, Office of Air and Radiation. 2003a. Ozone: Good up high bad nearby. EPA-451-K-03-001. Website: www.epa.gov/air/ozonepollution/pdfs/ozonegb.pdf. Accessed April 8, 2008.
- U.S. Environmental Protection Agency, Office of Air and Radiation. 2003b. September 2003. Particulate Pollution and Your Health. EPA-452/F-03-001
- U.S. Environmental Protection Agency. 1995. Integrated Risk Information System. 1,1,1,2-Tetrafluoroethane (CASRN 811-97-2). Website: http://cfpub.epa.gov/iris/quickview.cfm?substance_nmbr=0656. Accessed April 8, 2008.
- U.S. Environmental Protection Agency. 1999. Fact Sheet. Final Regional Haze Regulations for Protection of Visibility in National Parks and Wilderness Areas. 1999.
- U.S. Environmental Protection Agency. 2006a. Office of Atmospheric Programs. April 2006. The U.S. Inventory of Greenhouse Gas Emissions and Sinks: Fast Facts. Website: <http://epa.gov/climatechange/emissions/downloads06/06FastFacts.pdf>. Accessed April 8, 2008.
- U.S. Environmental Protection Agency. 2006b. High Global Warming Potential Gases. Science. Website: <http://www.epa.gov/highgwp/scientific.html>. Accessed April 8, 2008.
- U.S. Fish and Wildlife Service (USFWS). 2005. Revised Guidance on Site Assessment and Field Surveys for the California Red-Legged Frog.
- U.S. Fish and Wildlife Service (USFWS). 2007. List of Endangered and Threatened Species That May Occur in or be Affected by Projects in Placerville, California USGS Quadrangle (Document Number 070717024104). Official list obtained from USFWS website on August 16, 2007.
- U.S. Geological Survey (USGS). 1973. Placerville, California 7.5-Minute Topographic Quadrangle Map. Department of the Interior. U.S. Government Printing Office. Washington D.C.
- U.S. Geological Survey. 1983. Groundwater Conditions and Well Yields in Fractured Rocks, Southwestern Nevada County, CA. Report 83-4262.
- Wallace, W.J. 1955. "A Suggested Chronology for Southern California Coastal Archaeology." *Southwestern Journal of Anthropology* 11(3):214-230.
- Warren, C.N. 1968. "Cultural Tradition and Ecological Adaptation on the Southern California Coast." *Archaic Prehistory in the Western United States*, C. Irwin-Will.

- Western Regional Climate Center. 2007. Placerville, California (046960) Period of Record Monthly Climate Summary. Available at: <http://www.wrcc.dri.edu/summary/Climsmcca.html>
- Williams, D.F. 1986. Mammalian Species of Special Concern in California. California Department of Fish and Game. Wildlife Management Division Administrative Report. Rancho Cordova, California.
- Wilson, Norman L. and Arlene Towne. 1978. Nisenan, In: Handbook of North American Indians: California, Volume 8, edited by Robert F. Heizer. William G. Sturtevant, Editor, Smithsonian Institution, Washington, D. C.
- Youngdahl Consulting Group, Inc. 2008. Preliminary Geotechnical Engineering Study for Diamond Springs Parkway, El Dorado County, Placerville, California. February 19, 2008 (included in this EIR as Appendix G).
- Youngdahl Consulting Group, Inc. 2009. Phase I Environmental Site Assessment, Diamond Springs Parkway, Placerville and Diamond Springs, El Dorado County, California. January 2009 (included in this EIR as Appendix H).

