

STATE ROUTE 49

REALIGNMENT STUDY



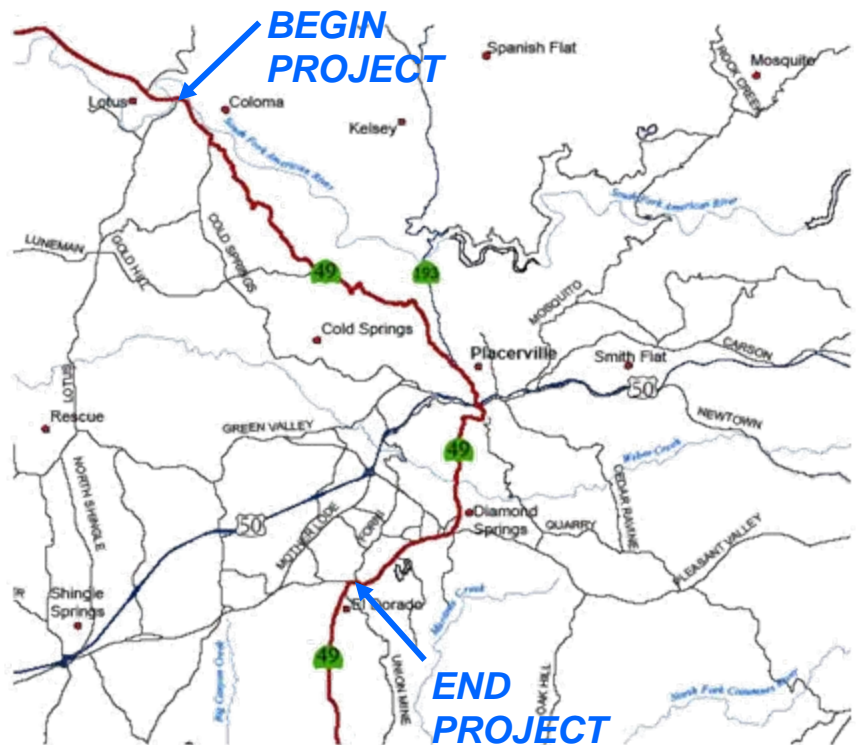
March 4, 2010

PREPARED FOR



PREPARED BY

TYLIN INTERNATIONAL



STATE ROUTE 49 REALIGNMENT STUDY

This State Route 49 Realignment Study has been prepared under the direction of the following Registered Engineer. The registered civil engineer attests to the technical information contained herein and the engineering data upon which recommendations, conclusions, and decisions are based.



Keith D. Rhodes, P.E.
Project Manager

3/4/10
Date



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EXECUTIVE SUMMARY

On January 10, 2008, El Dorado County Transportation Commission (EDCTC) submitted an application to Caltrans for a 2008/2009 Partnership Planning Grant to fund the State Route 49 (SR 49) Realignment Study from Coloma to El Dorado. On August 29, 2008, Caltrans notified EDCTC that the SR 49 Realignment Study had been selected for funding in Fiscal Year 2008/2009.

The SR 49 Realignment Study is a preliminary Project Initiation Document (PID), essentially a feasibility study that recommends three feasible alternative alignments based upon their ability to meet the project goals and objectives. The geographic limits of the study are from the intersection of SR 49 with Lotus Road in the town of Coloma to the intersection of SR 49 with Pleasant Valley Road in the town of El Dorado in El Dorado County. SR 49, also known as the Golden Chain Highway, passes through many historic mining communities within the geographic limits of the study, including the towns of El Dorado and Diamond Springs, the City of Placerville, and the town of Coloma. Per Streets and Highways Code 263, SR 49 between the town of Coloma and the town of El Dorado is eligible to be nominated for official designation as a State Scenic Highway.

The primary goals of the project are: 1) eliminate the at-grade intersection of SR 49 and U.S. 50 and the existing alignment of SR 49 through Marshall Gold Discovery State Historic Park (MGDSHP); 2) relieve SR 49 traffic impacts to densely populated residential areas and business districts of the City of Placerville and town of Diamond Springs; and 3) improve the safe and efficient transport of goods and people while maximizing the utilization of existing local roads to achieve improved conditions in the corridor in the most cost effective manner possible.

The purpose of the study is to demonstrate that there are feasible transportation solutions that fulfill the project goals and objectives, not to establish all possible alternatives that may satisfy the goals and objectives of the project. Therefore, the alternatives considered in this study are provisional rather than conclusive and are not intended to limit other alternatives from being considered in a future Project Initiation Document (PID), such as a Project Study Report (PSR). In addition to identifying possible alternatives that may satisfy the purpose and need of the project, infeasible alternatives were also identified so that the alternatives studied in a PSR can focus on those alternatives that are potentially feasible as recognized in this study.

Public involvement and outreach were major components of the State Route 49 Realignment Study. In an effort to involve a broad range of potentially affected interests, EDCTC ratified 22 groups/entities on February 5, April 2, and June 4, 2009, as members of the SR 49 Realignment Study Stakeholder Advisory Committee (SAC). The purpose of the SAC was to provide both policy and technical guidance to the EDCTC during the development of the SR 49 Realignment Study. The project scope of work included six SAC meetings and two public open houses.

Following the February and March 2009 SAC meetings and April 2009 Public Open House, 52 alternative alignments were submitted to EDCTC for evaluation during the Level 1, Intermediate Level 1, and Level 2 Screening processes. The 52 potential alternative alignments were evaluated during the Level 1 Screening based on how well each alternative met the project purpose and need and its constructability and operational feasibility. Alternatives were scored on a basic "Yes" or "No" scoring.

The results of Level 1 Screening recommended 10 alternatives for advancement to the Intermediate Level 1 Screening. The goal of the Intermediate Level 1 Screening was to determine which three out of the 10 alternatives would best result in satisfying the project purpose and need when compared to one another.. The 10 alternatives were evaluated on how well they met the purpose and need and were scored from one to four (weighted) according to the following point system:

- 1 = No improvement or unacceptable impact
- 2 = Marginal improvement or high impact
- 3 = Acceptable improvement or moderate impact
- 4 = Substantial improvement or low impact

The results of the Intermediate Level 1 Screening recommended the following three Alternative Alignments for advancement to Level 2 Screening:

- ▣ **Alternative 3E:** Begin at Lotus Road/State Route (SR) 49 Intersection. Lotus Road to Green Valley Road, Green Valley Road to Missouri Flat Road, Missouri Flat Road to SR 49 (Pleasant Valley Road), SR 49 to El Dorado.
- ▣ **Alternative 5G:** Begin at Lotus Road/SR 49 Intersection. Lotus Road to Gold Hill Road, Gold Hill Road to Cold Springs Road, Cold Springs Road to Pierroz Road, Pierroz Road to Placerville Drive, Placerville Drive to Ray Lawyer Drive, Ray Lawyer Drive to the proposed Ray Lawyer Drive Extension, Ray Lawyer Drive Extension to SR 49, SR 49 to the proposed Diamond Springs Parkway, Diamond Springs Parkway to Missouri Flat Road, Missouri Flat Road to SR 49 (Pleasant Valley Road), SR 49 to El Dorado.
- ▣ **Alternative 5H:** Begin at Lotus Road/SR 49 Intersection. Lotus Road to Gold Hill Road, Gold Hill Road to Cold Springs Road, Cold Springs Road to Pierroz Road, Pierroz Road to Placerville Drive, Placerville Drive to Ray Lawyer Drive, Ray Lawyer Drive to US 50 via the proposed Ray Lawyer Drive Interchange, US 50 to Missouri Flat Road (Missouri Flat Interchange), Missouri Flat Road to SR 49 (Pleasant Valley Road), SR 49 to El Dorado.

Figures ES.1, ES.2, and ES.3 illustrate Alternatives 3E, 5G, and 5H, respectively. Alternatives 3E, 5G, and 5H were then evaluated in the Level 2 Screening based how well they met transportation goals, such as safety, mobility, accessibility, and multi-modal opportunities, as well as their responsiveness to environmental goals, such as noise, cultural resources, land use, planning, biological resources, and air quality. The alternatives were then scored from one to four (non-weighted) using the same point system used in the Intermediate Level 1 Screening.

The Level 2 Screening resulted in the following ranking of the three alternatives and their associated estimated construction cost. Cost was a non-criterion, but was determined for informational purposes.

1. Alternative 5H – \$23.6 million
2. Alternative 3E – \$17.4 million
3. Alternative 5G – \$28.7 million

The results of the Level 1, Intermediate Level 1, and Level 2 Screening processes were presented to the public at Open House #2 on October 14, 2009. The purpose of the Open House was to provide an overview of the study process and present key highlights from the SR 49



Realignment Study, including the project's history, schedule, and alternatives evaluated. Attendees had the opportunity to discuss the project with Project Team members from Caltrans, El Dorado County Department of Transportation, El Dorado Transit, California State Parks, EDCTC, and the project consultant.

An overview of the study and the results of the Level 1, Intermediate Level 1, and Level 2 Screening processes were presented to the EDCTC Commissioners on November 4, 2009 and Placerville City Council on December 14, 2009.

Based on comments received during the six SAC meetings, the two Open Houses, the EDCTC Commissioners meeting, and Placerville City Council meeting, the Draft SR 49 Realignment Study was prepared and presented to the EDCTC Commissioners in February 2010. The Final SR 49 Realignment Study was presented to the EDCTC Commissioners in March 2010.

The “next steps” in this project development effort will be to secure funding for the preparation of a Project Initiation Document (PID). The use of State funds for capital improvements on the State Highway System (SHS) requires a Caltrans approved PID.

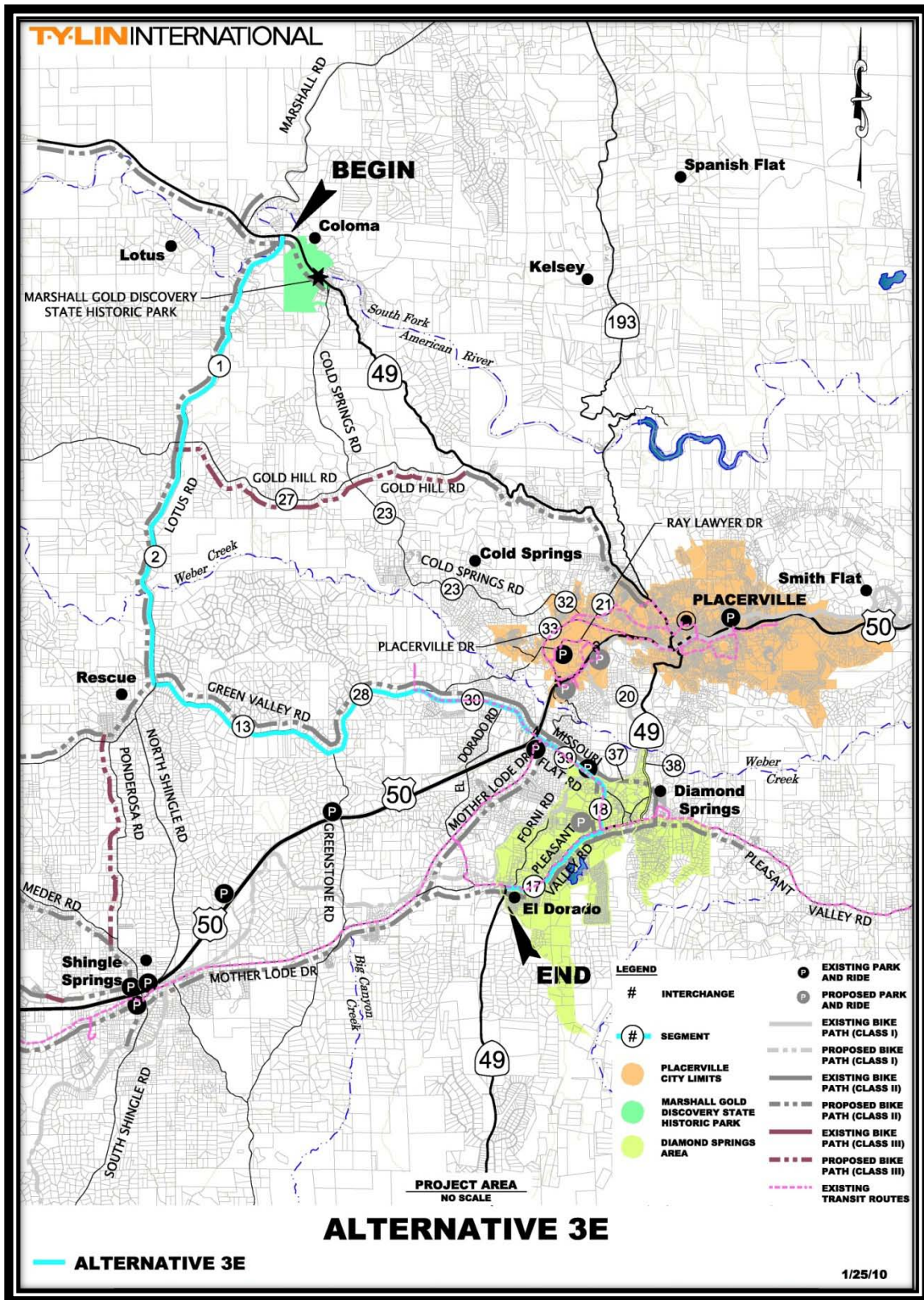


Figure ES.1 – Alternative 3E

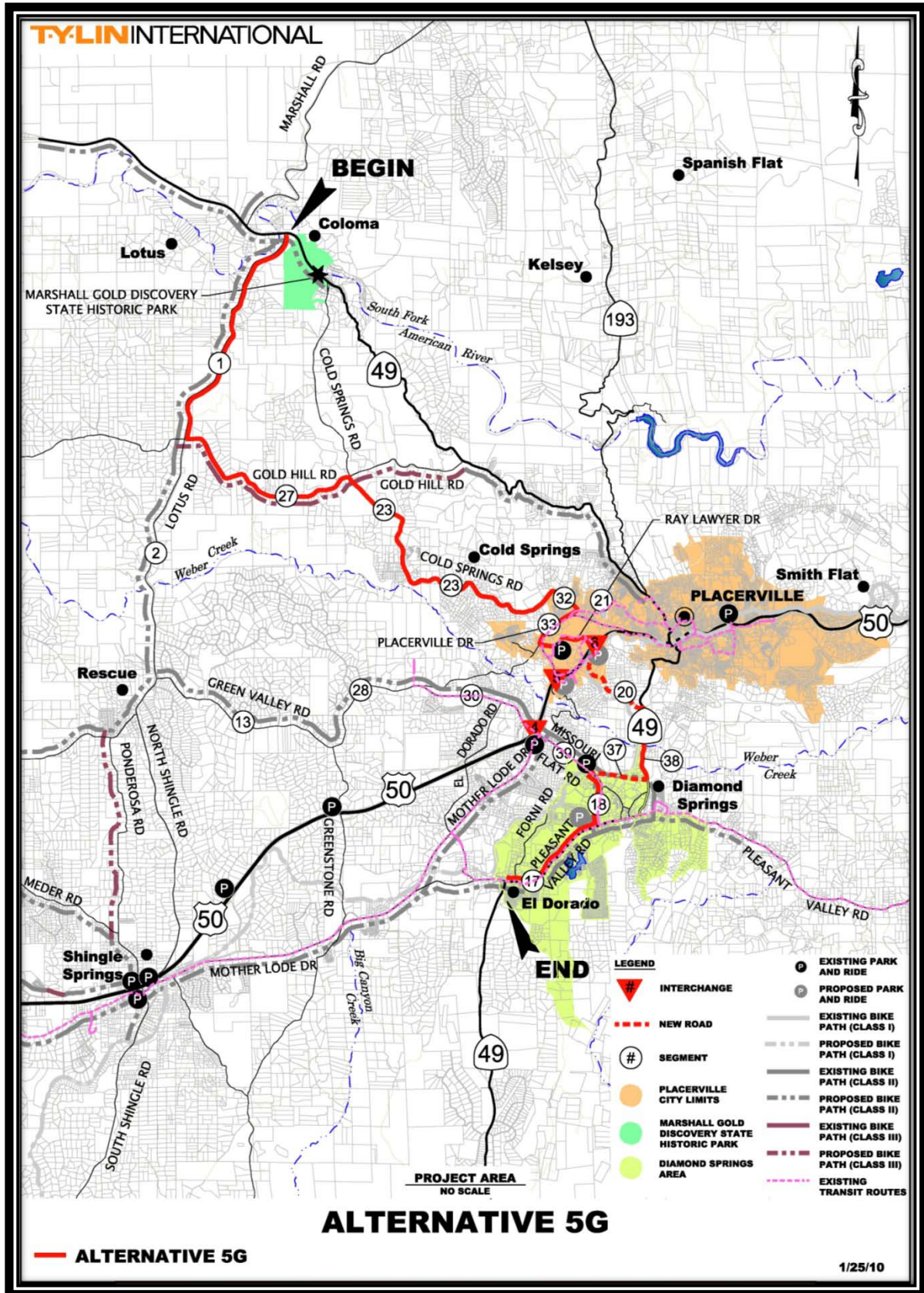


Figure ES.2 – Alternative 5G

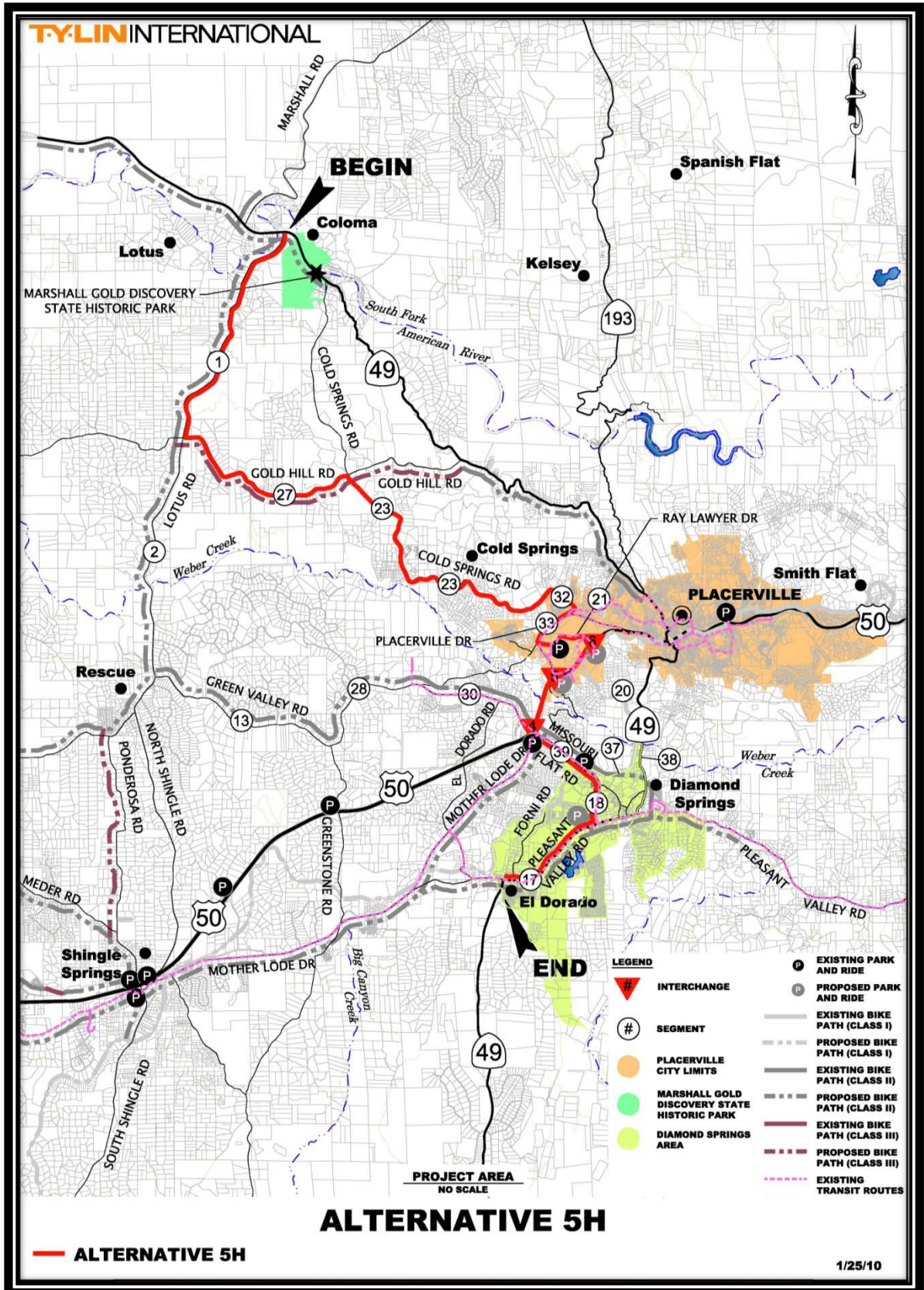


Figure ES.3 – Alternative 5H

STATE ROUTE 49 REALIGNMENT STUDY

1. INTRODUCTION

The El Dorado County Transportation Commission (EDCTC) is the Regional Transportation Planning Agency (RTPA) for El Dorado County. EDCTC represents the regional transportation planning interests and is responsible for coordinating regional transportation for the western slope of El Dorado County and the City of Placerville.

In August 2008, Caltrans awarded the EDCTC a Partnership Planning Grant as the lead agency for the development of the State Route 49 (SR 49) Realignment Study. The SR 49 Realignment Study is a feasibility study to explore a variety of alternatives that realign SR 49 from the intersection of SR 49 with Lotus Road in the town of Coloma to the intersection of SR 49 with Pleasant Valley Road in the town of El Dorado in El Dorado County. The project area also includes U.S. 50 within the project limits and all significant local roadways and trails. The SR 49 Realignment Study explores alternative alignments of SR 49 between Coloma and El Dorado that will:

- ▣ Improve interregional and regional conditions on the state and regional transportation system by improving traffic operations.
- ▣ Improve the safe and efficient transport of goods and people (i.e. tourists and local traffic) along SR 49 from Coloma to the community of El Dorado while minimizing impacts to historic, cultural, and natural resources.
- ▣ Examine alternatives that eliminate the existing at-grade intersection of SR 49 and U.S. 50 and the alignment of SR 49 through Marshall Gold Discovery State Historic Park.
- ▣ Explore alternatives that relieve SR 49 traffic impacts to densely populated residential areas and business districts of the City of Placerville and town of Diamond Springs.
- ▣ Reduce travel times within the corridor and the total vehicle-hours traveled during peak commute times.
- ▣ Consider and analyze land uses identified in the City of Placerville and El Dorado County General Plans to ensure that potential new alignments are compatible with planned zoning and land uses in the project area.
- ▣ Consider how potential new alignments may affect jobs, corridor demographics, population growth and distribution projections, as well as current and future traffic demand and transportation needs.
- ▣ Evaluate the utilization of existing local roads, which may reduce the amount of resources required to achieve improved conditions in the corridor.
- ▣ Consider alternatives that maximize bicycle, pedestrian, and transit opportunities; contribute to the remedy for current and future deficiencies in transportation safety in the corridor; and maintain a context sensitive solutions approach to local and interregional transportation issues.

The SR 49 Realignment Study demonstrates three viable build alternatives that satisfy the purpose and need of the project. These alternatives range in cost from \$17.4 million to \$28.7 million for construction only. These costs are preliminary estimates for planning purposes and will be further refined in a PSR.

The anticipated Caltrans Project Development Category for this project is Category 2A. It may require modification of existing access control, reconstruction of existing intersections and local roads, acquisition of new rights of way, and a California Transportation Commission (CTC) approved route adoption, but will not require a Freeway Agreement or Controlled Access Highway Agreement.

Finally, the SR 49 Realignment Study does not guarantee a future project, but provides an opportunity for Caltrans, governing local agencies, and residents of El Dorado County to initiate, in a cooperative effort, the evaluation of a future project that meets the goals and objectives of the County's transportation needs.

2. BACKGROUND

SR 49 is the main north-south arterial connecting El Dorado County and the other "Mother Lode" Counties in the Sierra Foothills. SR 49, also known as the Golden Chain Highway, passes through many historic mining communities within the geographic limits of the study, including the towns of El Dorado and Diamond Springs, the City of Placerville, and the town of Coloma. Per Streets and Highways Code 263, SR 49 between the town of Coloma and the town of El Dorado is eligible to be nominated for official designation as a State Scenic Highway.

As the major transportation link between commercial centers, residential areas, and the county seat, it has been crucial to the economy of the region since before California statehood. While the current major traffic flows in the region are east-west, there is a sizable and growing north-south travel demand created by economic growth in the region, increased interregional commerce, and increased recreational activity. SR 49 is the key link--and in many cases the only link--serving these activities. According to the Caltrans SR 49 Transportation Concept Report (TCR), the growing congestion on SR 49 is beginning to have spillover impacts on other elements of the El Dorado County road system, as traffic diverts to avoid congestion. However, others believe that spillover impacts are not a result of SR 49 congestion, but due to travelers utilizing more direct routes to local destinations.

The location and present state of the current alignment of SR 49 between Coloma and El Dorado, along with increased traffic demand due to growth in the county, growth in interregional commerce, and significant increases in recreational use of the area, have resulted in impaired traffic operations and inefficient movement of people, goods, and services. The present alignment of SR 49 routes local, regional, and interregional commercial traffic through densely populated residential areas and the business districts of the City of Placerville and the towns of Coloma, Diamond Springs, and El Dorado. The physical alignment of SR 49 has changed little over the last 100-plus years. The route in its present state has numerous short radius curves, switchbacks, and a considerable number of grades in excess of 7%. In addition to the alignment being very poor and inadequate for modern transportation demands, narrow roadway widths, limited passing opportunities, and heavy volumes of logging trucks and recreational vehicles degrade traffic operations and safety. The basic width of the traveled way is only 18 feet and there are few usable shoulders. From Placerville to Marshall Road, SR 49 is a conventional two-lane highway.

From the El Dorado County/Placer County line in the north, the current alignment of SR 49 climbs out of the American River canyon and winds south through the town of Cool and

Marshall Gold Discovery State Historic Park in Coloma before reaching the City of Placerville, where SR 49 makes an at-grade intersection with U.S. 50. After crossing U.S. 50 and passing through downtown Placerville, the route heads south, crossing Weber Creek, and then west through the towns of Diamond Springs and El Dorado. From El Dorado, SR 49 turns south, crossing the Cosumnes River and continuing to the El Dorado County/Amador County line.

Through the towns of El Dorado and Diamond Springs, SR 49 provides access to residential development with signalization and left turn pockets. Within the towns of El Dorado and Diamond Springs are numerous at-grade crossings and driveways. Commercial establishments built very close to the roadway and on street parking contribute to the narrowness of the roadway and limit the ability to widen it. In the town of Diamond Springs, SR 49 makes a left turn onto Diamond Road and continues north towards Placerville. During the afternoon peak traffic hour, the queue of cars can reach 1/2 mile at Diamond Road. As a result, drivers have difficulty turning onto SR 49 and resort to taking circuitous routes around town to avoid this intersection. Although zoned primarily for rural residential use, the towns of El Dorado and Diamond Springs are experiencing a substantial increase in low to medium density residential development. Population growth along this segment is expected to continue with high-density residential, industrial, and commercial land uses becoming more common. According to the Caltrans SR 49 Transportation Concept Report (TCR), existing roadway is quite narrow and is built along unstable hills in many areas.

As SR 49 approaches the City of Placerville, the alignment becomes increasingly winding, with speed advisories as low as 15 mph, with few shoulders and numerous driveway accesses. Commuters use the roadway in large part to reach U.S. 50, while substantial amounts of recreational traffic use the roadway to reach wineries, historical locations, parks, ski resorts, and other locations in the “Gold Country” along the Sierra Nevada foothills.

SR 49 through the City of Placerville is the western border of its downtown area. As a city street within the city limits of Placerville, SR 49 is a narrow, heavily traveled, winding urban street that courses through town on Sacramento Street, heads northwest on Pacific Street, heads west for a very short distance on Main Street, then continues north on Spring Street, where it crosses U.S. 50, and finally continues northwesterly on Coloma Street. Visibility is hindered due to rugged terrain, the winding nature of the alignment, the notably heavy amount of traffic this segment carries, and on-street parking in some areas. As a city street, there are numerous signalized intersections, side streets, and driveways on this segment, which also has no shoulders. The intersection of SR 49 and U.S. 50 regularly experiences long delays, blocking nearby streets and intersections. According to the Caltrans SR 49 TCR, the Department of Finance asserts the El Dorado County’s population is projected to increase by 76% by the year 2015, with a large percentage of this growth occurring in the Placerville area. This segment of SR 49 passes through the City of Placerville’s central business district, where land use is commercial and medium-density residential. Placerville is the county seat for El Dorado County, and is a major commercial and tourism focus.

SR 49 north of Placerville is narrow, has minimal shoulders, and winds its way through hilly terrain from the City of Placerville northwest to Gold Hill, through the small historic

community of Coloma, then north through Cool. Coloma is home to Marshall Gold Discovery State Historic Park, site of the discovery of gold in 1848, and the park is bisected by SR 49.

3. THE PROJECT PROCESS

The development of the SR 49 Realignment Study was divided into three distinct phases:

- ▣ Phase 1 – Purpose and Need/Screening Criteria
- ▣ Phase 2 – Alternative Analysis
- ▣ Phase 3 – Documentation

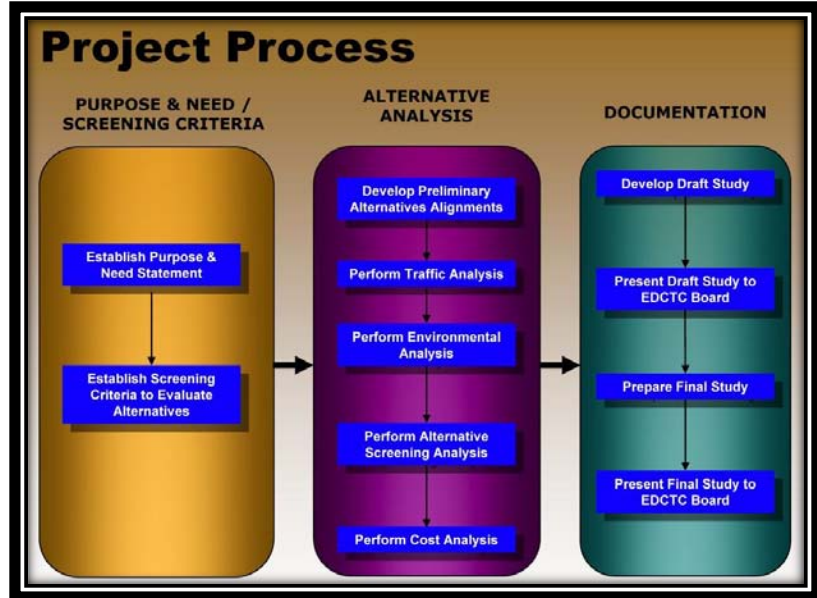
Phase 1 – Purpose and Need/Screening Criteria:

Phase 1 involved the establishment of the project purpose and need and screening criteria. The project purpose and need is the foundation by which all alternatives were developed and measured. Therefore, public input during this phase was critical to ensure early public comment on the development of the purpose and need and influence the direction of the project. The public, as well as the Project Development Team (PDT), also had the opportunity to comment on the screening criteria, which were established based on the agreed purpose and need.

Phase 2 – Alternative Analysis:

Phase 2 involved the development and screening of alternatives. Public input was also solicited to obtain additional insight on potential alternatives that may best satisfy the project purpose and need.

Following the development of the preliminary alternatives, each alternative was evaluated against the screening criteria established in Phase 1 to determine three feasible alternatives for recommendation for further evaluation. A traffic analysis and environmental constraints analysis was performed on the three recommended alternatives. In addition, a preliminary cost estimate was developed for the three recommended alternatives.



Phase 3 – Documentation:

Phase 3 involved preparing the SR 49 Realignment Study to document the project process. In addition, presentations to the EDCTC Commissioners, El Dorado County Board of Supervisors, and Placerville City Council were conducted during this phase.

4. NEED AND PURPOSE

The following project purpose and need was developed through consultation with the Project Development Team (PDT) and the Stakeholder Advisory Committee (SAC) and feedback received during the April 30, 2009 Public Open House:

SR 49 provides a regional and interregional route for the movement of goods and people within El Dorado County. The purpose of the SR 49 Realignment Study is to evaluate potential alternative alignments for the safe and efficient transport of goods and people (i.e. tourists and local traffic) along SR 49, from Coloma to the community of El Dorado, while minimizing impacts to historic, cultural, and natural resources.

The study is needed to evaluate potential alignments that will eliminate the existing alignment of SR 49 through Marshall Gold Discovery State Historic Park and the at-grade intersection of SR 49 and U.S. 50. The study will respond to current and projected regional and local traffic demand on the state and local road systems along SR 49 and U.S. 50, especially through densely populated residential areas and the business districts of the City of Placerville and the communities of Coloma, Diamond Springs, and El Dorado. The sharp curves and steep grades of the existing alignment within the study area, in conjunction with the commercial, regional, and local traffic, are not adequate for modern transportation demands, resulting in congestion and reduced traffic safety for vehicle, bicycle, and pedestrian travel. The study will focus on the use of existing roads to reduce the amount of resources necessary to achieve improved conditions in the SR 49 corridor and support the adopted general plans of El Dorado County, City of Placerville, and the Marshall Gold Discovery State Historic Park.

Key Project Goals

- ▣ Improve interregional and regional conditions on the state and regional transportation system by improving traffic operations.
- ▣ Explore alternatives that relieve SR 49 traffic impacts to densely populated residential areas and business districts of the City of Placerville and the towns of El Dorado and Diamond Springs.
- ▣ Reduce travel times within the corridor and the total vehicle-hours traveled during peak commute times.
- ▣ Consider and analyze land uses identified in the City of Placerville, El Dorado County, and Marshall Gold Discovery State Historic Park General Plans to ensure that potential new alignments are compatible with planned zoning and land uses in the project area.
- ▣ Consider how potential new alignments may affect jobs, corridor demographics, population growth and distribution projections, as well as current and future traffic demand and transportation needs.
- ▣ Consider alternatives that maximize bicycle, pedestrian, and transit opportunities; contribute to the remedy for current and future deficiencies in transportation safety in the corridor; and maintain a context sensitive solutions approach to local and interregional transportation issues.

5. ALTERNATIVES

5.1 Design Criteria

A Design Criteria Memorandum (DCM) was prepared (see Attachment G) that presents a range of design criteria that was used when analyzing alternative alignments. The proposed design criteria were used to assist in estimating costs and evaluating alternatives.

The design criteria were collected from the following three sources:

1. El Dorado County Highway Design Manual (Local Agency Standards)
2. Caltrans Design Information Bulletin (DIB) 79-03 “Design Guidance and Standards for Roadway Rehabilitation Projects” (State Agency Standards)
3. Caltrans Highway Design Manual (State Agency Standards)

The SR 49 Transportation Concept Report (TCR) provides useful information that guided the geometric design criteria identified in the DCM. The SR 49 TCR is a Caltrans prepared long-term planning document that evaluates the conditions of SR 49 and establishes a concept of what SR 49 should look like at the end of a twenty-year planning period. Figures 5.1 and 5.2 summarize the functional classification and design designation of the project limits of SR 49 as identified in the SR 49 TCR. The design designation represents the basic factors that control the design of a given highway. Highway features, such as design speed, are influenced principally by the character of terrain, economic considerations, environmental factors, type and anticipated volume of traffic, functional classification of the highway, and whether the area is rural or urban.

Figure 5.3 highlights three major components of the basic design criteria used in the analysis of alternatives for this study – design speed, typical cross section width, and right of way width. The El Dorado County Highway Design Manual, Caltrans DIB 79-03, and Caltrans Highway Design Manual were then used to identify the corresponding standards.

Figure 5.4 illustrates the proposed typical section for SR 49.

Figure 5.1 – Functional Classification

State Route 49		
Designation	Classification	Terrain
Conventional Highway	Rural/Urban ⁽¹⁾	Rolling

⁽¹⁾ The project area is mostly rural. However, there are sections of urban classification including the areas within the city limits of Placerville, El Dorado, and Diamond Springs.

Figure 5.2 – Design Designation

State Route 49 (Sources: SR 49 TCR, September 2000 ; HDM)			
	TCR Segment 2 ⁽⁸⁾	TCR Segment 3 ⁽⁹⁾	TCR Segment 4 ⁽¹⁰⁾
ADT (2010) ⁽¹⁾	16616	32340	7396
ADT (2030) ⁽²⁾	23522	76623	17865
DHV ⁽³⁾	3528	11493	2680
Truck % (T) ⁽⁴⁾	6%	6%	10%
Directional Split (D) ⁽⁵⁾	55%	55%	64%
LOS ⁽⁶⁾	E	F	E
Concept LOS ⁽⁷⁾	E	F	E

- ⁽¹⁾ ADT (2010) – The average daily traffic, in number of vehicles, for the construction year.
- ⁽²⁾ ADT (2030) – The average daily traffic for the future year used as a target in design. ADT values for the year 2030 are projected based on an annual 5% traffic growth as identified in the TCR.
- ⁽³⁾ DHV – The two-way design hourly volume of vehicles. DHV calculated using 0.15*ADT. DHV is used to determine the number of lanes required for a highway facility based on a desired Level of Services (LOS).
- ⁽⁴⁾ T – The truck traffic volume expressed as a percent of the DHV (excluding recreational vehicles).
- ⁽⁵⁾ D – The percentage of the DHV in the direction of heavier flow.
- ⁽⁶⁾ LOS – Level of Service. LOS ranges from A through F, which represents driving conditions from the least congested to most congested, respectively. LOS is a factor in determining the traffic capacity of a highway facility.
- ⁽⁷⁾ Concept LOS – Level of Service based on the planned conceptual geometry of the facility in 20 years.
- ⁽⁸⁾ TCR Segment 2 – From Union Mine Road south of El Dorado to Sacramento Street south of Placerville (PM ED 9.494/13.984).
- ⁽⁹⁾ TCR Segment 3 – From Sacramento Street south of Placerville to the junction of SR 193 (PM ED 13.984/15.685).
- ⁽¹⁰⁾ TCR Segment 4 – From the junction of SR 193 to the El Dorado/Placer County Line (PM ED 15.685/38.233).

Figure 5.3 – General Roadway Design Criteria

(For more details regarding the Basic Design Criteria, see Attachment G)

	Local Agency*	Caltrans (DIB 79-03)**	HDM (New Construction)	Proposed
<i>Basic Design Criteria</i>				
Design Speed (mph)	Index 101.2	HDM Table 101.2	Table 101.2	
SR 49 (Rural)	55	50 - 60	50 - 60	55
SR 49 (Urban)	45	30 - 60	30 - 60	45
Typical Cross Section				
Minimum Lane Width (ft)	Index 301.1	Index 3.3.3.6.1.1	Index 301.1	
SR 49 (Rural)	12	12	12	12
SR 49 (Urban)				
Minimum Shoulder Width (ft)	Index 301.1	Index 3.3.3.6.1.2.1	Table 307.2	
SR 49, ADT < 250	8	0	2 or 4, ADT < 400 8, ADT > 400	8
SR 49, 251 < ADT < 1000		2		
SR 49, 1001 < ADT < 3000		4		
SR 49, ADT > 3001		8		
Minimum R/W Width (ft)	Index 301.1	HDM Index 306.1	Index 306.1	
SR 49 (Rural)	60	40 - 82 ⁽²⁾⁽³⁾	130	40 - 82 ⁽²⁾⁽³⁾
SR 49 (Urban)				

- * Local agency standards taken from El Dorado County Highway Design Manual
- ** Caltrans DIB 79-03 gives design guidance and standards for Roadway Rehabilitation (3R) Projects. Design Criteria not fully covered by DIB 79-03 will default to the Caltrans Highway Design Manual (HDM) criteria for new construction, unless noted otherwise.
- ⁽¹⁾ The project area is mostly rural. However, there are sections of urban classification including the areas within the city limits of Placerville, El Dorado, and Diamond Springs.
- ⁽²⁾ DIB 79-03 does not specify a minimum R/W width. The 82' shown here is meant to convey the width of R/W required to construct the minimum widths of the cross section components that are specified by DIB 79-03, which sum to the full R/W width. 82' = 24'(2-12' lanes) + 16'(2-8' shoulders) + 6'(2-3' chokers) + 36'(2-18' catch to hinge). The 40' shown here is meant to convey the width of R/W under several constraints; therefore, limited to edge of shoulder to edge of shoulder. 40' = 24'(2-12' lanes) + 16'(2-8' shoulders).
- ⁽³⁾ Recommended 130' minimum width will be used when feasible.

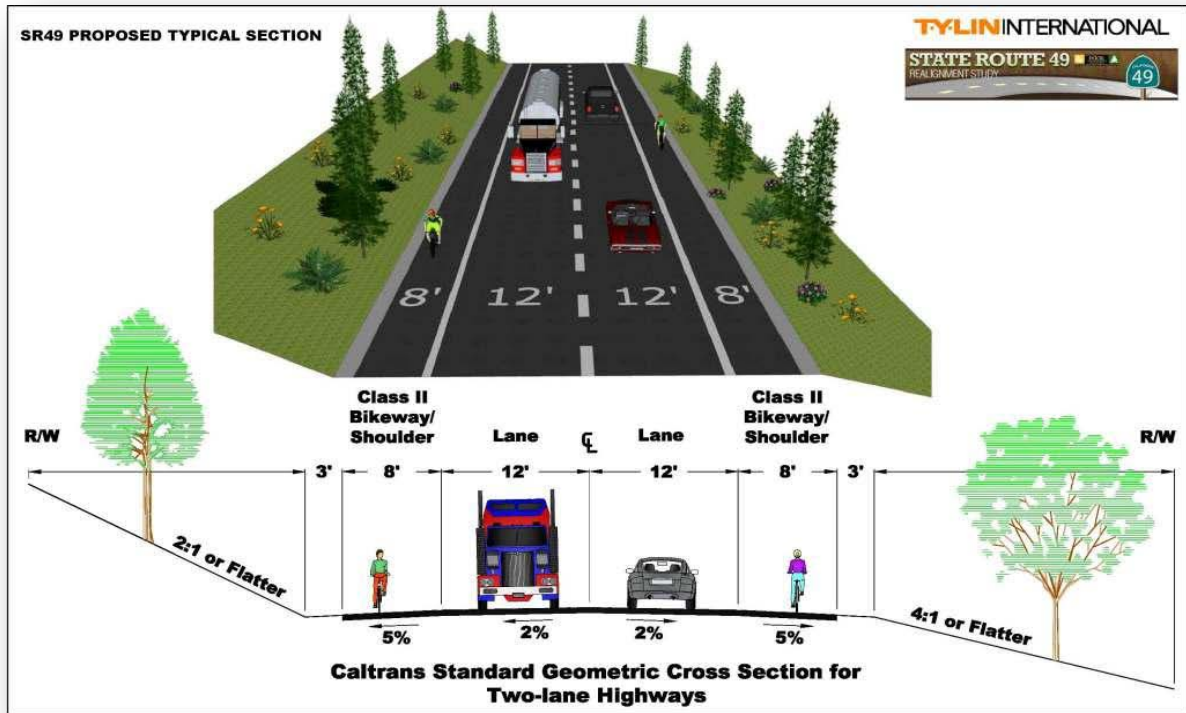


Figure 5.4 – State Route 49 Proposed Typical Section

5.2 Project Alternatives Analyzed

Input from the first public open house held on April 30, 2009, the SAC, and the PDT resulted in 52 conceptual alignment alternatives that span the entire length of the corridor between Coloma and El Dorado (See Attachment C-1). The 52 alternatives were comprised of various combinations of 39 individual conceptual roadway segments identified in Figure 5.5.

In an effort to simplify the process of evaluating these alternatives, the 52 conceptual alignment alternatives were sorted into 11 groups containing sub-groups of alternatives (See Figure 5.6). For example, Group 1 is comprised of the sub-group of alignment alternatives 1A, 1B, and 1C. All 52 alignment alternatives begin in Coloma, and were divided into sub-groups based on which one of the following individual segments the alignment alternative begins with in Coloma: Segment 1, 25, 26, 34, or 35.

With the exception of the No-Build alternative, the 11 groups of conceptual alternatives are color-coded (e.g. Alternative 9 is brown, 11 is yellow, etc.) as shown on Attachment C-1 and Figure 5.6. Attachment C-1 graphically displays each of the 39 individual segments, the 52 color coded alignment alternatives, and identifies key interchanges within the project area. Figure 5.6 is a legend of the 11 groups of conceptual alternative alignments by color code and details the segments that make up each alternative alignment. For example, Alternative 1A is comprised of Segments 1, 2, 3, Interchange #1, and Segments 4, 5, and 6. Figure 5.5 describes each of the 39 individual conceptual alignment alternative segments (e.g. Segment #1 is Lotus Road from SR 49 at Coloma to Gold Hill Road).

SEGMENT #	NAME OF ROAD	FROM	TO	miles	min
1	Lotus Rd	SR49 @ Coloma	Gold Hill Rd	3.4	5.0
2	Lotus Rd	Gold Hill Rd	Green Valley Rd	3.5	4.0
3	N. Shingle Rd	Green Valley Rd	IC#1	4.8	8.0
4	Mother Lode Dr	IC#1	Greenstone Rd	3.0	6.0
5	Mother Lode Dr	Greenstone Rd	Pleasant Valley Rd	1.1	2.0
6	New Road Connection	Pleasant Valley Rd	SR 49 south of El Dorado	0.8	1.0
7	Pleasant Valley Rd	Mother Lode Dr	El Dorado Rd	0.8	1.0
8	New Road Connection	El Dorado Rd	SR 49 south of El Dorado	0.4	1.0
9	El Dorado Rd	Mother Lode Dr	Pleasant Valley Rd	0.9	2.0
10	Mother Lode Dr	Pleasant Valley Rd	El Dorado Rd	1.0	1.0
11	El Dorado Rd	Mother Lode Dr	IC#3	1.1	3.0
12	New Road Connection	Green Valley Rd	IC#3	1.8	2.0
13	Green Valley Rd	Lotus Rd	Greenstone Rd	2.7	4.0
14	Greenstone Rd	Green Valley Rd	IC#2	1.0	1.0
15	Greenstone Rd	IC#2	Mother Lode Dr	1.7	2.0
16	Pleasant Valley Rd	El Dorado Rd	SR 49 at El Dorado	0.4	1.0
17	Pleasant Valley Rd (SR 49)	SR 49 @ El Dorado	Missouri Flat Rd	1.6	3.0
18	Missouri Flat Rd	Proposed Diamond Springs Parkway	Pleasant Valley Rd (SR 49)	0.9	1.0
19	SR 49	Proposed Diamond Springs Parkway	Missouri Flat Rd	1.4	2.0
20	Proposed Ray Lawyer Dr Extension	IC#6	SR 49	2.0	3.0
21	Ray Lawyer Dr	Placerville Dr	IC#6	0.8	1.0
22	Proposed Mallard Lane Extension	Cold Springs Rd/Coolwater Creek	Ray Lawyer Dr	1.0	3.0
23	Cold Springs Rd	Gold Hill Rd	Coolwater Creek	3.2	5.0
24	Cold Springs Rd	SR 49	Gold Hill Rd	2.7	7.0
25	Coloma Bypass Option 1	Lotus Rd/SR49	Cold Springs Rd/SR 49	1.2	3.0
26	Coloma Bypass Option 2	Marshall Rd	Cold Springs Rd/SR 49	2.4	5.0
27	Gold Hill Rd	Lotus Rd	Cold Springs Rd	2.8	3.0
28	Green Valley Rd	Greenstone Rd	Missouri Flat Rd	1.8	2.0
29	Green Valley Rd	Missouri Flat Rd	Ray Lawyer Dr	2.0	6.0
30	Missouri Flat Rd	Green Valley Rd	IC#4	1.7	2.0
31	Placerville Dr	Ray Lawyer Dr	IC#5	0.6	1.0
32	Cold Springs Rd	Coolwater Creek	Placerville Dr	1.5	3.0
33	Placerville Dr	Cold Springs Rd / Pierroz Road	Ray Lawyer Dr	0.6	1.0
34	New Road Connection	Beach Court/SR49	Pleasant Valley Rd	8.8	12.0
35	New Road Connection	Beach Court/SR49	Green Valley Rd	7.3	8.0
36	SR 49 Route Adoption 1964	Marshall Rd @ SR 49	IC#5	7.9	9.0
37	Proposed Diamond Springs Parkway	Bradley Dr	Missouri Flat Rd @ SPRR Xing	0.9	1.0
38	SR 49	Proposed Ray Lawyer Dr Extension	Proposed Diamond Springs Parkway	0.7	1.0
39	Missouri Flat Rd	IC#4	Proposed Diamond Springs Parkway	0.9	1.0
IC#1	S. Shingle Rd-Ponderosa Rd/US 50 Interchange	IC#1	IC#2	3.6	3.0
IC#2	Greenstone Rd/US 50 Interchange	IC#2	IC#3	1.9	2.0
IC#3	El Dorado Rd/US 50 Interchange	IC#3	IC#4	1.0	1.0
IC#4	Missouri Flat Rd/US 50 Interchange	IC#4	IC#5	0.8	0.8
IC#5	Western Placerville Dr/US 50 Interchange	IC#5	IC#6	0.8	0.8
IC#6	Ray Lawyer Dr/US 50 Interchange				

Figure 5.5 – Roadway Segments for Level 1 Screening

# of Alts	Alternative #	Segments	miles	min
1	NO-BUILD		14.1	26.0
2	1	A 1 2 3 IC#1 4 5 6	16.6	26.0
3		B 1 2 3 IC#1 4 5 7 8	17.0	27.0
4		C 1 2 3 IC#1 4 5 7 16	17.0	27.0
5	2	A 1 2 13 14 IC#2 15 5 6	14.2	19.0
6		B 1 2 13 14 IC#2 15 5 7 8	14.6	20.0
7		C 1 2 13 14 IC#2 15 5 7 16	14.6	20.0
8	3	A 1 2 13 28 29 21 IC#6 20 38 19 17	19.9	31.0
9		B 1 2 13 28 29 21 IC#6 20 38 37 18 17	20.3	31.0
10		C 1 2 13 28 29 21 IC#6 IC#5 IC#4 39 18 17	19.2	28.6
11		D 1 2 13 28 29 31 IC#5 IC#4 39 18 17	18.2	27.8
12		E 1 2 13 28 30 IC#4 39 18 17	16.5	22.0
13	4	A 1 2 13 12 IC#3 11 9 8	13.8	21.0
14		B 1 2 13 12 IC#3 11 10 6	14.3	20.0
15		C 1 2 13 12 IC#3 11 10 7 8	14.7	21.0
16		D 1 2 13 12 IC#3 11 10 7 16	14.7	21.0
17		E 1 2 13 12 IC#3 11 9 16	13.8	21.0
18	5	A 1 27 23 22 21 IC#6 20 38 19 17	16.9	26.0
19		B 1 27 23 22 21 IC#6 20 38 37 18 17	17.3	26.0
20		C 1 27 23 22 21 IC#6 IC#5 IC#4 39 18 17	16.2	23.6
21		D 1 27 23 22 31 IC#5 IC#4 39 18 17	15.2	22.8
22		E 1 27 23 32 33 31 IC#5 IC#4 39 18 17	16.3	23.8
23		F 1 27 23 32 33 21 IC#6 20 38 19 17	18.0	27.0
24		G 1 27 23 32 33 21 IC#6 20 38 37 18 17	18.4	27.0
25		H 1 27 23 32 33 21 IC#6 IC#5 IC#4 39 18 17	17.3	24.6
26	6	A 26 25 24 23 22 21 IC#6 20 38 19 17	17.0	33.0
27		B 26 25 24 23 22 21 IC#6 20 38 37 18 17	17.4	33.0
28		C 26 25 24 23 22 21 IC#6 IC#5 IC#4 39 18 17	16.3	30.6
29		D 26 25 24 23 22 31 IC#5 IC#4 39 18 17	15.3	29.8
30		E 26 25 24 23 32 33 31 IC#5 IC#4 39 18 17	16.4	30.8
31		F 26 25 24 23 32 33 21 IC#6 20 38 19 17	18.1	34.0
32		G 26 25 24 23 32 33 21 IC#6 20 38 37 18 17	18.5	33.0
33		H 26 25 24 23 32 33 21 IC#6 IC#5 IC#4 39 18 17	17.4	31.6
34	7	A 34 8	9.2	13.0
35		B 34 16	9.2	13.0
36	8	A 35 28 14 IC#2 15 5 6	13.7	16.0
37		B 35 28 14 IC#2 15 5 7 8	14.1	17.0
38		C 35 28 14 IC#2 15 5 7 16	14.1	17.0
39	9	A 35 29 21 IC#6 20 38 19 17	15.8	24.0
40		B 35 29 21 IC#6 20 38 37 18 17	16.2	24.0
41		C 35 29 21 IC#6 IC#5 IC#4 39 18 17	15.1	21.6
42		D 35 29 31 IC#5 IC#4 39 18 17	14.1	20.8
43		E 35 30 IC#4 39 18 17	12.4	15.0
44	10	36 31 IC#5 IC#4 39 18 17	12.7	15.8
45	11	A 25 24 23 22 21 IC#6 20 38 19 17	14.6	28.0
46		B 25 24 23 22 21 IC#6 20 38 37 18 17	15.0	28.0
47		C 25 24 23 22 21 IC#6 IC#5 IC#4 39 18 17	13.9	25.6
48		D 25 24 23 22 31 IC#5 IC#4 39 18 17	12.9	24.8
49		E 25 24 23 32 33 31 IC#5 IC#4 39 18 17	14.0	25.8
50		F 25 24 23 32 33 21 IC#6 20 38 19 17	15.7	29.0
51		G 25 24 23 32 33 21 IC#6 20 38 37 18 17	16.1	29.0
52		H 25 24 23 32 33 21 IC#6 IC#5 IC#4 39 18 17	15.0	26.6

Figure 5.6 – Legend of Level 1 Alternatives

6. ALTERNATIVE SCREENING PROCESS

To meet the stated project purpose, and address the project need, a three-tiered screening process was used to evaluate alternative alignments and their potential for adverse environmental impacts: Level 1, Intermediate Level 1, and Level 2 screening. The SAC, PDT, and the general public provided input on the development of the performance criteria utilized to screen the various alternatives studied.

6.1 *Level 1 – Initial Screening Analysis and Results*

Level 1 consisted of an initial screening analysis to identify reasonable alternative alignments that met the general purpose and need for the proposed project, as well as being constructible and operationally feasible. Using criteria based solely on the purpose and need of the project, alternatives were assigned either a “yes” or “no”, then were comparatively scored and ranked based on the level of meeting the purpose and need of the project. Alternative alignments that were found to be unreasonable or infeasible, based on their relative scores, were eliminated from further evaluation in this study. The evaluation was accomplished by the PDT, SAC, and public through project meetings and public outreach venues.

Level 1 Screening Criteria:

[Criteria 1A – Ability to Meet the Purpose and Need:](#) An alternative must have a theoretical capability to fulfill the following elements of the project purpose and need.

- ▣ Improve traffic operations for existing and future traffic demands, and the efficient movement of people, goods, and services on SR 49 from Coloma to El Dorado;
- ▣ Improve interregional and regional conditions on the SR 49 and regional transportation system by improving traffic operations from Coloma to El Dorado;
- ▣ Ensure compatibility with planned zoning and land uses in the project area identified in the El Dorado County General Plan and polices, City of Placerville General Plan, and the Marshall Gold Discovery State Historic Park General Plan;
- ▣ Eliminate the existing alignment of SR 49 through Marshall Gold Discovery State Historic Park;
- ▣ Eliminate the at-grade intersection of SR 49 and U.S. 50;
- ▣ Reduce travel times within the corridor and the total vehicle-hours traveled in the corridor during peak traffic times;
- ▣ Relieve SR 49 traffic impacts to densely populated residential areas and business districts of the City of Placerville and town of Diamond Springs;
- ▣ Minimize environmental impacts and concerns (i.e. jobs, corridor demographics, cultural resources, population growth and distribution projections, existing and future development);
- ▣ Reduce the amount of resources required to achieve improved conditions in the corridor by the utilization of existing local roads;
- ▣ Maximize multi-modal opportunities locally and interregionally (i.e. bicycle, pedestrian, and transit);
- ▣ Contribute to the remedy for current and future deficiencies in transportation safety in the SR 49 corridor;
- ▣ Maintain a context sensitive solutions approach to local and interregional transportation issues.

Criteria 1B – Constructability and Operational Feasibility: An alternative must also be theoretically feasible to construct and operate, and should not cause or result in:

- ▣ Excessive cost to construct;
- ▣ Serious community disruption; or
- ▣ Unacceptable adverse social, economic, or environmental impacts.

Scoring:

For each alternative, a *Yes* or *No* determination was made as to whether the alternative will fulfill the project purpose and need. The determination was based on how well the alternative addressed the elements of the project purpose and need. Alternatives that did not meet the stated purpose and need (those which scored a cumulative majority of “No” in both Criteria 1A: *Ability to Meet the Purpose and Need* and Criteria 1B: *Constructability and Operational Feasibility*) were recommended for elimination from further consideration in the study. For a detailed summary of the scoring assumptions for the Level 1 Screening, refer to Attachment C-5, “Alternatives for Level 1 Screening – Scoring Assumptions”.

Out of a maximum score of 16 “Yes” determinations, nine of the 52 alternatives that received a score between 13 and 16 were initially recommended to advance to the Level 2 screening analysis. Those alternatives were 1C, 2C, 3B, 3C, 3D, 3E, 5E, 5G, and 5H that are described as follows:

Alternative 1C:

Alternative 1C begins at the SR 49/Lotus Road intersection in Coloma, and continues south along Lotus Road to North Shingle Road. Alternative 1C continues south across the U.S. 50/Ponderosa Road interchange to Mother Lode Drive. Alternative 1C continues east on Mother Lode Drive to Pleasant Valley Road, and continues east until it reaches the Pleasant Valley Road/SR 49 intersection in the town of El Dorado. Alternative 1C covers a distance of 17.0 miles and has a travel time of 27.0 minutes.

Alternative 2C:

Alternative 2C begins at the SR 49/Lotus Road intersection in Coloma, and continues south along Lotus Road to the Lotus Road/Green Valley Road intersection. Alternative 2C continues east along Green Valley Road to Greenstone Road. From Greenstone Road, Alternative 2C continues south under U.S. 50 to Mother Lode Drive. From Mother Lode Drive it continues east to Pleasant Valley Road where it continues east until it reaches the Pleasant Valley Road/SR 49 intersection in the community of El Dorado. Alternative 2C covers a distance of 14.6 miles and has a travel time of 20.0 minutes.

Alternative 3B:

Alternative 3B includes two new roadway segments: the Ray Lawyer Drive Extension and the Diamond Springs Parkway. Alternative 3B begins at the SR 49/Lotus Road intersection in Coloma, and continues south along Lotus Road to the Lotus Road/Green Valley Road intersection. Alternative 3B continues east along Green Valley Road to Ray Lawyer Drive. From Ray Lawyer Drive, it continues east over U.S. 50 and connects to the proposed Ray Lawyer Drive Extension. The Ray Lawyer Drive Extension continues south until intersecting with existing SR 49 approximately 2.0 miles south from its proposed intersection with Ray Lawyer Drive and Forni Road. Alternative 3B continues south on SR 49 to the proposed Diamond Springs Parkway, which is an east-west roadway that will

connect SR 49 to Missouri Flat Road. From Missouri Flat Road, Alternative 3B will continue south to Pleasant Valley Road, where it continues west until it reaches the Pleasant Valley Road/SR 49 intersection in the community of El Dorado. Alternative 3B covers a distance of 20.3 miles and has a travel time of 31.0 minutes.

Alternative 3C:

Alternative 3C begins at the SR 49/Lotus Road intersection in Coloma, and continues south along Lotus Road to the Lotus Road/Green Valley Road intersection. Alternative 3C continues east along Green Valley Road to Ray Lawyer Drive. From Ray Lawyer Drive, it continues eastward to the proposed U.S. 50/Ray Lawyer Drive interchange and onto westbound U.S. 50. Alternative 3C will continue along westbound U.S. 50 to the Missouri Flat Road interchange, where it will continue south to Pleasant Valley Road and then to Pleasant Valley Road until it reaches the Pleasant Valley Road/SR 49 intersection in the town of El Dorado. Alternative 3C covers a distance of 19.2 miles and has a travel time of 28.6 minutes.

Alternative 3D:

Alternative 3D begins at the SR 49/Lotus Road intersection in Coloma, and continues south along Lotus Road to the Lotus Road/Green Valley Road intersection. Alternative 3D continues east along Green Valley Road to the Ray Lawyer Drive/Placerville Drive intersection. From Placerville Drive, it continues westward to the Western Placerville Drive/U.S. 50 interchange. Alternative 3D continues along westbound U.S. 50 to the Missouri Flat Road interchange, where it turns south onto Missouri Flat Road. Alternative 3D continues south and then west on Pleasant Valley Road until it reaches the Pleasant Valley Road/SR 49 intersection in the town of El Dorado. Alternative 3D covers a distance of 18.2 miles and has a travel time of 27.8 minutes.

Alternative 3E:

Alternative 3E begins at the SR 49/Lotus Road intersection in Coloma, and continues south along Lotus Road to the Lotus Road/Green Valley Road intersection. Alternative 3E continues east along Green Valley Road and then connects to Missouri Flat Road. From Missouri Flat Road, Alternative 3E crosses U.S. 50 and continues south to Pleasant Valley Road where it continues west until it reaches the Pleasant Valley Road/SR 49 intersection in the community of El Dorado. Alternative 3E covers a distance of 16.5 miles and has a travel time of 22.0 minutes.

Alternative 5E:

Alternative 5E begins at the SR 49/Lotus Road intersection in Coloma, and continues south along Lotus Road to the Lotus Road/Gold Hill Road intersection. Alternative 5E continues east toward the Gold Hill Road/Cold Springs Road intersection. Alternative 5E continues south along Cold Springs Road to Pierroz Road and then Placerville Drive. From Placerville Drive, it continues west to the Western Placerville Drive/U.S. 50 interchange and westbound U.S. 50. Alternative 5E continues along westbound U.S. 50 to the Missouri Flat Road interchange, where it takes Missouri Flat Road south to Pleasant Valley Road, and then west on Pleasant Valley Road until it reaches the Pleasant Valley Road/SR 49 intersection in the town of El Dorado. Alternative 5E covers a distance of 16.3 miles and has a travel time of 23.8 minutes.

Alternative 5G:

Alternative 5G includes two new roadway segments: the Ray Lawyer Drive Extension, which will continue south approximately 2 miles from its proposed intersection with Forni Road to intersect with SR 49, and the Diamond Springs Parkway, which will connect SR 49 to Missouri Flat Road. Alternative 5G begins at the SR 49/Lotus Road intersection in Coloma and continues south along Lotus Road to the Lotus Road/Gold Hill Road intersection. Alternative 5G continues east on Gold Hill Road to the Gold Hill Road/Cold Springs Road intersection. Alternative 5G then continues southeast along Cold Springs Road to Pierroz Road and Placerville Drive. Alternative 5G continues southwest along Placerville Drive to Ray Lawyer Drive, which it follows eastward over the U.S. 50 overpass to the proposed Ray Lawyer Drive Extension. The Ray Lawyer Drive Extension continues south until it intersects with existing SR 49. Alternative 5G continues south on SR 49 to the proposed Diamond Springs Parkway and continues on it to Missouri Flat Road. From Missouri Flat Road, Alternative 5G continues south to Pleasant Valley Road, which it follows in a westerly direction until it reaches the Pleasant Valley Road/SR 49 intersection in the community of El Dorado. Alternative 5G covers a distance of 18.4 miles and has a travel time of 27.0 minutes.

Alternative 5H:

Alternative 5H begins at the SR 49/Lotus Road intersection in Coloma, and continues south along Lotus Road to the Lotus Road/Gold Hill Road intersection. Alternative 5H continues east on Gold Hill Road to the Gold Hill Road/Cold Springs Road intersection. Alternative 5H then continues southeast along Cold Springs Road to Pierroz Road and Placerville Drive. Alternative 5H continues southwest along Placerville Drive to Ray Lawyer Drive, which it follows to the proposed Ray Lawyer Drive Interchange and westbound U.S. 50. Alternative 5H continues along westbound U.S. 50 to the Missouri Flat Road interchange, where it takes Missouri Flat Road south to Pleasant Valley Road, which it continues on to the west until it reaches the Pleasant Valley Road/SR 49 intersection in the town of El Dorado. Alternative 2C covers a distance of 17.3 miles and has a travel time of 24.6 minutes.

The SAC's review of the nine recommended alternatives raised concerns about the potential impacts of Alternative 1C and the decision not to recommend Alternatives 10 and 11B for further analysis. The issues and concerns involving Alternatives 1C, 10, and 11B and the final list of alternatives recommended for advancement to the Intermediate Level 1 screening analysis are described below:

Alternative 1C:

Alternative 1C received a score of 13, which recommended it as was one of the nine alternatives for advancement to Intermediate Level 1 Screening. However, the SAC and PDT concurred that compared to other alternatives, Alternative 1C posed potentially significant impacts to the City of Placerville's business district due to the alignment's distance from the city limits. Therefore, the SAC and PDT agreed that Alternative 1C should not be recommended for advancement to Intermediate Level 1 Screening.

Alternative 10:

Alternative 10 is the Caltrans SR 49 1964 Route Adoption and it received a score of nine in the Level 1 Screening, not qualifying it for advancement to the Intermediate Level 1 analysis. However, the SAC and PDT concurred that due to the alignment's potential

importance to the corridor, Alternative 10 should be advanced to the Intermediate Level 1 Screening and be further evaluated.

Alternative 11B:

Alternative 11B incorporates the Coloma Bypass, Mallard Lane Conceptual Alignment, Ray Lawyer Drive Extension, and the Diamond Springs Parkway. It received a score of nine, thereby not advancing as a recommended alternative for advancement to the Intermediate Level 1 Screening. However, State Parks expressed a strong interest in seeing at least one of the Coloma Bypass alternatives from Groups 6 and 11 moved forward for further evaluation in the Intermediate Level 1 Screening. Although all nine alternatives that were initially recommended to move forward to the Intermediate Level 1 Screening remove the alignment of SR 49 out of the MGDSHP, only the Coloma Bypass alternatives from Groups 6 and 11 meet the full intent of the Park's General Plan which expresses a desire to eliminate through vehicle traffic in the park to improve pedestrian safety, reduce impacts to historic structures, and enhance visitor experience. State Parks, the SAC, and PDT concurred with advancing Alternative 11B to the Intermediate Level 1 Screening. In addition to State Parks' concerns, Alternative 11B was advanced because it also addressed the interests of the City of Placerville by incorporating the Mallard Lane Conceptual Alignment, Ray Lawyer Drive Extension, and the Diamond Springs Parkway.

Results:

Therefore, based on the results of the Level 1 Screening and the recommendations of the SAC and PDT the following 10 alternatives, plus the No-Build, were recommended for advancement to the Intermediate Level 1 Screening Analysis: 2C, 3B, 3C, 3D, 3E, 5E, 5G, 5H, 10, and 11B. The results of the Level 1 screening analysis are summarized in Attachment C-4, "Alternatives for Level 1 Screening – Results."

6.2 Intermediate Level 1 Screening Analysis

Intermediate Level 1 Screening Analysis consisted of a comparative evaluation of the 10 alternatives advanced from the Level 1 screening process: 2C, 3B, 3C, 3D, 3E, 5E, 5G, 5H, 10, and 11B. As in the Level 1 Screening, alternatives in the Intermediate Level 1 Screening were evaluated against how well they met the project's purpose and need. However, while the Level 1 scoring was based on a simple "yes/no," alternatives in the Intermediate Level 1 Screening received a weighted score from 1 to 4 for their responsiveness to the Intermediate Level 1 Screening criteria derived from the project purpose and need. Alternatives were then ranked based on their cumulative score and the three alternatives with the highest cumulative scores were advanced to the Level 2 Screening. The evaluation of alternatives during the Intermediate Level 1 Screening was performed by the PDT, SAC, and the public through project meetings and public outreach.

Criteria:

The criteria for the Intermediate Level 1 Screening were goals derived from the project purpose and need and are identified in Figure 6.1. Areas of emphasis included safe and efficient mobility of goods, services, and people; accessibility between residential areas, communities, and business districts; maximized use of existing local roads; minimized environmental impacts; and compatibility with affected jurisdiction's general plans. Safety, due to its high degree of importance to the general public, SAC, and PDT, received the

highest weight of 20%. With the exception of the environmental goal (Goal 6) that received a weight of 5%, the remaining goals each received a weight of 15%. Since the environmental impacts associated with each alternative were relatively equal, the environmental goal provided the least opportunity to distinguish one alternative from another and was therefore given the lowest weight.

The criteria did not address the project goals of removing the alignment of SR 49 from Marshall Gold Discovery State Historic Park (MGDSHP) and eliminating the at-grade intersection of SR 49/US 50. Since both are critical to the success of the project and are accomplished by all 10 alternatives, they were not included in the screening criteria. However, while all 10 alternatives would *remove* the alignment of SR 49 from MGDSHP, they would not *eliminate* vehicle traffic from MGDSHP. Even though the alignment of SR 49 would be removed from MGDSHP, the existing segment of road through MGDSHP would remain and its disposition would be determined in a future project phase during the relinquishment process.

Scoring:

Scoring definitions are as follows:

- 1 = No improvement or unacceptable impact
- 2 = Marginal improvement or high impact
- 3 = Acceptable improvement or moderate impact
- 4 = Substantial improvement or low impact

For a detailed summary of the scoring assumptions for the Intermediate Level 1 Screening, refer to Attachment D-5, “Alternatives for Intermediate Level 1 Screening – Scoring Assumptions.”

Alternative 10 (1964 adopted route) received the highest score of 12.7 out of a maximum 14.6. However, it is acknowledged that Alternative 10 is an infeasible alternative due to its relatively high cost (a minimum of six new bridges will be required) and right of way impacts which include right of way acquisitions valued at approximately \$30 million. Therefore, Alternative 10 was dropped from further analysis and the following alternatives that ranked two through four were proposed for advancement to the Level 2 Screening: Alternative 3E was ranked second, 5H was third, and 5E and 5G were tied for fourth. Alternative 5G was selected to advance instead of 5E because it is the only alternative of the four that utilizes the Ray Lawyer Drive Extension, which allows one of the alternatives to satisfy a goal of the City of Placerville’s General Plan, which is to maintain the alignment of SR 49 within the city limits. Alternatives 3E, 5G, and 5H are described as follows:

Alternative 3E:

Alternative 3E begins at the SR 49/Lotus Road intersection in Coloma, and continues south along Lotus Road to the Lotus Road/Green Valley Road intersection. Alternative 3E continues east along Green Valley Road and then connects to Missouri Flat Road. From Missouri Flat Road, Alternative 3E crosses U.S. 50 and continues south to Pleasant Valley Road where it continues west until it reaches the Pleasant Valley Road/SR 49 intersection in the town of El Dorado. Alternative 5G covers a distance of 16.5 miles and has a travel time of 22.0 minutes.

Alternative 5G:

Alternative 5G includes two new roadway segments: the Ray Lawyer Drive Extension, which will continue south approximately 2 miles from its proposed intersection with Forni Road to intersect with SR 49, and the Diamond Springs Parkway, which will connect SR 49 to Missouri Flat Road. Alternative 5G begins at the SR 49/Lotus Road intersection in Coloma and continues south along Lotus Road to the Lotus Road/Gold Hill Road intersection. Alternative 5G continues east on Gold Hill Road to the Gold Hill Road/Cold Springs Road intersection. Alternative 5G then continues southeast along Cold Springs Road to Pierroz Road and Placerville Drive. Alternative 5G continues southwest along Placerville Drive to Ray Lawyer Drive, which it follows eastward over the U.S. 50 overpass to the proposed Ray Lawyer Drive Extension. The Ray Lawyer Drive Extension continues south until it intersects with existing SR 49. Alternative 5G continues south on SR 49 to the proposed Diamond Springs Parkway and continues on it to Missouri Flat Road. From Missouri Flat Road, Alternative 5G continues south to Pleasant Valley Road, which it follows in a westerly direction until it reaches the Pleasant Valley Road/SR 49 intersection in the town of El Dorado. Alternative 5G covers a distance of 18.4 miles and has a travel time of 27.0 minutes.

Alternative 5H:

Alternative 5H begins at the SR 49/Lotus Road intersection in Coloma, and continues south along Lotus Road to the Lotus Road/Gold Hill Road intersection. Alternative 5H continues east on Gold Hill Road to the Gold Hill Road/Cold Springs Road intersection. Alternative 5H then continues southeast along Cold Springs Road to Pierroz Road and Placerville Drive. Alternative 5H continues southwest along Placerville Drive to Ray Lawyer Drive, which it follows to the proposed Ray Lawyer Drive Interchange and westbound U.S. 50. Alternative 5H continues along westbound U.S. 50 to the Missouri Flat Road interchange, where it takes Missouri Flat Road south to Pleasant Valley Road, which it continues on to the west until it reaches the Pleasant Valley Road/SR 49 intersection in the town of El Dorado. Alternative 5H covers a distance of 17.3 miles and has a travel time of 24.6 minutes.

Results:

Alternatives 3E, 5G, and 5H were the alternatives advanced from the Intermediate Level 1 Screening to the Level 2 Screening. For a detailed summary of the results of the Intermediate Level 1 Screening refer to Attachment D-4, “Alternatives for Intermediate Level 1 Screening – Results.”

6.3 Level 2 – Comparative Screening Analysis

The Level 2 Screening consisted of a comparative evaluation of the three alternatives (3E, 5G, and 5H) that were advanced from the Intermediate Level 1 screening process, plus the No-Build alternative. The three alternatives, as well as the No-Build alternative, received a non-weighted score from 1 to 4 for their response to each of the transportation benefits criterion and environmental criterion. The cumulative score for each alternative was determined and the three alternatives were then ranked one through three based on their score. It is assumed that the alternative with the highest score will theoretically provide the greatest degree of transportation benefit and the lowest potential for environmental impacts. The evaluation was performed by the PDT, SAC, and the public through project meetings

and public outreach. Preliminary cost estimates were provided for each alternative for the purpose of comparison only and were not used in scoring or ranking alternatives. The results of the comparative evaluation are summarized in Attachment E-4, “Alternatives for Level 2 Screening – Results.”

Criteria:

The criteria for the Level 2 screening were established from the project purpose and need and were more refined than those identified in the previous two screening levels. The criteria and goals contained within the criteria are identified in Figures 6.2 and 6.3. Areas of emphasis include safe and efficient mobility of goods, services, and people; accessibility between residential areas, communities, and business districts; maximized use of existing local roads; minimized environmental impacts; and compatibility to affected General Plans.

Scoring:

Scoring definitions are as follows:

- 1 = No improvement or unacceptable impact
- 2 = Marginal improvement or high impact
- 3 = Acceptable improvement or moderate impact
- 4 = Substantial improvement or low impact

Results:

The Level 2 Screening resulted in the following ranking of the four alternatives:

- ▣ Rank #1 – Alternative 5H (Scored 113 out of 184)
- ▣ Rank #2 – Alternative 3E (Scored 110 out of 184)
- ▣ Rank #3 – Alternative 5G (Scored 104 out of 184)
- ▣ Rank #4 – No-Build (Scored 40 out of 184)

The estimated construction cost for these alternatives are as follows (excludes right-of-way and project development support costs):

- ▣ Alternative 5H – \$23.6 million
- ▣ Alternative 3E – \$17.4 million
- ▣ Alternative 5G – \$28.8 million
- ▣ No-Build – \$0 million

6.4 Project Alternatives Selected

Based on the results of the Level 2 Screening, alternatives 5H, 3E, and 5G are recommended for further evaluation in a Project Study Report (PSR).

INTERMEDIATE LEVEL 1 SCREENING CRITERIA		
%Wt	Goal	Criteria
20%	Goal 1: Safe transport of goods and people (i.e. commercial, regional, and local) regionally and interregionally for vehicle, bicycle, and pedestrian travel (i.e. improve sharp curves, steep grades, and traveled way of SR 49 for modern transportation demands).	# of curves with advisory speed limits per mile
		# of grades >7%
		# of constraints that prevent widening (i.e. side-slopes >2:1, and right of way requiring removal of buildings)
		# of school zones
15%	Goal 2: Efficient transport of goods and people (i.e. commercial, regional, and local) regionally and interregionally for vehicle, bicycle, and pedestrian travel	Travel time reduction (Regional)
		Travel time reduction (Local)
		Vehicle-miles traveled reduction
15%	Goal 3: Improve accessibility for commercial, regional, and local traffic between residential areas and business districts of the City of Placerville, Diamond Springs, and El Dorado.	Alignment within the City of Placerville city limits.
		Alignment within the Diamond Springs business district.
		Alignment within the El Dorado business district.
		Population (within 1/2 mile buffer of alternative) divided by route distance
		Employment (within 1/2 mile buffer of alternative) divided by route distance
15%	Goal 4: Improve accessibility for commercial, regional, and local traffic between residential areas, communities, and business districts along SR 49 from El Dorado to Coloma.	Population within 1/2 mile Buffer of Alternative
		Employment within 1/2 mile Buffer of Alternative
15%	Goal 5: Maximize the use of existing roads to minimize resources required to achieve improved conditions in the SR 49 corridor and support the projected land uses of the adopted El Dorado County and City of Placerville General Plans.	Use of existing local roads only
		# of new bridges required
5%	Goal 6: Minimize impacts to historic, cultural, and natural resources.	Potential to conflict with historic resources including structures, towns and districts.
		Located in a 7.5-minute quadrangle in which special-status species have been previously recorded as identified in the California Natural Diversity Database (CNDDB).
		Potential to impact bodies of water as identified on the National Wetland Inventory.
		Located within or adjacent to Areas More Likely to Contain Asbestos.
		Buffer for More Likely to Contain Asbestos or Fault Line
15%	Goal 7: Ensure compatibility with land uses in the project area identified in the El Dorado County General Plan, City of Placerville General Plan, and the Marshall Gold Discovery State Historic Park General Plan.	No conflicts with other planned projects & consistent with all current General Plans
100%		

Figure 6.1 – Intermediate Level 1 Screening Criteria

LEVEL 2 SCREENING CRITERIA		
Criterion 2A: Transportation Benefits	Objective	Criteria
<p>Transportation Goal 1: Safe transport of goods and people (i.e. commercial, regional, and local) regionally and interregionally for vehicle, bicycle, and pedestrian travel (i.e. improve sharp curves, steep grades, and traveled way of SR 49 for modern transportation demands)</p>	<p>Increase safety</p>	# of curves with advisory speed limits per mile
		# of grades >7%
		# of constraints that prevent widening (i.e. side-slopes >2:1, and right of way requiring removal of buildings)
		# of school zones
<p>Transportation Goal 2: Efficient transport of goods and people (i.e. commercial, regional, and local) regionally and interregionally for vehicle, bicycle, and pedestrian travel</p>	<p>Increase vehicular mobility</p>	Travel time reduction (Regional)
		Travel time reduction (Local)
		Roadway segment performance (Regional). Miles of Alignment operating at acceptable LOS.
		Vehicle-miles traveled reduction
<p>Transportation Goal 3: Improve accessibility for commercial, regional, and local traffic between residential areas and business districts of the City of Placerville, Diamond Springs, and El Dorado</p>	<p>Improve vehicular accessibility</p>	Alignment within the City of Placerville city limits
		Alignment within the Diamond Springs business district
		Alignment within the El Dorado business district
		Population (within 1/2 mile buffer of alternative) divided by route distance
		Employment (within 1/2 mile buffer of alternative) divided by route distance
<p>Transportation Goal 4: Improve accessibility for commercial, regional, and local traffic between residential areas and business districts along SR 49 from Coloma to El Dorado</p>	<p>Improve vehicular accessibility</p>	Population within 1/2 mile Buffer of Alternative
		Employment within 1/2 mile Buffer of Alternative
<p>Transportation Goal 5: Maximize the use of existing roads to minimize resources required to achieve improved conditions in the SR 49 corridor and support the projected land uses of the adopted El Dorado County and City of Placerville General Plans</p>	<p>Utilize existing local roads for realignment</p>	Use of existing local roads only
		# of bridge widenings required
		# of new bridges required
<p>Transportation Goal 6A: Relieve SR 49 traffic impacts to Downtown business district of City of Placerville.</p>	<p>Realign SR 49 from Downtown business district of City of Placerville</p>	Alignment within the business district.
<p>Transportation Goal 6B: Relieve SR 49 traffic impacts to business districts of Diamond Springs.</p>	<p>Realign SR 49 from business district of Diamond Springs</p>	Alignment within the business district.
<p>Transportation Goal 8: Maximize multi-modal opportunities locally and interregional (i.e. bicycle, pedestrian, and transit) as specified in the Caltrans Deputy Directive (DD) 64.</p>	<p>Identify increase in, or proximity to transit routes, park and ride lots, and pedestrian and bicycle trails and facilities</p>	# of bicycle facility connections (existing or feasible future)
		# of transit facility connections (existing or feasible future)
		# of park-n-ride facility connections (existing or feasible future)
<p>Transportation Goal 10A: Relieve SR 49 traffic impacts to densely populated residential areas of the City of Placerville.</p>	<p>Realign SR 49 from densely populated residential areas of City of Placerville</p>	# of residential streets connections
		# of residential areas directly impacted
<p>Transportation Goal 10B: Relieve SR 49 traffic impacts to densely populated residential areas of the Diamond Springs.</p>	<p>Realign SR 49 from densely populated residential areas of Diamond Springs</p>	# of residential streets connections
		# of residential areas directly impacted

Figure 6.2 – Criterion 2A – Level 2 Screening Criteria

LEVEL 2 SCREENING CRITERIA		
Criterion 2B: Responsiveness to Environmental Goals	Objective	Criteria
Environmental Goal 1: Maintain visual integrity along the project corridor.	AESTHETICS / VISUAL - Avoid/minimize potential impacts on aesthetics to the area	Would the project result in substantial degradation to the existing visual character or quality of the site and its surroundings?
Environmental Goal 2: Maintain agricultural land uses adjacent to the project corridor.	AGRICULTURAL RESOURCES - Avoid / minimize potential impacts to agricultural lands (e.g., Farmland and lands under Williamson Act Contracts).	Would the project result in the conversion of Farmland or conflict with Williamson Act Contracts?
Environmental Goal 3: Strive to achieve and maintain established local, State and Federal air quality standards.	AIR QUALITY - Avoid / minimize potential impacts on air quality	Would the project result in an exceedance of established air quality emissions?
Environmental Goal 4: Maintain and protect wildlife and wildlife habitat resources of significant biological and ecological value.	SPECIES - Avoid / minimize potential impacts on native and special-status plant and wildlife species	Would the project result in an impact to native or special-status plant and wildlife species or their habitat?
Environmental Goal 4: Maintain and protect fisheries resources of significant biological and ecological value.	WATERS OF THE U.S./WETLANDS - Avoid / minimize potential impacts to waters of the U.S. and wetlands	Would the project result in impacts to waters of the U.S. and/or wetlands?
		Acres of vegetation removal
Environmental Goal 4: Maintain and protect vegetation resources of significant biological and ecological value.	TREES - Avoid / minimize oak tree removal	Would the project result in the removal of oak woodlands?
Environmental Goal 5: Preserve and protect historic and archaeological resources.	CULTURAL RESOURCES - Avoid / minimize potential impacts to historic and archaeological resources	Would the project result in impacts to historic and/or archaeological resources?
Environmental Goal 6: Maintain geological integrity of the natural environment.	GEOLOGY/SOILS - Avoid/minimize potential impacts on geology/soils to the area	Would the project result in increased risk from geologic conditions (such as liquefaction, ground-shaking, landslides), result in soil erosion, or result in exposure of the project to unstable soils? Would the project result in increased risk of exposure to naturally occurring asbestos?
Environmental Goal 7: Protect adjacent land uses and travelers from exposure to hazards and hazardous materials.	HAZARDS/HAZARDOUS MATERIALS - Avoid / minimize potential impacts to increased risk of hazards and exposure to hazardous materials	Would the project result in an increased risk of exposure of workers and/or the public to hazards and/or hazardous materials? Would the project impair an adopted emergency response or evacuation plan?
Environmental Goal 8: Maintain water quality in the environment.	HYDROLOGY AND WATER QUALITY - Avoid / minimize potential impacts to water quality	Would the project have the potential to degrade water quality or alter drainage patterns?
Environmental Goal 9: Protection and conservation of existing land uses adjacent to the project corridor.	LAND USE AND PLANNING - Avoid / minimize potential conflicts with the County General Plan, City General Plan, and/or the Marshall Gold Discovery State Historic Park General Plan.	Would the project conflict with the County General Plan, City General Plan, and/or the Marshall Gold Discovery State Historic Park General Plan?
Environmental Goal 10: Ensure that adjacent land uses are not subjected to noise beyond acceptable levels.	NOISE - Avoid / minimize potential noise impacts to adjacent land uses.	Would the project result in increased noise levels in exceedance of accepted noise standards?
Environmental Goal 11: Protect existing residences consistent with applicable planning documents.	POPULATION AND HOUSING - Avoid / minimize potential displacement of existing residences.	Would the project result in displacement of a substantial number of existing residences?
Environmental Goal 12: Provide public services to project corridor.	PUBLIC SERVICES - Avoid / minimize potential impacts on public services.	Would the project result in potential impacts to public services (such as fire, police, schools, parks), public service facilities, or response times?
Environmental Goal 13: Promote recreational opportunities along the project corridor.	RECREATIONAL - Avoid/minimize potential impacts on existing or planned recreational facilities	Would the project result in impacts to existing or planned recreational facilities?
Environmental Goal 14: Provide the safe, orderly, and efficient movement of people and goods.	TRANSPORTATION AND CIRCULATION - Avoid / minimize potential impacts to the transport of people and goods within the project corridor.	Would the project result in worsened roadway operations and/or inefficient delivery of goods and services? Would the project result in inadequate emergency access?
Environmental Goal 15: Provide sufficient utility and service systems to the project corridor.	UTILITIES AND SERVICE SYSTEMS - Avoid/minimize potential impacts on utilities and service systems.	Would the project result in disruptions to utilities and/or services, require construction of additional service facilities, and/or comply with federal, state and local statutes related to solid waste?

Figure 6.3 – Criterion 2B – Level 2 Screening Criteria

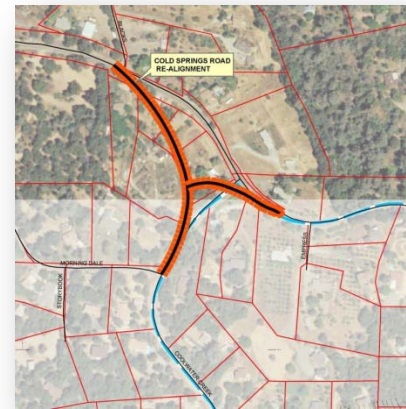
7. ALTERNATIVES NOT SELECTED OR ANALYZED

The intent of the SR 49 Realignment Study is not to establish a complete set of all possible alternatives; rather, the study intends to demonstrate that there are feasible transportation solutions to fulfilling the project purpose and need. Therefore, the alternatives not selected or analyzed in this study are not intended to be precluded from being considered in a PSR.

7.1 Notable Project Alternatives Not Selected

Mallard Lane Conceptual Alignment:

The proposed Mallard Lane Extension is identified as Segment 22 of the 39 individual conceptual roadway segments listed in Figure 5.5. Segment 22 extends from the Cold Springs Road/Coolwater Creek Road intersection to Ray Lawyer Drive, covers a distance of 1.0 miles, and has a travel time of 3 minutes. Alternative alignments 11A through 11D incorporate the use of Segment 22, which was highly recommended by the City of Placerville to be considered as an alignment alternative in the study. According to the City of Placerville, Segment 22 will meet the City of Placerville’s General Plan transportation goal to “support the relocation of Highway 49 to an alternate route through Placerville” which “promotes the development of a circulation system that preserves the historic nature and character of neighborhoods and districts, reinforces neighborhood identity and integrity, and minimizes adverse impacts on hillsides and vegetation.”



Source: Placerville Drive Conceptual Circulation Network



Source: Placerville Drive Conceptual Circulation Network

In addition, this segment is compatible with the City’s Placerville Drive Conceptual Circulation Network Plan. Alternatives incorporating Segment 22 were eliminated in the Level 1 and Intermediate Level 1 screening primarily because one of the key goals of the project emphasizes the use of existing roads to reduce the resources necessary to achieve improved conditions in the SR 49 corridor. The concern was that this segment, which will require new roads and several full-take right-of-way acquisitions of businesses, will require greater resources and have a larger environmental impact than other alternatives. Segment 22 is described in detail as follows:

Cold Springs Road Realignment – Beginning at the Cold Springs Road/Blacks Lane intersection, approximately 500 feet of Cold Springs Road is realigned to the southeast to a relocated Cold Springs Road/Coolwater Creek Road intersection approximately 200 feet

west of its original location. The relocated Cold Springs Road/Coolwater Creek Road intersection requires a 400' realignment of Coolwater Creek Road to the Coolwater Creek Road/Morning Dale Lane intersection. Six (6) or more parcels will be impacted, requiring either full or partial right-of-way acquisitions.

Ray Lawyer Drive Extension to Mallard Lane – Beginning at the Ray Lawyer Drive/Placerville Drive intersection, Ray Lawyer Drive will be extended approximately 0.4 miles to the northwest between Easy Street and Orchard Way, and connecting to Mallard Lane approximately 300' south of Drake Court. Ten (10) or more parcels will be *impacted* requiring either full or partial right-of-way acquisitions, including businesses.

Green Valley Road Realignment – Beginning at the Green Valley Road/Mallard Lane intersection, Green Valley Road will be realigned approximately 0.2 miles to the northeast connecting at a new intersection with the new Ray Lawyer Drive Extension and Debbie Lane. Eight (8) or more parcels will be impacted requiring either full or partial right-of-way acquisitions, including businesses.

Coloma Bypass:

The proposed Coloma Bypass is identified as Segments 25 and 26 of the 39 individual conceptual roadway segments listed in Figure 5.5. Segment 25 extends from the Lotus Road/SR 49 intersection to the Cold Springs Road/SR 49 intersection, covers a distance of 1.2 miles, and has a travel time of 3 minutes. Segment 26 extends from the Marshall Road to the Cold Springs Road/SR 49 intersection, covers a distance of 2.4 miles, and has a travel time of 5 minutes. Alternative alignments in Groups 6 and 11 incorporate the use of segments 26 and 25, respectively, which are the Coloma Bypass options as identified in the Marshall Gold Discovery State Historic Park (MGDSHP) General Plan. These two segments are the only options which fully meet the goals of the MGDSHP General Plan of both removing the alignment of SR 49 from the park and providing the ability to eliminate vehicle traffic on a portion of Main Street in Coloma for pedestrian safety. For these reasons, State Parks – Gold Fields District highly recommended including these segments in an alternative alignment.

The two Coloma Bypass segments require the construction of new bridge(s) across the South Fork of the American River, relocating SR 49 to the north side of the river, and rerouting all vehicular traffic around Main Street in Coloma and the historic core of the park unit. These two conceptual segments options are described in detail as follows:

Segment 25 – Coloma Bypass Option 1: Construct two bridges—one upstream of the Mount Murphy Bridge and a second downstream of the North Beach area--which will create a bypass around Coloma from approximately the corner of Main and Sacramento Streets to the intersection of Lotus Road and SR 49. State Parks views this as the more feasible option.

Segment 26 – Coloma Bypass Option 2: Construct one bridge upstream of the Mount Murphy Bridge that will create a bypass that approximately follows the alignment of Carvers Road to Marshall Road. This option becomes problematic when considering the residential community along Carvers Road and the steep topography towards Marshall Road.

Alternatives incorporating Segments 25 and 26 were eliminated in the Level 1 and Intermediate Level 1 screening primarily because one of the key goals of the project emphasizes the use of existing roads to reduce the amount of resources necessary to achieve improved conditions in the SR 49 corridor. The concern that these segments, which will require one or two bridges across the South Fork of the American River, will require far greater resources and have much larger environmental impacts than other alternatives resulted in them not being recommended to advance to Level 2 Screening.

However, following the Level 1 and Intermediate Level 1 screenings State Parks stated a desire to see alternatives incorporating Segments 25 and 26 evaluated in a PSR. Potential issues associated with these segments include:

- El Dorado County will need to replace the Mount Murphy Bridge regardless of the alignment of SR 49;
- The potential availability of federal funding from the Highway Bridge Program (HBP) to cover nearly 90% of the costs of replacement of the Mount Murphy Bridge; and
- A majority of the Coloma Bypass could be located on State Park right-of-way on the north side of the river. Many of the potential environmental impacts regarding cultural and visual resources are within the park. State Parks will need to consider the potential benefits a bypass will provide to the historic core of the park unit versus the potential environmental impacts the bypass will have on the park and surrounding area.

For a more detailed discussion of the ideas and concerns expressed by State Parks – Gold Fields District regarding the Coloma Bypass options as they relate to the SR 49 Realignment Study, refer to Attachment J-2, “State Parks Letter to EDCTC dated October 26, 2009.”

[SR 49 Route Adoption of 1964:](#)

The SR 49 Route Adoption of 1964 is identified as Segment 36 of the 39 individual conceptual roadway segments listed in Figure 5.5. Segment 36 extends from the Marshall Road/SR 49 intersection to the Western Placerville Drive/U.S. 50 interchange, covers a distance of 7.9 miles, and has a travel time of 9 minutes. Alternative alignment 10 incorporates Segment 36, which is the SR 49 route adopted by the CTC in 1964. On March 19, 1964, the CTC (formerly State Highway Commission) adopted a new alignment for SR 49 between U.S. 50 and Auburn in Placer County in response to the potential construction of the Auburn Dam. The adopted new alignment for SR 49 is identified as Alternative 10 in the SR 49 Realignment Study. Its limits are from U.S. 50 near the El Dorado County Fairgrounds to 0.5 miles west of the South Fork of the American River in Coloma. This alignment was originally adopted as a freeway but was later redesignated a controlled-access highway.

Caltrans began design of the adopted new alignment in 1970. The Environmental Impact Statement (EIS) was submitted to Caltrans Headquarters on September 3, 1975. A prehistoric Native American site (El Dorado No. 58) was discovered within the adopted alignment just north of Thompson Hill Road and final approval of the EIS was held up pending resolution of the matter. At that time, Caltrans shelved the project because of the constraints in funding for highways.

In 1988, the CTC denied El Dorado County’s request for an engineering study to set line and grade for the Coloma Bypass, using the alignment adopted in 1964. The decision was influenced by the extent of development within the 130’ right-of-way prism required for the alignment. Therefore, the 1964 adopted alignment was no longer a viable option. Right-of-way for the 1964 alignment was never secured (see Figure 7.1). In addition, without environmental clearance, the CTC declared that the study will be a wasted effort and that the project was unlikely to be added into the State Transportation Improvement Program (STIP).

Parcels Contiguous with or Contained within the 1964 SR 49 Alignment				
	Structure Value	Land Value	# of Parcels Contiguous with or Contained within the 1964 Alignment	Acres
Totals for All Parcels	\$20,540,868	\$11,784,844	140	1866.76
Average Structure Value	\$146,720			
Average Per Acre Value		\$6,313		
	Structure Value	Land Value	TOTAL ESTIMATED VALUE: STRUCTURES AND LAND	
Totals for Parcels within 130’ ROW 1964 Alignment	\$2,878,264	\$789,122	\$3,667,386	125.00

* Total value of structures that existed within the 130’ ROW of the 1964 alignment as of 2008.
 ** Total value of land, based on an average adjacent land values per acre, that is within the 130’ ROW of the 1964 alignment.
 Data Source: El Dorado County Surveyor’s Office GIS Dept. 2008
 Study Source: EDCTC, 2009

Figure 7.1 – Parcels Contiguous with or Contained within the 1964 SR 49 Alignment

Rescinding the 1964 route adoption was proposed during the 1980’s, but was never approved, and therefore is still an adopted route. As an adopted alignment, it was considered as an alternative alignment in the SR 49 Realignment Study and evaluated based on the same criteria that all other alternative alignments were evaluated by. For more information regarding the 1964 Route Adoption of SR 49, see Appendix L.

7.2 Project Alternatives Not Analyzed

The study did not analyze the following potential project alternatives due to their late identification during the study’s development. However, the potential alternatives should be considered for study in a PSR.

Combella Road Segment and SR 49 Upgrade Alternative: This segment is located along Cold Springs Road, Middletown Road, and Combella Road. The segment begins at the north end of Segment 33 at the intersection of Pierroz Road and Cold Springs Road and continues south on Cold Springs Road to Middletown Road and on to Combella Road which it follows to its intersection with SR 49. This segment will be used in conjunction with other alternative segments that connect to the south end of Segment 33 and allow for the bypass of the existing SR 49/U.S. 50 at-grade intersection. North of the Combella Road/SR 49 intersection, utilization of the existing SR 49 alignment is required. Several options are available with the Combella Road segment to eliminate SR 49 from the park and remain consistent with one of the key goals of the project: (1) SR 49 north to Gold Hill Road west; and (2) SR 49 north with a Coloma Bypass. These portions of existing SR 49 will require significant upgrading. For example, the segment of SR 49 from Combella Road north to the Gold Hill Road/SR 49 intersection may require significant curve correction improvements.

Additional alternatives that can be derived by utilizing the Combella Road Segment are:

- ▣ Follow Segment 25 (Coloma Bypass Option 1) to the existing SR 49 south to the Combella Road/SR 49 intersection. Follow Combella Road to Middletown Road to Cold Springs Road to Pierroz Road to Placerville Drive. From Placerville Drive take Ray Lawyer Drive to Ray Lawyer Drive Extension to existing SR 49. Follow SR 49 to Diamond Springs Parkway and Missouri Flat Road. Take Missouri Flat Road south to Pleasant Valley Road (SR 49), continuing on it to the Pleasant Valley Road/SR 49 intersection in the town of El Dorado. This alternative increases vehicle miles traveled by 3.6 miles but does not increase travel time. Travel time for this alternative is 25.8 minutes, which is less than the travel time for the No-build alternative of 26 minutes.
- ▣ Take Segment 1 (Lotus Road) to Gold Hill Road. Follow Gold Hill Road to the existing SR 49 and take it south to the Combella Road/SR 49 intersection. Take Combella Road to Middletown Road to Cold Springs Road to Pierroz Road to Placerville Drive. Follow Placerville Drive to U.S. 50 to the Missouri Flat Road Interchange. Follow Missouri Flat Road south to Pleasant Valley Road (SR 49), continuing on it to the Pleasant Valley Rd/SR 49 intersection in the town of El Dorado. This alternative increases vehicle miles traveled by 2.6 miles and increases travel time by two minutes.

County Route (SR 49 Alternate Truck Route) Alternative: Alternative alignments such as Alternative 1C (Lotus Rd to Green Valley Rd to North Shingle Rd to Mother Lode Dr to Pleasant Valley Rd to SR 49) and Alternative 3E (Lotus Rd to Green Valley Rd to Missouri Flat Rd to Pleasant Valley Rd/SR 49) could be designated as a County “E” Route to serve as a truck route. Direction signage in Coloma would advise southbound SR 49 truck traffic to take the alternate “E” Route to the town of El Dorado where it would continue southbound on SR 49. Direction signage in the town of El Dorado would advise northbound SR 49 truck traffic to take the alternate “E” Route to the town of Coloma where it would continue northbound on SR 49. This alternative would allow SR 49 to maintain its historic alignment between Coloma and El Dorado while relieving truck traffic impacts to densely populated residential areas and business districts of the City of Placerville and town of Diamond Springs. However, the alternative would not satisfy the project goal of eliminating the at-grade intersection of SR 49 and U.S. 50 or removing the alignment of SR 49 from Marshall Gold Discovery State Historic Park.

8. SYSTEM AND REGIONAL PLANNING

During the Level 2 Screening process the study analyzed whether or not Alternatives 3E, 5G, and 5H were compatible and consistent with relevant state and local plans and projects. The results of that analysis are provided below.

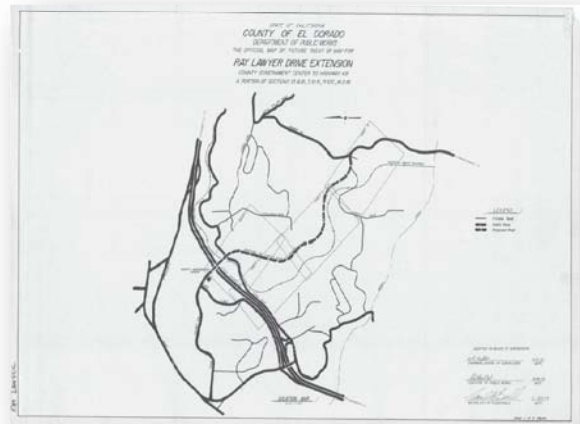
8.1 *SR 49 Transportation Concept Report (TCR)*

The roadway cross section proposed in this study is a 40’ section and is consistent with the Caltrans State Route 49 Transportation Concept Report (TCR), which identifies the concept for SR 49 between Coloma and El Dorado as a 40-foot-wide two-lane conventional highway, where feasible. The proposed cross section includes two 8’-foot shoulders and two 12-foot travel lanes (see Attachment B – Proposed Typical Cross Section).

8.2 El Dorado County General Plan

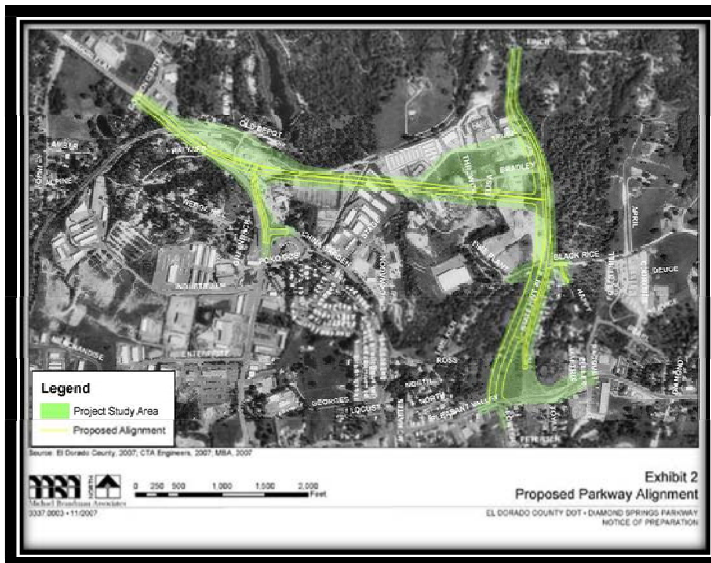
The alternatives explored in this study are compatible with planned zoning and land uses in the project area as identified in the El Dorado County General Plan and policies. The following are some of El Dorado County’s planned key projects based on zoning and land uses identified in the General Plan and were considered in the evaluation of an alternative’s compatibility with the General Plan:

- ▣ SR 49 Widening in Diamond Springs
- ▣ Ray Lawyer Drive Extension
- ▣ Diamond Springs Bypass
- ▣ U.S. 50/Ponderosa Road/South Shingle Road Interchange Improvements
- ▣ U.S. 50/Missouri Flat Road – Phase 1B Interchange Improvements



Source: City of Placerville Public Works

Ray Lawyer Drive Extension: El Dorado County has identified the need for a connection from the proposed U.S. 50/Ray Lawyer Drive interchange (as part of the U.S. 50/Western Placerville Drive Interchange Project) and Ray Lawyer Drive to SR 49 south of the City of Placerville. In 1979, El Dorado County completed a county route adoption that extended



Ray Lawyer Drive south and east parallel to the Sacramento-Placerville Transportation Corridor (SPTC). None of the alternatives presented in this study will preclude the County from constructing this as a stand-alone project.

SR 49 Widening in Diamond Springs: El Dorado County has planned the SR 49 Widening Project located in Diamond Springs on SR 49 between Pleasant Valley Road and Bradley Drive. The project consists of widening SR 49 to a standard two-

lane highway (providing 12-foot lanes and eight-foot shoulders), and creating a frontage road for the adjacent residences for access control. None of the alternatives presented in this study will preclude the County from constructing this as a stand-alone project.

Diamond Springs Bypass: El Dorado County identified the need for a new east-west arterial connecting Missouri Flat Road to Pleasant Valley Road, both east and west of Diamond

Springs. The new arterial will provide needed additional capacity and will remove through traffic from Pleasant Valley Road (SR 49) through “downtown” Diamond Springs--especially at the Pleasant Valley Road/Missouri Flat Road and Pleasant Valley Road/SR 49 intersections. None of the alternatives presented in this study will preclude the County from constructing this as a stand-alone project. The El Dorado County Department of Transportation (DOT) is in the process of preparing an Environmental Impact Report (EIR) for the Diamond Springs Parkway Project. The preliminary roadway design depicts a new parkway beginning at Missouri Flat Road near its intersection with the SPTC, then heading north of China Garden Road eastward to SR 49. The project is identified in the County General Plan (2004) Circulation Map as a planned four-lane divided road and is part of DOT’s five-year Capital Improvement Plan (CIP). Because the El Dorado County DOT is in the process of conducting the CEQA review for the Diamond Springs Parkway Project, it is anticipated that the evaluation of the project’s consistency with applicable planning documents will be conducted during the project EIR.

[U.S. 50/Ponderosa Road/South Shingle Road Interchange Improvements:](#) El Dorado County is proposing a project that provides capacity improvements to the U.S. 50/Ponderosa Road/South Shingle Road Interchange. The project includes widening of the existing U.S. 50 overcrossing to accommodate five lanes and the realignment of the westbound loop on-ramp, ramp widenings, and widening of Ponderosa Road, Mother Lode Drive, and South Shingle Road. None of the alternatives presented in this study will preclude the County from constructing this as a stand-alone project.

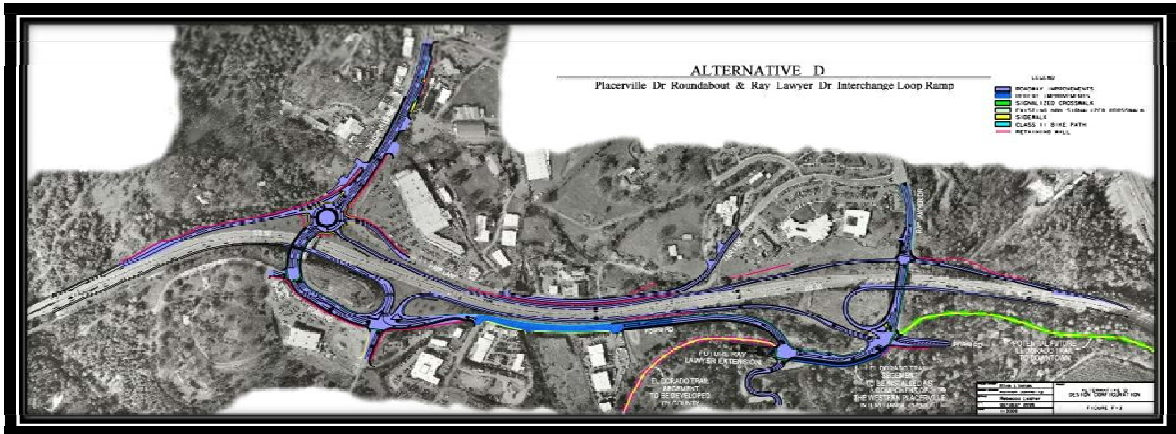
[U.S. 50/Missouri Flat Road – Phase 1B Interchange Improvements:](#) El Dorado County is proposing a project that modifies the existing U.S. 50/Missouri Flat Road interchange, widens the U.S. 50/Weber Creek bridges, and provides bicycle and pedestrian facilities between Missouri Flat Road and Western Placerville Drive/Forni Road interchanges. None of the alternatives presented in this study will preclude the County from constructing this as a stand-alone project.

8.3 City of Placerville General Plan

The City of Placerville General Plan states as a goal under Section III that the City “shall support the relocation of Highway 49 to an alternate route through Placerville”. Therefore, the alternatives explored in this study are compatible with the goals, planned zoning, and land uses in the project area as identified in the City of Placerville General Plan and polices. The following are some of the City’s planned key projects based on zoning and land uses identified in the General Plan that assisted in the evaluation of alternatives concerning their compatibility:

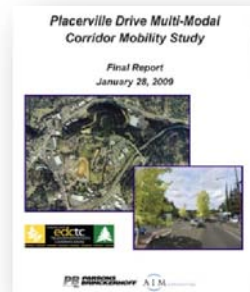
- ▣ U.S. 50/Western Placerville Interchanges Project
- ▣ Placerville Drive Multi-Modal Corridor Mobility Plan

[U.S. 50/Western Placerville Interchanges Project:](#) The City of Placerville is proposing to widen and improve segments of Forni Road, Fair Lane, Placerville Drive, and Ray Lawyer Drive. Improvements to these roadways will be made in conjunction with modifications and improvements to eastbound and westbound U.S. 50 ramps to and from Forni Road, Placerville Drive, and Ray Lawyer Drive. None of the alternatives presented in this study will preclude the City from constructing this as a stand-alone project.



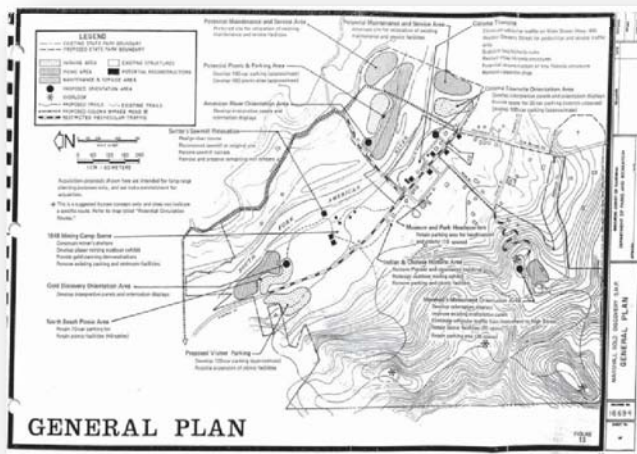
Source: City of Placerville Public Works

Placerville Drive Multi-Modal Corridor Mobility Plan: The Placerville Drive Multi-Modal Corridor Mobility Study focuses on Placerville Drive between the limits of the Placerville Drive/Forni Road interchange on the west, and the new Placerville Drive/U.S. 50 interchange on the east. The plan developed a concept for Placerville Drive that articulates a vision to integrate future land use with a multimodal roadway facility. None of the alternatives presented in this study will preclude the City from implementing the plan.



Source: EDCTC

8.4 Marshall Gold Discovery State Historic Park General Plan



Source: MGDSP General Plan, 1979

The Marshall Gold Discovery State Historic Park (MGDSHP) General Plan was approved in 1979 and acknowledged the threat to the historic environment, the structural stability of buildings, and visitor safety created by traffic on SR 49 through Main Street in Coloma. The MGDSP General Plan recommended the development of a “Coloma Bypass” road, which will help achieve two primary goals for traffic and circulation in the park:

1. Remove the alignment of SR 49 from the park; and
2. Eliminate all vehicular traffic through the park on a portion of Main Street for pedestrian safety and to simulate the park’s historic appearance during the gold rush period.

The MGDSHP General Plan describes two options for a Coloma Bypass which involve the construction of a new bridge(s) across the South Fork of the American River, relocation of the roadway on the north side of the river, and bypassing traffic around Main Street and the historic core of the park. The first option will construct two bridges, one upstream of the existing Mount Murphy Bridge, and a second downstream of the North Beach area, creating a bypass around Coloma approximately from the corner of Main and Sacramento Streets to the intersection of Lotus Road and SR 49. The second option will involve a single bridge upstream of the existing Mount Murphy Bridge and will create a bypass that approximately follows the alignment of Carvers Road to Marshall Road.

Although all the alternatives explored in the SR 49 Realignment Study are compatible with the stated goals identified in the MGDSHP General Plan, only the alternatives that proposed the Coloma Bypass meet the full intent of the General Plan for the park unit.

8.5 Multi-modal Planning Opportunities

The SR 49 Realignment Study evaluated the proposed alternatives for bicycle and pedestrian opportunities and potential conflicts with the El Dorado Transit Authority's various multi-modal transportation plans, the City of Placerville's Non-Motorized Transportation Plan and Pedestrian Plan, the El Dorado County Bicycle Transportation Plan (EDCBTP), and the El Dorado County Sacramento Placerville Transportation Corridor (SPTC) Master Plan.

Bicycle and Pedestrian Opportunities: The EDCBTP identifies rural roads that comprise bicycle transportation corridors within the county (see Figure 8.1). Among these roads are Green Valley Road, North Shingle Road, South Shingle Road, Pleasant Valley Road, and Mother Lode Drive. Many of these roads are being considered as possible alternative alignments for SR 49. The EDCBTP recognizes that new development along these roads could result in increased numbers of commute bicyclists and encourages the installation of Class II Bike Lanes, which can lead to possible improved connectivity within the overall bikeway system.

The proposed SPTC–El Dorado Trail corridor currently extends from the western El Dorado County line to the Camino area just east of Placerville. El Dorado County and the City of Placerville have developed segments of the trail between Missouri Flat Road and Forni Road and from Clay Street in the City of Placerville to Los Trampas Drive near Camino Heights.

Currently, there are two proposed projects within El Dorado Trail corridor, including the SPTC, which will provide a multi-modal transportation corridor extending from Shingle Springs to Camino. The segments proposed for consideration are listed below from east to west, two of which are currently underway:

- ▣ **Main Street to Ray Lawyer Drive in Placerville** – EDCTC and the City of Placerville are working with Caltrans to obtain the right of way necessary to open this segment as a natural trail and to construct a Class I bike path from the intersection of Placerville Drive and Forni Road to Ray Lawyer Drive.
- ▣ **Missouri Flat Road to Mother Lode Drive in El Dorado** - This segment is now open as a natural trail. EDCTC is currently seeking funding to construct a Class I bike

path in this segment from Missouri Flat Road to Mother Lode Drive in the town of El Dorado.

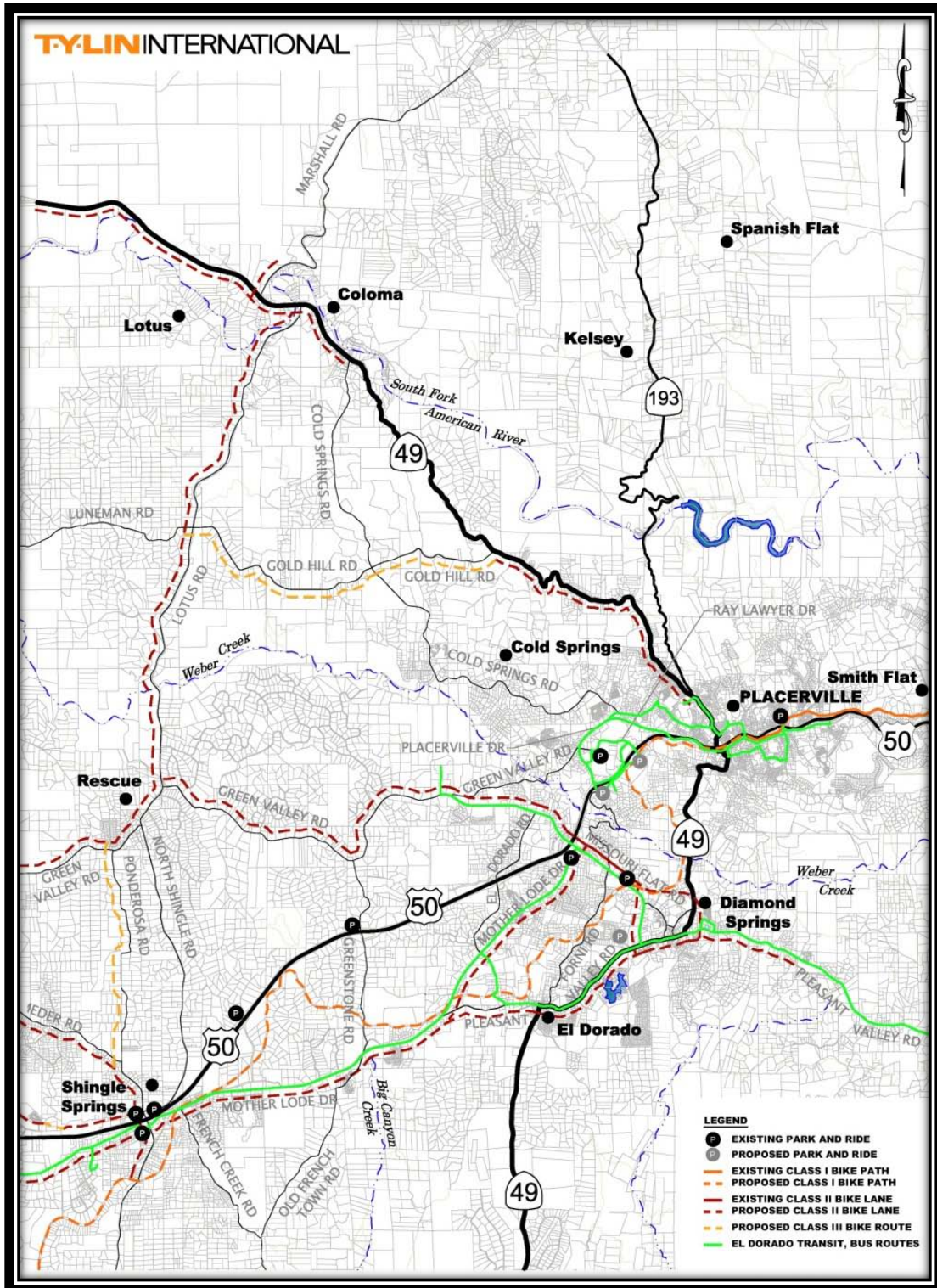


Figure 8.1 Map of Alternative Modes of Transportation (Source: EDC Transit and EDCBTP)

Additional segments of the El Dorado Trail, from Mother Lode Drive in El Dorado to the El Dorado County/Sacramento County line, are proposed by the EDCBTP to be developed with a Class I bike path, linking the El Dorado Trail with the City of Folsom's bikeway system and the American River Bike Trail.

None of the alternatives presented in the SR 49 Realignment Study present any conflicts with the various multi-modal transportation plans previously mentioned.

Transit Opportunities: El Dorado Transit provides general public transit service throughout the County, connecting the communities of Pollock Pines, Camino, Placerville, El Dorado, Diamond Springs, Cameron Park, Shingle Springs and Grizzly Flat. El Dorado Transit offers scheduled fixed-route service, daily commute service to Sacramento, and Dial-A-Ride service in Placerville. El Dorado Transit also provides the Placerville Area Shuttle Service (PASS) and PASS Express, as well as a Trolley service that runs between November 28th and December 23rd in Placerville. El Dorado Transit has eight routes that may be affected by the alternatives evaluated in the SR 49 Realignment Study. Seven routes will be affected by Alternatives 5G and 5H, while Alternative 3E affects only two of the transit routes (see Attachment E-1 "Level 2 Screening – Map of Alternatives"). In addition, there are approximately 10 transit timepoints (key bus stops) located adjacent to the three alternative alignments:

1. Diamond Springs Timepoint 1 (Segment 39; Missouri Flat Transfer Center);
2. Diamond Springs Timepoint 3 (Segment 18; Diamond Springs Mobile Home Park);
3. Diamond Springs Timepoint 8 (Segment 17; El Dorado Transit Offices);
4. Diamond Springs Timepoint 9 (Segment 17; Lake Oaks Drive and Patterson Drive);
5. Diamond Springs Timepoint 10 (Segment 17; Union Mine High School Circle);
6. Diamond Springs Timepoint 11 (Segment 17; Pleasant Valley Road and Oro Lane);
7. Placerville – Eastbound Timepoint 9 (Segment 33; Big 5, Placerville Drive);
8. Placerville – Eastbound Timepoint 10 (Segment 33; M.O.R.E. Workshop);
9. Placerville – Eastbound Timepoint 13 (Segment 32; Hidden Springs Circle); and
10. Placerville – Eastbound Timepoint 14 (Segment 32; Cold Springs Dental).

Because a number of transit stations are located adjacent to the three alternative alignments, it is anticipated that transit service could be disrupted during construction activities. The proposed design for the SR 49 Realignment Project is not known at this time; therefore it cannot be determined whether the project will impact transit operations. It is anticipated that the lead agency will coordinate with El Dorado Transit prior to construction to minimize delays in transit operations; however, a project-specific evaluation of the project's impact on transit facilities and operations will be required during the CEQA review of the SR 49 Realignment Project.

9. TRAFFIC ANALYSIS

9.1 Existing Conditions

To understand the existing traffic flow patterns along the three study alternatives (3E, 5G, and 5H), existing traffic counts were collected during the PM peak hour (between 4 and 6 PM) of an average weekday from available County sources. Based on the traffic counts and capacity thresholds along the study routes, the operating performance of each roadway

segment was described in terms of level of service (LOS). LOS ranges from A through F, which represents driving conditions from the least congested to most congested, respectively. In general, LOS A represents free-flow conditions and LOS F represents severe delay caused by stop-and-go conditions. Figure 9.1 summarizes volume capacity thresholds that were used to calculate LOS during the PM peak hour.

The traffic analysis conducted for the SR 49 Realignment Study did not include an origin-destination study, which is used to determine and analyze traffic travel patterns during a typical day or weekend. Consequently, the operating performances shown for each roadway segment during peak hour traffic levels for existing and future conditions do not reflect the influences of local, tourist, commercial, and through traffic. An origin-destination study will be conducted as part of the PSR to analyze the effects of local, tourist, commercial, and through traffic on existing and future peak hour traffic demands.

Figure 9.2 b below describes the LOS for each segment of the three alternatives during the PM peak hour for the existing conditions and future conditions in the year 2025. For roadway segments, the LOS capacity thresholds given are the combined two-way total volume. For freeway segments on U.S. 50, the LOS is calculated separately by direction, and those thresholds given below are one-way directional totals.

PEAK HOUR VOLUME THRESHOLDS AND LEVEL OF SERVICE FOR STUDY ROADWAYS					
Facility Type	Maximum Peak Hour Volume				
	LOS A	LOS B	LOS C	LOS D	LOS E
2-Lane Minor Highway	90	200	680	1,410	1,740
4-Lane Major Highway	120	290	790	1,600	2,050
2-Lane Arterial	--	--	970	1,760	1,870
4-Lane Arterial – Divided	--	--	1,920	3,540	3,740
2-Lane Freeway (by direction)	1,110	2,010	2,880	3,570	4,010

Source: Fehr & Peers, 2009

Figure 9.1 Peak Hour Volumes Thresholds & LOS for Study Roadways

PM Peak Hour Traffic Roadway Level of Service – Existing / Future Conditions			
Alternative	Segment	LOS	
		Existing	Future*
3E	1 – Lotus Rd from SR 49 @ Coloma to Gold Hill Rd	C	D
	2 – Lotus Rd from Gold Hill Road to Green Valley Rd	D	D
	13 – Green Valley Rd from Lotus Rd to Greenstone Rd	C	D
	28 – Green Valley Rd from Greenstone Rd to Missouri Flat Rd	C	D
	30 – Missouri Flat Rd from Green Valley Rd to IC#4	D	D
	39 – Missouri Flat Rd from IC#4 to Diamond Springs Parkway	D	F
	18 – Missouri Flat Rd from Diamond Springs Parkway to Pleasant Valley Rd (SR 49)	F	F
	17 – Pleasant Valley Rd (SR 49) to SR 49 @ El Dorado	D	F

* Assumes no improvements made to the existing roadway segments.

Figure 9.2 – Peak Hour Traffic LOS by Segment – Existing & Future Conditions

PM Peak Hour Traffic Roadway Level of Service – Existing / Future Conditions			
Alternative	Segment	LOS	
		Existing	Future*
5G	1 – Lotus Rd from SR 49 @ Coloma to Gold Hill Rd	C	D
	27 – Gold Hill Rd from Lotus Rd to Cold Springs Rd	C	C
	23 – Cold Springs Rd from Gold Hill Rd to Coolwater Creek Rd	C	C
	32 – Cold Springs Rd from Coolwater Creek Rd to Pierroz Rd	C	D
	33 – Placerville Dr from Pierroz Rd to Ray Lawyer Dr	C	D
	21 – Ray Lawyer Dr from Placerville Dr to IC#6	C	D
	IC#6 – Ray Lawyer Dr / U.S. 50 Interchange	C	D
	20 – Ray Lawyer Dr Extension from IC#6 to SR 49	C	D
	38 – SR 49 from Ray Lawyer Dr Extension to Diamond Springs Parkway	C	D
	37 – Diamond Springs Parkway from Bradley Dr to Missouri Flat Rd at SPTC Crossing	C	D
	18 – Missouri Flat Rd from Diamond Springs Parkway to Pleasant Valley Rd (SR 49)	F	F
	17 - Pleasant Valley Rd (SR 49) to SR 49 @ El Dorado	D	F
5H	1 – Lotus Rd from SR 49 @ Coloma to Gold Hill Rd	C	D
	27 - Gold Hill Rd from Lotus Rd to Cold Springs Rd	C	C
	23 - Cold Springs Rd from Gold Hill Rd to Coolwater Creek Rd	C	C
	32 - Cold Springs Rd from Coolwater Creek Rd to Pierroz Rd	C	D
	33 - Placerville Dr from Pierroz Rd to Ray Lawyer Dr	C	D
	21- Ray Lawyer Dr from Placerville Dr to IC#6	C	D
	IC#6 - Ray Lawyer Dr / U.S. 50 Interchange	C	D,E
	IC#5 – Placerville Dr / U.S. 50 Interchange from IC#5 to IC#6	C	D,E
	IC#4 – Missouri Flat Rd / U.S. 50 Interchange from IC#5 to IC#4	C	D,E
	39 – Missouri Flat Rd from IC#4 to Diamond Springs Parkway	D	F
	18 - Missouri Flat Rd from Diamond Springs Parkway to Pleasant Valley Rd (SR 49)	F	F
	17 - Pleasant Valley Rd (SR 49) to SR 49 @ El Dorado	D	F

* Assumes no improvements made to the existing roadway segments.

Figure 9.2 – Peak Hour Traffic LOS by Segment – Existing & Future Conditions (continued)

Most of the roadway segments of the three recommended alternatives operate at LOS C or better, except for segments of Lotus Road between Gold Hill Road and Green Valley Road, and Missouri Flat Road, Pleasant Valley Road, and SR 49 (south of U.S. 50). Missouri Flat Road operates at LOS D along the four-lane section just south of U.S. 50 and at LOS F along the two-lane portion just north of Pleasant Valley Road. Traffic operations on U.S. 50 and SR 49 in Placerville are at LOS C or better, which is generally appropriate for the roadway segments leading into Placerville. However, traffic operations in Placerville are controlled by the at-grade traffic signal controlled intersection on U.S. 50 at Canal Street and SR 49, and adjacent closely spaced intersections (south of U.S. 50), which the roadway

segment analysis methodology cannot account for. Field observations indicate congested conditions during the PM peak hour.

About one percent of travel on SR 49 (north or south of the study area) is through travel. Consequently, most trips in the study area have a local origin and/or destination. This information is based on a review of the existing conditions data collected for the study and a review of the base year El Dorado County TDF model. While this information is useful in describing the general characteristics of travel in the study area, it does not provide detail about who is using the facilities, like the percentage of travelers that are tourists and what percentage of tourist traffic is occurring in the peak hours. This data is important for determining if the proposed improvements are addressing the needs of travelers. Therefore, it is recommended that future traffic analysis include some or all of the following to answer these questions:

- ▣ A vehicle license plate survey
- ▣ A vehicle intercept survey
- ▣ Detailed origin/destination analysis

9.2 Future Conditions

The El Dorado County Travel Demand Forecasting (TDF) Model was used to forecast traffic flow patterns during the PM peak hour in the future year 2025. Travel characteristics under year 2025 conditions are expected to be similar to those described above under existing conditions. However, traffic volumes generally increase. In addition, PM peak hour flow on U.S. 50 is more balanced, which is consistent with increased employment in the study area. Figure 9.2 summarizes the operating performance of each study roadway segment during the PM peak hour in terms of LOS, which is based on 2025 forecasted volumes and roadway volume capacity thresholds, assuming no improvements are made to the existing roadways. Compared to existing conditions, most of the study facilities will operate at LOS D or worse, consistent with planned development. Residential and non-residential development growth in the study area is summarized below: (*Source: El Dorado County General Plan Model*)

- ▣ The number of households within the study area is forecast to increase by about 2,900 to a total of about 11,100 households by 2025.
- ▣ The number of jobs within the study area is forecast to increase by about 6,700 to a total of 18,900 jobs by 2025.

10. ENVIRONMENTAL CONSTRAINTS ANALYSIS

10.1 Aesthetics

The 2004 El Dorado County General Plan classifies visual resources into two categories: scenic resources and scenic views. No scenic resources are located immediately adjacent to the proposed three Alternative Alignments; however, one scenic resource (the historic townsite of Coloma--Marshall Gold Discovery State Historic Park) is located along the No-Build Alternative Alignment. The scenic resource is located along SR 49 in the Coloma area, and is identified as Locations 3a and 4b in the El Dorado County General Plan. Caltrans has identified the existing SR 49 alignment as eligible for state scenic highway status. If Caltrans designates SR 49 as a state scenic highway, the County will be required

to adopt a scenic corridor protection program for SR 49, which will protect views and place controls on incompatible land uses along the highway.

Within the proposed Alternative Alignments, there is one scenic view, as defined by the El Dorado County General Plan. The scenic view is in all directions along Cold Springs Road in the Gold Hill area, and provides views of rolling hills and ridgelines. This scenic view is located along Segment 23, which is included in Alternative Alignments 5G and 5H. If either Alternative Alignment is selected, it is likely to have a less-than-significant impact on the scenic view. The area is considered a scenic view for the views of the rolling hills and ridgelines, and modification to the roadway will not impact the scenic view.

The City of Placerville General Plan defines nine subareas within the city limits that provide input to the scenic resources and urban design analysis. Roadway segments considered for the SR 49 Realignment Project are located within three of the nine subareas. The three subareas are 1c, 3b and 7, as defined in the 1989 City of Placerville General Plan Background Report.

According to the City of Placerville General Plan Background Report, Subarea 1c consists of commercial uses in the foreground views with middleground views with scenic value; however, as stated in the General Plan Background Report, the foreground views dominate this subarea. Roadway Segments 21 (Ray Lawyer Drive) and 33 (Placerville Drive) are located within Subarea 1c.

Subarea 3b is predominantly suburban residential with grassland and agricultural areas. As stated in the General Plan Background Report, “Most portions of the residential area have high scenic value as do the grassland and agricultural area.” Roadway Segment 32 and the easternmost portion of Segment 23 is located within Subarea 3b.

Subarea 7 is comprised of rural residential and agricultural uses, and “the area should be considered as having high scenic resource value, particularly with respect to the Route 49 ‘scenic’ corridor” (City of Placerville, 1989b). The northern portion of roadway Segment 20 (the future Ray Lawyer Drive Extension) is located within Subarea 7.

Because the proposed design for the SR 49 Realignment Project is not known at this time, it cannot be determined whether the project will impact scenic resources and/or scenic views. Because Alternative 5G includes two new roadway segments (Segments 20 and 37), Alternative 5G’s visual resources impact is considered potentially significant until a project specific visual resources evaluation can be conducted. In order to determine the project’s effect on visual resources, a project-specific visual resources evaluation will be required during the CEQA/NEPA review of the SR 49 Realignment Project.

10.2 Agricultural Resources

“Farmland of Local Importance” is located adjacent to Segments 1, 2, 13, 23, 27, 28, 30, and 38. “Prime Farmland” is located adjacent to Segment 27 (Gold Hill Road). The El Dorado County General Plan identifies seven areas (Agricultural Districts) that are important to agriculture in the County. The Agricultural Districts are identified primarily by soils, which should be preserved for agricultural use. Portions of the project area (segments 1, 23, and 27) are located within the Gold Hill Agricultural District. Because the proposed design for the SR 49 Realignment Project is not known at this time, it cannot be determined whether the project will result in development of incompatible uses adjacent to

agriculturally zoned parcels. In order to determine the project’s impact on agriculturally zoned parcels, a project-specific agricultural resources evaluation--including evaluating distance of setback from proposed improvements and location of Williamson Act Contract lands with relation to the proposed improvements will be required during the CEQA/NEPA review of the SR 49 Realignment Project.

10.3 Air Quality

The project area is located within the Mountain Counties Air Basin (MCAB) and under the jurisdiction of the El Dorado County Air Quality Management District (EDCAQMD). El Dorado County is designated as non-attainment for the federal ozone standard. Under the state Ambient Air Quality Standards and based on 2004 designations, El Dorado County is designated non-attainment for ozone and PM₁₀. Because the proposed design for the SR 49 Realignment Project is not known at this time, it cannot be determined whether the project will result in exceeding the established federal, state and local air quality standards. In order to determine the project’s effect on air quality emissions (both construction-related and operational), a project-specific air quality evaluation will be required during the CEQA/NEPA review of the SR 49 Realignment Project.

10.4 Biological Resources

Vegetation

The project site occurs primarily within a rural residential area. A mix of annual grassland and oak woodland comprise the majority of the habitat types between residential properties. The following Figure 10.1 is a complete list of the estimated acreage of various habitat cover types observed along the proposed road alignments.

Waters and Wetlands

The alternative alignments affect habitats regulated by the U.S. Army Corps of Engineers (Corps) under Section 404 of the Clean Water Act; the California Department of Fish and Game under Section 1601 of the California Fish and Game Code, the Central Valley Regional Water Quality Control Board under Section 401 of the Clean Water Act and the Porter-Cologne Act. These habitats could consist of ponds, wetland swales and channels and creeks. Numerous wetland features cross or parallel the proposed alignments.

Habitat Type	Proposed Alignments (acres)		
	3E	5G	5H
Oak woodland	53.8	64.9	47.7
Annual Grassland	40.8	33	28.7
Chaparral	5.9	2.9	2.9
Riparian	3.6	2.4	2.7
Rural Residential	21.4	31.6	32.4
Agriculture	0	1.7	1.7
Swale	0.87	0.83	1.05
Pond	1.2	0.45	0.45
Channel	0.98	0.09	0.09
Developed	66.8	72.9	88.1
Total	194.35	210.77	205.79

Source: Padre Associates, 2009a

Figure 10.1 Habitat Acreage Estimate

During surveys, wetland habitat was categorized by channel, swale, and/or pond habitat. For a list of acreage estimates for the proposed alignments, see Figure 10.1. Potential regulated waters and wetlands (in the form of channel/swale habitat and pond habitat) for each proposed alignment segment is depicted in Figures 3A-G of the Environmental Constraints and Opportunities Analysis (see Attachment H). Wetland acreage and locations are estimates based on windshield surveys and a review of topographic and U.S. Fish and Wildlife National Wetland Inventory (NWI) maps.

Vegetated roadside ditches, swales, ponds and creeks may be considered jurisdictional waters of the United States or wetlands regulated by the Corps and California Department of Fish and Game (CDFG). A preliminary jurisdictional delineation is recommended to determine whether the features mapped within the proposed alignments are subject to jurisdiction of the Corps and CDFG.

Soils

There are approximately 17.21 acres of serpentine soils on Alternative Alignment 3E and 14.35 acres on Alternative Alignments 5G and 5H. The majority of the serpentine soils are in the vicinity of Lotus Road between Gold Hill and Green Valley Roads. Serpentine rock and soils contain naturally occurring asbestos, a hazardous material that is regulated by the County of El Dorado and the State of California.

Special-Status Species

Plants: The results of a California Natural Diversity Database (CNDDDB) query indicate that there were three special-status plant species recorded within one mile of the proposed alignments (CNDDDB, 2009). These species include: Layne's ragwort (*Senecio layneae*), Jepson's onion (*Allium jepsonii*), and Red Hill soaproot (*Chlorogalum grandiflorum*). In addition to these three plants, Brandegee's clarkia (*Clarkia biloba* ssp. *brandegeae*) and Stebbins' morning glory (*Calystegia stebbinsii*) have the potential to occur along the proposed alignments based on their soil and/or habitat preferences.

Layne's ragwort is a federally listed threatened and California-listed rare species. This species has the potential to occur along roadsides within the proposed alignments on serpentine soils. Two known occurrences of Layne's ragwort have been recorded along proposed Alignment 3E, and one known occurrence has been recorded along all three proposed alignments.

Jepson's onion is a CNPS List 1B plant species. This species has the potential to occur along roadsides within the proposed alignments on serpentine soils. The nearest recorded occurrence to the project site is within a quarter mile south of Alignment 3E.

Red Hills soaproot is a CNPS List 1B plant species. This species has the potential to occur near the proposed alignments on serpentine soils. The nearest recorded occurrence to the project site is approximately 0.75-mile west of Alignment 3E.

Stebbins' morning glory is a federal- and state-listed endangered plant species. This species has the potential to occur near the proposed alignments on serpentine soils. The nearest recorded occurrence to the project site is approximately 3.75 miles west of all the proposed alignments.

Brandegees clarkia is a CNPS List 1B species. This species has the potential to occur along roadsides within the proposed alignments. The nearest recorded occurrence to the project site is approximately two miles east of Alignment 5H along the current SR 49 alignment.

Based on the proximity of rare plant species to the proposed alignments, surveys should be conducted along the selected alignments, and in particularly areas with serpentine soil. Surveys should be conducted within the blooming periods of the species of interest.

Wildlife: The results of a California Natural Diversity Database (CNDDDB) query indicate that there were three special-status wildlife species recorded within one mile of the alternative alignments (CNDDDB, 2009). These species include Foothill Yellow-Legged Frog (*Rana boylei*), Northern Pacific Pond Turtle (*Actinemys marmorata*), and Tri-Colored Blackbird (*Agelaius tricolor*). In addition to these two species, California red-legged frog (*Rana aurora draytonii*), California tiger salamander (*Ambystoma tigrinum*), and valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) have the potential to occur along the proposed alignments based on their historical range and/or habitat preferences.

California red-legged frog (CRLF) is a federally listed threatened species and a California Species of Special Concern. The closest occurrence of a CRLF to the project site is one single juvenile frog seen in May of 2005 on the eastern edge of Folsom Lake, approximately eight miles from the project site. However, this occurrence is unverified (Barry, 2008). The closest critical habitat is located near Spivey Pond approximately eight miles from the easternmost road segment alignment. Spivey Pond is the closest verified CRLF occurrence to the proposed alignments approximately 12 miles east of the proposed alignments. Based on a review of aerial photography and topographic maps of the area surrounding the proposed alignment, there are many small farm ponds and channels near the proposed alignments that could provide habitat for the CRLF. To properly assess the habitat within a one-mile radius of the project site, a CRLF Site Assessment is recommended.

Valley elderberry longhorn beetle (VELB), a moderate-sized, brightly colored, and sexually dichromatic beetle, was listed as a threatened species by the USFWS on August 10, 1980. The likelihood of habitat for the VELB along the proposed alignments is high. The closest reported occurrence of the VELB to the project site is a cluster of blue elderberry shrubs containing VELB exit holes on the eastern edge of Folsom Lake, approximately seven miles from the project site. Critical habitat for the VELB occurs along the American River Parkway in Sacramento, approximately 20 miles from the project site. To properly identify blue elderberry shrubs, the obligate host plant of the VELB, a spring survey conducted during the blooming season (March through July), is recommended.

Northern Pacific pond turtle (NPPT) is a California Species of Special Concern. This species could occur within ponds or creeks along the proposed alignments. There is one known occurrence one mile east of Alternative Alignment 5G.

Foothill yellow-legged frog (FYLF) is a California Species of Special Concern. This species has the potential to occur within streams along the proposed alignments. There is a known population of FYLF on Indian Creek within 0.75 mile from the northern portion of the proposed alignments.

California tiger salamander (CTS) is a Federal Threatened species and California Species of Special Concern. Portions of the project site are at the upper limits of the species altitude range; however, CTS has the potential to occur within stockponds or vernal pools near the proposed alignments. The nearest known occurrence of this species is approximately 21 miles southwest of the project site.

Tricolored blackbird is a California Species of Special Concern. This species has the potential to occur within riparian habitat along the proposed alignments. The nearest known occurrence of this species is approximately one mile east of proposed Alternative Alignments 5G and 5H.

10.5 Cultural Resources

In October 2009, staff of the North Central Information Center (NCIC) of the California Historical Resources Information System conducted a records search of the study area. The records search indicates that limited portions of the project area were previously surveyed for cultural resources. Of the three alternative alignments (3E, 5G, and 5H), at least 27 past cultural resource surveys have covered a portion of one of the alternatives, bisected one of them, or were completed immediately adjacent to the proposed roadway alignment. The records search found that 40 prehistoric and historic-period cultural resources were recorded within one-eighth mile of one of the alternative routes. The sites include prehistoric bedrock milling sites, lithic scatters, and habitation locales, as well as historic period mining features, ditches, roads, refuse scatters, standing structures, cemeteries, water towers, roads, and a ranch complex.

Review of the above referenced historic maps and ethnographic sources did not identify any named Nisenan settlements along the three alternative alignments, although several are located nearby. Such village sites include *Pul Pull Mul* along Webber Creek, *In Dak* near Placerville, and *On Cho Ma* near Diamond Springs. The presence of numerous archaeological sites with bedrock mortars, and some with midden, indicate that small, seasonal villages were most likely situated within the study area. In addition to suggesting the location of historic features across the landscape, the historic references consulted help to define a range of expectations. It is anticipated that other features, related to gold mining, homesteading, agriculture, and infrastructure, are present within the study area.

The relatively few cultural resource surveys conducted within the study area produced a relatively large number of resources. The records search results indicate that portions of the potential realignment routes were previously surveyed (26 percent). A total of 40 cultural resources were documented immediately adjacent or within one eighth of a mile of one of the alternative routes. Documented resources include prehistoric bedrock milling sites, lithic scatters, and habitation locales, as well as historic-period mining features, ditches, roads, refuse scatters, standing structures, cemeteries, water towers, roads, and a ranch complex. Of the 40 cultural resource sites in the study area, approximately six lie within or adjacent to a potential alignment. The segment of Lotus Road, which follows the original Sacramento to Coloma Road, is a state historical landmark. While the significance of a few of the resources within the study area has been evaluated (per the National Register of Historic Places [NRHP] and California Register Historic Resources [CRHR] criteria), most have not. There is a high probability of encountering additional cultural resource sites that reflect the range of prehistoric and historic land uses documented herein.

In order to fully characterize the presence of cultural resources that could be impacted by the proposed project, an intensive pedestrian survey of all components of the preferred alternative is recommended. As such, areas to be used for equipment staging or material lay-down should be identified early in the planning process so that they may be included in the cultural inventory. Areas that were previously surveyed using current professional standards do not merit re-survey. In the event that prehistoric or historic-period resources are identified within a portion of the project site, complete avoidance may be the preferable strategy. If complete avoidance is not feasible, an evaluation of the resources' significance and integrity will be required.

Should the project require federal permitting, Section 106 of the National Historic Preservation Act will apply. In such a case, additional consultation with the lead federal agency and the California State Historic Preservation Officer (SHPO) will be required. Any resource that may be impacted should be evaluated relative to the criteria for listing on the National Register of Historic Places. The lead federal agency will be responsible for recommending whether specific resources are significant, and will play a leading role, in cooperation with the local lead agency for CEQA, in a finding of effect on the resources and the appropriate means of resolving adverse effects.

Finally, continued consultation with local Native American groups with knowledge of cultural resources in the project area (including but not limited to the Shingle Springs Band of Miwok Indians, the El Dorado Miwok Tribe, the El Dorado County Indian Council, and the Nashville-El Dorado Miwok), and the El Dorado Historical Society is recommended in order to identify potential undocumented resources.

10.6 Geology and Soils

Naturally Occurring Asbestos

Based on the El Dorado County Naturally Occurring Asbestos Review Area Map (July 22, 2005), all three alternative alignments have road segments that are located within areas "More Likely to Contain Asbestos". Road Segments 1, 2, 13 and 27 are located within areas "More Likely to Contain Asbestos" and within "Quarter Mile Buffer for More Likely to Contain Asbestos or Fault Line". Although it is unknown whether NOA occurs in these areas, there is the potential for NOA occurrence and disturbance. Based on this review, development of the three Alternative Alignments have the potential to disturb NOA.

Seismic Activity

Fault systems mapped in western El Dorado County include the West Bear Mountains Fault; the East Bear Mountains Fault; the Maidu Fault Zone; the El Dorado Fault; the Melones Fault Zone of the Clark, Gillis Hill Fault; and the Calaveras-Shoo Fly Thrust. No active faults have been identified in El Dorado County. One fault, part of the Rescue Lineament-Bear Mountains fault zone, is classified as a well-located late-Quaternary fault; therefore, it represents the only potentially active fault in the County. It is part of the Foothill Fault Suture Zone system, which was considered inactive until a Richter scale magnitude 5.7 earthquake occurred near Oroville on August 1, 1975. This fault is located near road Segment 2 (Lotus Road), which is part of Alternative Alignment 3E. All other faults located in El Dorado County are classified as pre-Quaternary (inactive) (El Dorado County General Plan Draft EIR, 2003).

Erosion

All construction will be consistent with the requirements of the County's Grading Ordinance and Storm Water Management Plan for Western El Dorado County. Application of these requirements and measures will prevent substantial erosion or topsoil loss. Following construction, all disturbed areas not paved will be revegetated consistent with measures to be identified within the Storm Water Pollution Prevention Plan (SWPPP) to ensure the long-term minimization of erosion and topsoil loss potential.

Unstable Soils

According to the United States Department of Agriculture, Soil Conservation Service's Soil Survey of El Dorado Area, California, dated April 1974, there are five soil associations in the western part of El Dorado County: Auburn-Argonaut association; Boomer-Auburn association; Rescue association; Serpentine rock land; and Auberry-Ahwahnee-Sierra association. The soils in these associations formed in material from weathered slates, schist's, metabasic igneous rocks, acid igneous rocks, basic igneous rocks, and serpentine rocks. If roadway modifications are proposed in areas where soils are likely to have moderate shrink-swell potential, the geotechnical characteristics of the soil should be described through field and laboratory tests prior to roadway design.

10.7 Hazards and Hazardous Materials

Site reconnaissance activities and government databases searches were conducted to acquire addresses for flagged properties of potential environmental concern along the project alignment. The results of the site reconnaissance and the database search are summarized in Figure 10.2.

Historically, the maintenance of railroad easements typically included the application of arsenic and/or petroleum products for weed control. The former Southern Pacific Railroad (SPRR) easement, which is now part of the El Dorado Trail, crosses Missouri Flat Road approximately 0.87 miles southeast of U.S. 50 (Alternative Alignment 3E, Segment 39). Previous grading and construction activities at this location appear to have removed any potential environmental concerns associated with past activities within the former SPRR easement. The northern portion of Segment 20 runs adjacent to the former SPRR easement. If planned grading and/or excavation activities encroach within the former SPRR easement, then soil testing for these contaminants prior construction activities may be warranted.

Several active LUST sites have been identified along the alternative alignments. Road improvement activities at these locations are not anticipated to come in contact with contaminated soil and/or groundwater. However, depending on road improvement activities at these locations, existing groundwater monitoring wells located in the subject roads and/or adjacent to the subject roads may be required to be abandoned prior to implementation of road improvement activities, and then replaced upon completion of those activities.

10.8 Hydrology and Water Quality

Hydrology

The alternative alignments are located primarily within the South Fork American River and Cosumnes River watersheds. The major tributaries contributing flow directly into the South Fork American River are Silver Fork 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. The southern portion of the project area (along Pleasant Valley Road) is located within the Cosumnes River Watershed.

Potential flooding may occur where the alternative alignments cross over and/or run adjacent to rivers, streams and creeks. Based on the site reconnaissance completed and a review of USGS topographic maps, Alternative Alignment 3E runs adjacent to and/or crosses the American River, Granite Canyon Creek, Granite Creek, Weber Creek and Indian Creek, Dry Creek and Mound Springs Creek. Starting at Four Corners, Alternative Alignments 5G and 5H run adjacent to and/or cross Cold Springs Creek, Hangtown Creek, and Weber Creek.

Database Review of Properties of Potential Environmental Concern Adjacent to the Project Alignment					
Segment	Alternative Alignment	Facility Name and Address	Facility Address	Case Type	Site Status
30	3E	El Dorado County Corp Yard	2441 Headington Road, Placerville	LUST Site	Case-closed, March 19, 1996
18	3E, 5G, and 5H	Sierra Door & Supply	4415 Missouri Flat Road, Placerville	LUST Site; gasoline; aquifer used for drinking water	Open – site assessment complete; eligible for closure per EMD (9-30-09)
18	3E, 5G, and 5H	Former Pacific Bell	281 Industrial Boulevard, Placerville	LUST Site; gasoline; aquifer used for drinking water	Open – verification monitoring (semi-annual).
18	3E, 5G, and 5H	Former Celebrity Plating	4502 Missouri Flat Road, Placerville	DTSC – Hazardous Waste Management Program	Active – soil and groundwater affected by metal plating (chrome)
18	3E, 5G, and 5H	Former Teters Auto Wreckers	4487 Missouri Flat Road, Placerville	Rural County Survey Program	Site Screening for potential contamination from lead, PCBs, waste oil and mixed oil
17	3E, 5G, and 5H	Steve's Cheaper Mart (Tower No. 182)	130 Pleasant Valley Road, Diamond Springs	LUST Site; gasoline; aquifer used for drinking water	Open – remediation; groundwater extraction and soil vapor extraction
17	3E, 5G, and 5H	Poor Red's	6221 Pleasant Valley Road, El Dorado	LUST Site	Case-closed; September 11, 1996
23	5G and 5H	Cold Springs Store	1628 Cold Springs Road, Placerville	LUST Site; gasoline; aquifer used for drinking water	Open – remediation; vapor intrusion and water wells impacted
33	5G and 5H	Shell Service Station	150 Placerville Drive (at Armory Drive), Placerville	LUST Site; gasoline; aquifer used for drinking water	Open – verification monitoring
37	5G	Western El Dorado Recovery Systems MRF	4100 Throwita Way, Placerville	Solid Waste Facility – Transfer/Processing Facility	CIWMB Permit No. 09-AA-004. No violations reported
37	5G	WEDRS – Green Waste Recycling Center	4100 Throwita Way, Placerville	Solid Waste Facility – Composting	CIWMB Permit No. 09-AA-006. No violations reported
37	5G	WEDRS – CDI Recovery Operation (MVCDI)	4100 Throwita Way, Placerville	Solid Waste Facility – Transfer/Processing Facility	CIWMB Permit No. 09-AA-007. No violations reported
Notes: CDI = Construction Debris and inert material CIWMB = California Integrated Waste Management Board DTSC = Department of Toxic Substances Control LUST = Leaking Underground Storage Tank MRF = Material Recovery Facility Source: Padre Associates, 2009b					

Figure 10.2 Properties of Potential Environmental Concern

According to the Federal Emergency Management Agency (FEMA) Maps, a majority of the project area is located in an area determined to be outside of the 0.2 percent annual chance floodplain (500 year flood). However, road Segment 13 (Green Valley Road) parallels Dry

Creek and is located in Zone A, which is a special flood hazard area subject to inundation by the one percent annual chance flood. Segment 1 (Lotus Road) is in the vicinity of areas designated as Zone A; however, the roadway does not appear to be located immediately adjacent to Zone A. Segment 2 (Lotus Road) crosses Weber Creek, and at the creek crossing, the area is designated Zone A. Drainage studies of the selected alignment will be required to ensure that drainage conditions are at a level consistent with pre-project conditions.

Water Quality

Construction of any of the alignments will be subject to the National Pollutant Discharge Elimination System (NPDES) permit, which requires the use of Best Management Practices (BMPs), as outlined in the *Storm Water Management Plan for Western El Dorado County (SWMP)*, to minimize water quality impacts from construction activities. Coverage for the project under the Statewide General Permit for Discharges of Storm Water Associated with Construction Activity, Order No. 99-08 DWQ will be required prior to the beginning of construction. In accordance with the provisions of the General Permit and the SWMP, preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) will be required to reduce or minimize discharge of pollutants from construction activities. Implementation of BMPs and the NPDES permit will minimize water quality impacts resulting from construction activities.

10.9 Land Use and Planning

The primary applicable land use plans within the project area are the 2004 El Dorado County General Plan, the 1989 City of Placerville General Plan, and the 1978 Marshall Gold Discovery State Historic Park General Plan. A detailed review of the project's consistency with the goals, objectives, and policies of the El Dorado County General Plan, the City of Placerville General Plan, and the Marshall Gold Discovery State Historic Park General Plan will be required during the CEQA/NEPA review. The alternative alignments are consistent with the land use plans specified in the aforementioned General Plans.

The 2005 El Dorado County Bicycle Transportation Plan identifies bicycle improvements along a number of the roadway segments proposed for realignment. Class II bicycle lanes are proposed along Lotus Road (Segments 1 and 2), Green Valley Road (Segments 13 and 28), and Pleasant Valley Road (Segment 17). Class III bicycle routes are proposed along Gold Hill Road (Segment 27). It is anticipated that realignment of SR 49 along any of the proposed alignments will result in the development of Class I bicycle paths, Class II bicycle lanes, and Class III bicycle routes consistent with the 2005 Bicycle Transportation Plan.

10.10 Noise

For the purposes of noise analysis, noise levels are measured based on their effect to noise-sensitive receptors, such as residences, schools, places of worship, and recreational areas, all of which are located within or adjacent to the alternative alignments. Because the proposed design for the SR 49 Realignment Project is not known at this time, it cannot be determined whether the project will result in exceeding the established noise levels as defined by the applicable General Plan Noise Elements (e.g., El Dorado County General Plan Health, Safety and Noise Element and the City of Placerville Health and Safety Element). In order to determine the project's effect on the noise environment (both construction-related and

operational), a project-specific acoustic evaluation will be required during the CEQA review of the SR 49 Realignment Project.

10.11 Population and Housing

All segments within the three alternative alignments are immediately adjacent to residential land uses (with the exception of Segments 18, 33, and 37). In some cases, existing residences are situated near the existing roadway. Because the proposed design for the SR 49 Realignment Project is not known at this time, it cannot be determined whether the project will require removal of residential structures and displacement of residents. It is anticipated, because of the narrow roadway corridors and close proximity of existing residences to the roadways that residences may require demolition, therefore displacing residents. A project-specific evaluation of the project's impact on housing and potential displacement of residents will be required during the CEQA review of the SR 49 Realignment Project.

10.12 Public Services

The El Dorado County Sheriff's Office provides service to the unincorporated areas of the County, while the City of Placerville Police Department provides service to the City of Placerville.

The project area is serviced by three fire protection districts: El Dorado County Fire Protection District (FPD), the Rescue FPD, and the Diamond Springs-El Dorado FPD. Fire stations 27 (6051 Gold Hill Road, Placerville), 73 (4302 Highway 49, Pilot Hill) and 74 (5122 Firehouse Road, Lotus) are located within the project area.

Six schools have been identified adjacent to the three Alternative Alignments: Sutter's Mill Elementary School (adjacent to Segment 1); El Dorado Adult School (adjacent to Segment 17); El Dorado Parent Participation Preschool (adjacent to Segment 21); Indian Creek School, the El Dorado County Office of Education: Charter Community School (adjacent to Segment 28); and Herbert Green School (adjacent to Segment 39).

Two education facility offices are located adjacent to the three Alternative Alignments: El Dorado Union School District (adjacent to Segment 18) and the El Dorado County Office of Education (adjacent to Segment 28).

One park facility is located along Segment 1: Henningsen Lotus Park (950 Lotus Road). The park offers a variety of active and passive recreation opportunities. Located on the South Fork American River, the park provides a boat launch and beach area. The park provides two soccer fields and a lighted softball/little league complex that provides year round youth sports.

Development of the SR 49 Realignment Project will not result in the need for new police, fire, school or park facilities; however, roadway widening or realignment may require right-of-way acquisition of police, fire, school or park facilities adjacent to existing roadways. Additionally, development of the SR 49 Realignment Project may result in some delayed emergency response times. It is anticipated that the construction contractor will be required to coordinate with the appropriate public services agencies to ensure delayed emergency response times will be minimized. Because the proposed design for the SR 49 Realignment Project is not known at this time, it cannot be determined whether the project will impact

police, fire, school or park facilities or response times. A project-specific evaluation of the project's impact on public service facilities and response times will be required during the CEQA review of the SR 49 Realignment Project.

10.13 Recreation

The 2005 El Dorado County Bicycle Transportation Plan identifies bicycle improvements along a number of the roadway segments proposed for realignment. Class II bicycle lanes are proposed along Lotus Road (Segments 1 and 2), Green Valley Road (Segments 13 and 28), and Pleasant Valley Road (Segment 17). Class III bicycle routes are proposed along Gold Hill Road (Segment 27). It is anticipated that realignment of SR 49 along any of the alternative alignments will result in the development of Class I bicycle paths, Class II bicycle lanes, and Class III bicycle routes consistent with the 2005 Bicycle Transportation Plan. Development of proposed bicycle facilities consistent with the 2005 Bicycle Transportation Plan is considered a beneficial effect of the SR 49 Realignment Project.

One park facility is located along Segment 1: Henningsen Lotus Park (950 Lotus Road). The park offers a variety of active and passive recreation opportunities. Located on the South Fork American River, the park provides a boat launch and beach area. The park provides two soccer fields and a lighted softball/little league complex that provides year-round youth sports.

It is not anticipated that the development of the SR 49 Realignment Project will result in the need for new park facilities; however, it is possible that development of the SR 49 Realignment Project will result in the need of right-of-way acquisition of park property. Because the design for the SR 49 Realignment Project is not known at this time, it cannot be determined whether the project will impact recreation facilities. A project-specific evaluation of the project's impact on recreation facilities and response times will be required during the CEQA review of the SR 49 Realignment Project.

10.14 Transportation

El Dorado Transit provides transit service throughout the county, connecting the communities of Pollock Pines, Camino, Placerville, El Dorado, Diamond Springs, Cameron Park, Shingle Springs and Grizzly Flat. There are approximately 10 transit timepoints located adjacent to the three Alternative Alignments. Because a number of transit stations are located adjacent to the three Alternative Alignments, it is anticipated that transit service could be disrupted during construction activities. Because the proposed design for the SR 49 Realignment Project is not known at this time, it cannot be determined whether the project will impact transit operations. It is anticipated that the EDCTC will coordinate with El Dorado Transit prior to construction to minimize delays in transit operations; however, a project-specific evaluation of the project's impact on transit facilities and operations will be required during the CEQA review of the SR 49 Realignment Project.

10.15 Conclusions

Based on a review of the available data, site visits, and consultation with interested parties, no environmental constraints were identified that will impede development of any of the three alternative alignments; however, wetland, endangered species and cultural resources permits will likely be required for project development, as well as the development of detailed CEQA/ NEPA analyses in subsequent project development phases.

This feasibility study anticipates that the project may have a significant effect on the environment and, therefore, the SR 49 Realignment project anticipates that the CEQA and NEPA environmental impact analyses will be required in subsequent project phases. While it is anticipated that these impact analyses will be reported in a CEQA Environmental Impact Report and a NEPA Environmental Assessment, the final determination of documentation requirements will rest with the respective CEQA and NEPA lead agencies. Other regulatory approvals will likely require analysis, reporting, coordination and permitting, include a streambed alteration agreement (California Department of Fish and Game), water quality certification (California Regional Water Quality Control Board), federal endangered species act (U.S. Fish and Wildlife Service) and wetlands/Waters of the United States permitting (U.S. Army Corps of Engineers).

11. RIGHT OF WAY

The three recommended alignments in this feasibility study are comprised primarily of existing roadways that will require modifications to meet Caltrans' two-lane conventional highway standards. The standard right-of-way width for a two-lane conventional highway per Caltrans standards is 130 feet for new construction; however, all but two of the roadway segments proposed are existing road segments. For rehabilitation type projects, the Caltrans Design Information Bulletin (DIB) 79-03 indicates a minimum right-of-way width of 82 feet to accommodate the minimum cross section components specified [82' = 24' (12'+12' lanes) + 16' (8'+8' shoulders) + 6' (3'+3' chokers) + 36'(18'+18' catch to hinge)]. Under severe constraints (i.e. limited to edge of shoulder to edge of shoulder), the minimum right-of-way width is the proposed cross section width of 40 feet [40' = 24' (12'+12' lanes) + 16' (8'+8' shoulders)]. Therefore, as a result of the proposed roadway widenings required for development of the SR 49 Realignment Project, right-of-way acquisitions will be required of commercial, industrial, residential, and agricultural properties, as well as police, fire, school, and/or park facilities adjacent to existing roadways.

12. UTILITIES

Pacific Gas & Electric (PG&E) supplies electricity and natural gas within the project area. Water service within the project area is provided by the El Dorado Irrigation District. AT&T provides telephone service within the County.

Because the proposed design for the SR 49 Realignment Project is not known at this time, it cannot be determined whether the project will require utility relocation; however, it is anticipated that widening and/or realigning the existing roadways will require some overhead and underground utility relocation. In the event that utility relocation is required, it is anticipated that Caltrans will coordinate with local utility providers early in the planning process to ensure that existing infrastructure in the project area is not damaged during construction activities, and that planned improvements to the underground utilities in the project area are coordinated with the roadway improvements. It is also anticipated that Caltrans will coordinate utility relocations with construction contractors and the various utility companies to ensure that the relocations are consistent with the project schedule and project design, and that the potential for interruption to service is minimized.

13. PROJECT COSTS

Conceptual preliminary construction costs for the three recommended alternatives were estimated and are summarized in Figure 13.1 below. For detailed cost estimates, refer to Attachment F.

Alignment	Conceptual Construction Cost* (in millions)
3E	\$17.4
5G	\$28.8
5H	\$23.6

* Estimated costs are for construction only. Excludes right-of-way and engineering support costs.

Figure 13.1 Conceptual Construction Costs Summary

14. COMMUNITY INVOLVEMENT

Public involvement and outreach were major components of the SR 49 Realignment Study. The EDCTC was committed to engaging the public in all phases of transportation planning during the study. In an effort to engage the general public in the development of the SR 49 Realignment Study and involve a broad range of potentially affected interests, the EDCTC Board ratified the following groups and organizations on February 5, April 2, and June 4, 2009, as members of the SR 49 Realignment Study Stakeholder Advisory Committee (SAC):

- ▣ Broadway Village Association
- ▣ California Outdoors
- ▣ California State Parks – Gold Fields District
- ▣ California Trucking Association
- ▣ Coloma Lotus Valley Community Association
- ▣ El Dorado Citizens for Smart Growth
- ▣ El Dorado County Office of Education
- ▣ El Dorado Youth Commission
- ▣ El Dorado County Parks and Recreation Commission
- ▣ El Dorado County Chamber of Commerce
- ▣ El Dorado County Historical Society
- ▣ El Dorado County Office of Emergency Services
- ▣ El Dorado Union High School District
- ▣ Farm Trails
- ▣ Friends of the Diamond Springs – El Dorado Community
- ▣ Greenstone Country Owners Association
- ▣ No Gridlock Committee
- ▣ Placerville Downtown Association
- ▣ Placerville Drive Business Association
- ▣ Sierra Club Maidu Group
- ▣ Taxpayers Association of El Dorado County
- ▣ Trails Now

The purpose of the SAC was to provide both policy and technical guidance to the EDCTC during the development of the SR 49 Realignment Study. The SAC was responsible for:

- Representing their constituents' key issues and concerns and distributing project information to their constituency.
- Assisting the EDCTC and PDT in evaluating the project alternatives by helping establish the performance criteria to be used for screening the various project alternatives.
- Meeting with the EDCTC and other key stakeholders during the development of the study.

The study conducted six SAC meetings and two public open houses. The SAC meetings and public open houses were held on the following dates:

- ▣ SAC Meeting #1 February 25, 2009
- ▣ SAC Meeting #2 March 30, 2009
- ▣ Open House #1 April 30, 2009
- ▣ SAC Meeting #3 May 18, 2009
- ▣ SAC Meeting #4 June 24, 2009
- ▣ SAC Meeting #5 July 22, 2009
- ▣ SAC Meeting #6 September 28, 2009
- ▣ Open House #2 October 14, 2009

The project introduction, Purpose and Need, and Screening Criteria were presented to the public at Open House #1 on April 30, 2009. The results of the Level 1, Intermediate Level 1, and Level 2 Screening processes were presented to the public at Open House #2 on October 14, 2009. The purpose of the open houses were to provide an introduction of the project, an overview of the study process, and present key highlights from the State Route 49 Realignment Study, including the project's purpose and need, history, schedule, and alternatives being discussed. Attendees had the opportunity to discuss the project with Project Team members from Caltrans, the El Dorado County Department of Transportation, El Dorado Transit, the EDCTC, and project consultant T.Y. Lin International.

Public Comments and Concerns:

The public outreach implemented for the SR 49 Realignment Study resulted in numerous public comments. Some of the comments were:

- ▣ Safety is an important issue to the public. Truck traffic through Placerville is a major concern due to the steep grades, sharp curves, and limited shoulders on SR 49.
- ▣ Honor existing historical heritage and the "Golden Chain". The public is very concerned that the historical heritage of the "Golden Chain", which is SR 49 passing through the various gold rush towns from Mariposa to Coloma and beyond, is recognized, honored, and preserved.
- ▣ Minimize impacts on existing businesses and residents.
- ▣ Remove SR 49 from Marshall Gold Discovery State Historic Park.
- ▣ Address intersection of SR 49 and U.S. 50.
- ▣ Reduce congestion on SR 49 through the Diamond Springs area.
- ▣ Address school-related safety issues. Many of the proposed alignments analyzed in the study enter various school zones, such as on Missouri Flat Road near the intersection of Green Valley Road where the El Dorado County Office of Education and Indian Creek School is located. This is impacted by Alternative 3E. On Lotus Road at the corner of Gold Hill Road is the Sutter's Mill School, which is impacted by all three of the

recommended alternatives identified in this study, Alternatives 3E, 5G, and 5H. Herbert Green Middle School, Charles Brown Elementary School and the Shenandoah High School are also impacted by all three of the recommended alternatives identified in this study.

- ▣ Maximize bicycling, pedestrian and transit opportunities.
- ▣ Improve emergency vehicle access.
- ▣ Consider land use impacts of alternatives to ensure consistency with the General Plans of El Dorado County, City of Placerville, and the Marshall Gold Discovery State Historic Park.

For a more complete listing of public comments received, see Attachment J, “Public Comments”.

15. PROJECT ISSUES

15.1 Funding the Project Study Report (PSR)

Funding or commitments for funding for the development of a PSR must be secured prior to any further project development. There are several sources of funding for the project on the federal, state and local levels. Figure 15.1 shows the current state and federal funding programs available for this type of project. Figure 15.1 is not intended to provide an exhaustive list of potential funding sources, but does list the most common and reliable funding programs for this type of project.

Potential State and Local Funding Programs Available for SR 49 PSR	
State Funds	
State Highway Account	Other State Funds To Be Determined.
Local Funds	
RSTP – Regional Surface Transportation Program	TIM ⁽¹⁾ – Traffic Impact Mitigation (TIM) Fee Program for the City of Placerville
PPM – Planning, Programming, & Monitoring	TIM ⁽²⁾ – Traffic Impact Mitigation (TIM) Fee Program for El Dorado County
LTF – Local Transportation Funds	

⁽¹⁾Only for those roads identified within the City of Placerville’s Fee Program

⁽²⁾Only for those roads identified within El Dorado County’s Fee Program

Figure 15.1 – Potential Federal, State, and Local Funding Programs available for SR 49 Project Study Report

15.2 Encroachments

The authority for Caltrans to control encroachments within the State highway is contained in the Streets and Highways Code and it is Caltrans' policy to prohibit private use of highway right-of-way. A realigned SR 49, as proposed by the three alternatives in this study, will become a State facility designated as a conventional highway and encroachments along the realigned SR 49 will be required to have approval from Caltrans District 3 Office of Permits. This has elicited concerns from existing businesses that may be required to adhere to State encroachment requirements in lieu of City or County requirements, a situation that may arise if an existing road such as Missouri Flat Road is redesignated as SR 49.

Encroachments on the existing SR 49 will need to be transferred from the State to the City or County.

15.3 Relinquishment

Relinquishment of the existing SR 49 to the City of Placerville and/or El Dorado County will be required if a realigned route is constructed. If realignment of SR 49 results in a new roadway designation as SR 49, then Caltrans will relinquish the old SR 49 to either the City of Placerville or El Dorado County depending on the location of the realigned SR 49. The City of Placerville and/or El Dorado County will be responsible for the maintenance and liability of the old SR 49.

Upon relinquishment, the old SR 49 may be renamed “Historic SR 49,” but the State will not keep and maintain both the new and old SR 49 routes as part of the State Highway System (SHS).

Before Caltrans relinquishes the old SR 49 to the City and/or County, an agreement will need to be entered into between the appropriate parties outlining the improvements that Caltrans will be responsible to make to the old SR 49 in order to bring it to an acceptable “state of good repair” prior to transferring ownership. The development of this agreement should commence during the PSR. At a minimum, it is recommended that discussions on the requirements for relinquishment occur during the initial phases of development of the PSR and be finalized before the route adoption process.

[Relinquishment Process:](#) The relinquishment of the old SR 49 to the City of Placerville and/or El Dorado County is accomplished by a CTC resolution. Caltrans initiates relinquishment action by the CTC when a route is superseded by relocation. This resolution is requested following construction of the project, after work on the facility to be relinquished is completed, and the facility is no longer needed for state highway purposes. Caltrans District 3 must submit Right-of-way Engineering information to the CTC to relinquish to the city or county the portion of a superseded State highway within the city or county. The information is prepared four months in advance of completion of construction to accommodate a ninety-day notice period to allow the local agency to state reasons and objections that the highway is not in a “state of good repair” as required before relinquishment. The scope of work and cost of the repair work should be defined during the Project Study Report (PSR) phase and the Project Approval and Environmental Document (PA&ED) phase of the project to construct the new alignment for SR 49.

15.4 Caltrans Design Standards

If a new alignment is constructed for SR 49, it will be required to adhere to the State’s design standards as identified in the Caltrans Highway Design Manual (HDM). The Design Criteria Memorandum (DCM) (see Attachment G) developed for this project provides a summary of key design standards to be adhered to per Caltrans standards. However, many of these standards might not be able to be satisfied due to the nature of the existing terrain and right-of-way, environmental or other constraints. One notable Caltrans design standard is the design speed for a conventional highway. SR 49 is designated as a two-lane conventional highway and the required design speed is between 50 and 60 miles per hour per HDM Table 101.2 and the Caltrans Design Information Bulletin (DIB) 79-03. The HDM does allow for flexibility in applying the design standards through the design

exception approval process, which enables the designer to tailor the design, as appropriate, to the specific circumstances while maintaining safety. Therefore, if the design speed of 55 mph, as recommended in the DCM, is determined to be infeasible for the site conditions, a more appropriate design speed will be determined, documented, and approved by Caltrans through the design exception process. All anticipated design exception approvals must be obtained prior to Caltrans approval of the PSR. The responsibility for approval of all exceptions to Mandatory Design Standards on the State Highway and local facility (within State right-of-way) projects rests with the Caltrans Division of Design-Design Coordinator. The responsibility for approval of all exceptions to Advisory Design Standards on the State Highway and local facility (within State right-of-way) projects rests with the Caltrans District Director.

15.5 *Eliminated Alternatives*

Based on the screening criteria established for the SR 49 Realignment Study, three out of the 52 alternatives were recommended for further study. However, although these three alternatives theoretically best satisfy the project purpose and need, they are not be construed as the only feasible alternatives that can satisfy the goals and objectives of the project. In addition, the intent of the study is not to establish a complete set of all possible alternatives; rather, the study intends to demonstrate that there are feasible transportation solutions to fulfilling the project purpose and need. Therefore, the alternatives recommended and rejected in this study were considered provisional rather than conclusive and are not intended to limit other alternatives from being considered in a PSR. Infeasible alternatives were also identified so that the alternatives studied in a PSR can focus on those alternatives that are potentially feasible as recognized in this study.

15.6 *Impacts to Business Districts*

Realignment of SR 49 has the potential to impact the business districts of the City of Placerville and town of Diamond Springs. During the development of the study local business owners from the City of Placerville and Diamond Springs voiced the concern that their businesses may suffer severe financial impacts in the event that a realigned SR 49 bypasses their business locations. The SR 49 Realignment Study attempted to capture this concern in the screening criteria. However, a more detailed investigation will be required during the development of a PSR to further evaluate the impacts of the realignment of SR 49 on local businesses. It was suggested through public comments that a PSR should research the impacts of the Amador County SR 49 Sutter Creek Bypass on local businesses.

15.7 *Safety Concerns Along Cold Springs Road*

Two of the three recommended alternatives in the study, Alternatives 5G and 5H, utilize Cold Springs Road between Gold Hill Road and Placerville Drive. The public identified several safety issues that have plagued this segment of Cold Springs Road for many years. One of the safety issues included the high accident rate on the portion of Cold Springs Road from Browns Road to Pierroz Road. The accidents are primarily a result of drivers failing to properly negotiate the sharp curves and steep grades. According to the El Dorado County Department of Transportation Accident Site Analysis Summary for Cold Springs Road between Gold Hill Road and Pierroz Road, an average of 16 accidents occur per year with an average of 11 of the accidents resulting in injuries.

El Dorado County has considered a new north-south connector road that will extend Missouri Flat Road north of Green Valley Road to connect to Cold Springs Road. Public comment during the development of the study recommended that a PSR should include the proposed Missouri Flat Road Extension connector when considering Cold Springs Road as a potential segment for realigning SR 49. For more information regarding the Missouri Flat Road Extension connector, see Attachment J-5, “Concerns Regarding Cold Springs Road.”

15.8 Route Adoption

The Caltrans Project Development Procedures Manual (PDPM), states that route adoptions are needed for “any new alignment for an existing route and the establishment of a location for an unconstructed route”. Therefore, any realignment of SR 49, such as those identified in this SR 49 Realignment Study, will require a route adoption. Route adoption usually occurs through a resolution by the CTC following approval of the environmental document. Typically, during a route adoption, there is community consensus on route location. The CTC route adoption resolution, with accompanying CEQA environmental documentation, is required prior to submittal to the FHWA for compliance with NEPA and project approval.

15.9 State Route Connectivity with SR 193 and SR 153

The realignment of SR 49 may create an issue with the future dispositions of SR 193 and SR 153. SR 193 is a split-section California State Highway consisting of two sections: an east-west arterial road running from Lincoln to Newcastle, just west of Auburn, and a loop to the east off SR 49 from Cool to Georgetown, then turning south to rejoin SR 49 just north of Placerville approximately 0.8 miles north of U.S. 50. If SR 49 is realigned, relinquishment of this 0.8 mile segment of the existing SR 49 to the City of Placerville or El Dorado County may need to be excluded and remain under the jurisdiction of Caltrans in order to preserve connectivity of SR 193 with SR 49.

SR 153 is a one-half mile long road known as “the shortest State Highway” and includes a portion of Cold Springs Road and Monument Drive in Coloma and MGDShp. Monument Drive provides access to the Marshall Monument within MGDShp, a number of private properties and businesses along Monument Drive. SR 153 does not handle regional traffic. If SR 49 is realigned, State Parks will consider accepting ownership and maintenance responsibility only for the upper portion of Monument Drive, which is entirely surrounded by State Parks’ right-of-way.

16. PROJECT DEVELOPMENT SCHEDULE

The SR 49 Realignment Study is a preliminary step in the overall project development process. The goal of the study is to determine feasible alignments that satisfy the project purpose and need, as well as additional alignments to be considered for further examination in a PSR. Figure 16.1 below shows the typical Caltrans project development process that must be followed for any federal-aid project in California on the State Highway System (SHS).

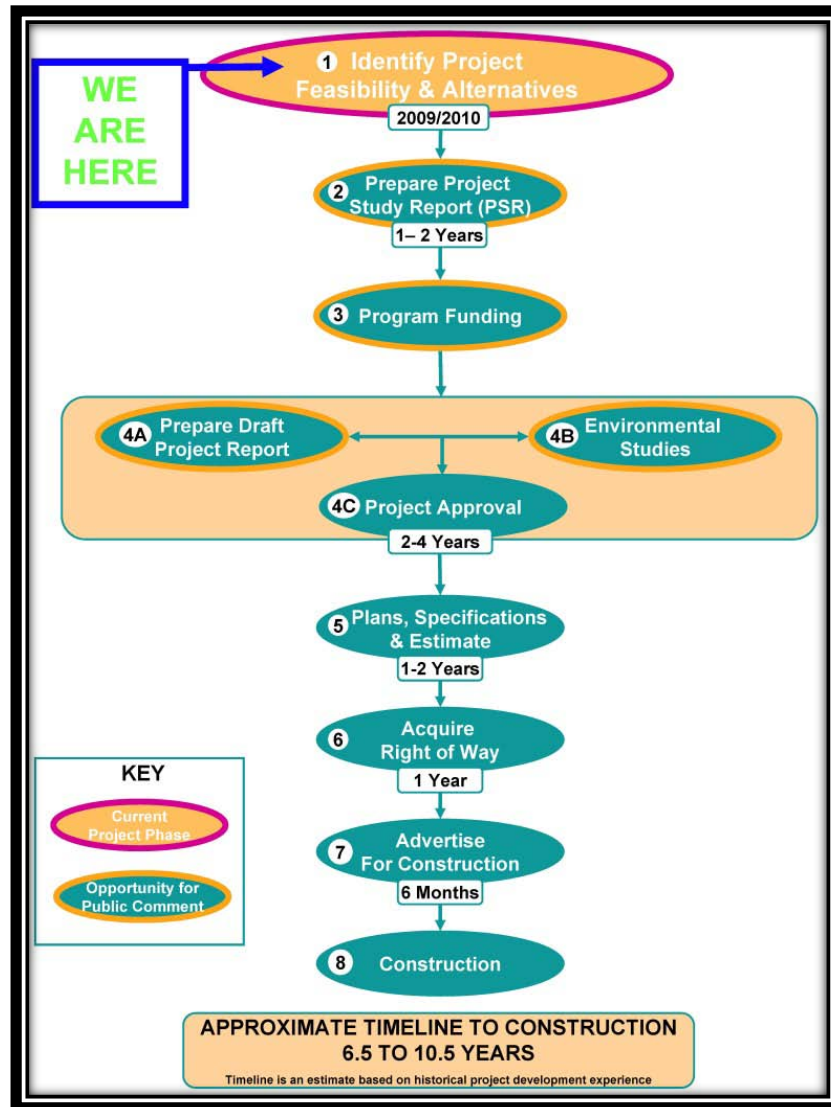


Figure 16.1 – Typical Schedule for the Project Development Process

17. RECOMMENDATIONS

17.1 General Recommendations:

As a project of regional significance and after careful evaluation of the alternatives presented in the SR 49 Realignment Study, realigning SR 49 from Coloma to El Dorado has been determined to be feasible. Based on the results of the Level 1, Intermediate Level 1, and Level 2 screening processes, Alignments 3E, 5G, and 5H are recommended for advancement into the Project Initiation phase of the project development process by means of a PSR as soon as funding can be secured. These alternatives meet the purpose and need of the project, and theoretically provide the best combination of engineering and construction feasibility with the best balance of transportation benefits and responsiveness to environmental goals. It should be noted that the results of this study will be used as input into the beginning of the Project Initiation phase and future project development process,

and that a major amount of additional, detailed study is required before the preferred project alignment is selected and final design can begin.

The potential SR 49 Realignment project will require environmental analysis to identify, assess and report potential impacts and opportunities to mitigate impacts that may occur within the entire project area. While funding for the ultimately selected alignment may become available for a complete project that addresses all roadway improvements identified in this and subsequent analyses, the EDCTC and Caltrans may identify funding sources that will allow increments of the total project to be constructed in segments with independent utility. The EDCTC, in cooperation with Caltrans, will prioritize and analyze the incremental segments of the project as independent elements of the project-wide impact analysis documents to facilitate the rapid development of key safety and circulation improvements as funding sources are identified.

Consistent with prioritizing segments with independent utility, EDCTC is undertaking a transportation planning effort in the Diamond Springs – El Dorado area. EDCTC is applying in April 2010 for a Caltrans Community-Based Transportation Planning Grant to execute a multi-modal transportation circulation study in response to the significant residential development and growth planned in the area and its potential impact on traffic circulation on area roads, including SR 49.

17.2 Type of Project Initiation Document (PID):

The outcome of the project initiation process is a Project Initiation Document (PID). A PID is technical report or an engineering document that establishes a well-defined purpose and need statement, proposed project scope tied to a reliable cost estimate, and schedule. The use of state funds for capital improvements on the State Highway System (SHS) requires an approved PID. The PID documents Caltrans' approval of the project (as defined by the scope, cost and schedule) to compete for State Transportation Improvement Program (STIP) funds. A PSR is a type of PID. The PSR is a format that meets statutory, CTC, and Caltrans requirements for STIP eligible projects. The Caltrans District 3 Director has discretion in prioritizing projects within District 3 for PID development and approves PIDs.

There are two major PID types that are used to program projects into the STIP:

- ▣ The PSR is used to program all support, right-of-way acquisition, and construction costs.
- ▣ The PSR-PDS (Project Study Report–Project Development Support) is used only to calculate the support costs needed to complete the project approval and environmental document (PA&ED) phase.

Both PID types use the same outline, however, the PSR-PDS does not require the same level of engineering detail as a PSR. The level of engineering detail and effort for developing a PSR-PDS is typically limited to that effort needed to develop the workplan for the PA&ED phase, and to develop a "ballpark" estimate of the construction cost. The construction estimate in a PSR-PDS is not a programming commitment; rather it is used to forecast long-range funding needs. This feasibility study anticipates that the project may have a significant effect on the environment and, therefore, the SR 49 Realignment project anticipates that the CEQA and NEPA environmental impact analyses will be required in subsequent project phases. While it is anticipated that these impact analyses will be reported in a CEQA Environmental Impact Report (EIR) and a NEPA Environmental

Assessment (EA), the final determination of documentation requirements will rest with the respective CEQA and NEPA lead agencies. Other regulatory approvals will likely require analysis, reporting, coordination and permitting, include a streambed alteration agreement (California Department of Fish and Game), water quality certification (California Regional Water Quality Control Board), federal endangered species act (U.S. Fish and Wildlife Service) and wetlands/Waters of the United States permitting (U.S. Army Corps of Engineers). The CEQA EIR Decision Tree process is shown in Figure 17.1. Consequently, the PID required by Caltrans is a PSR-PDS for STIP funded projects where the anticipated environmental determination is a Negative Declaration (ND) or EIR.

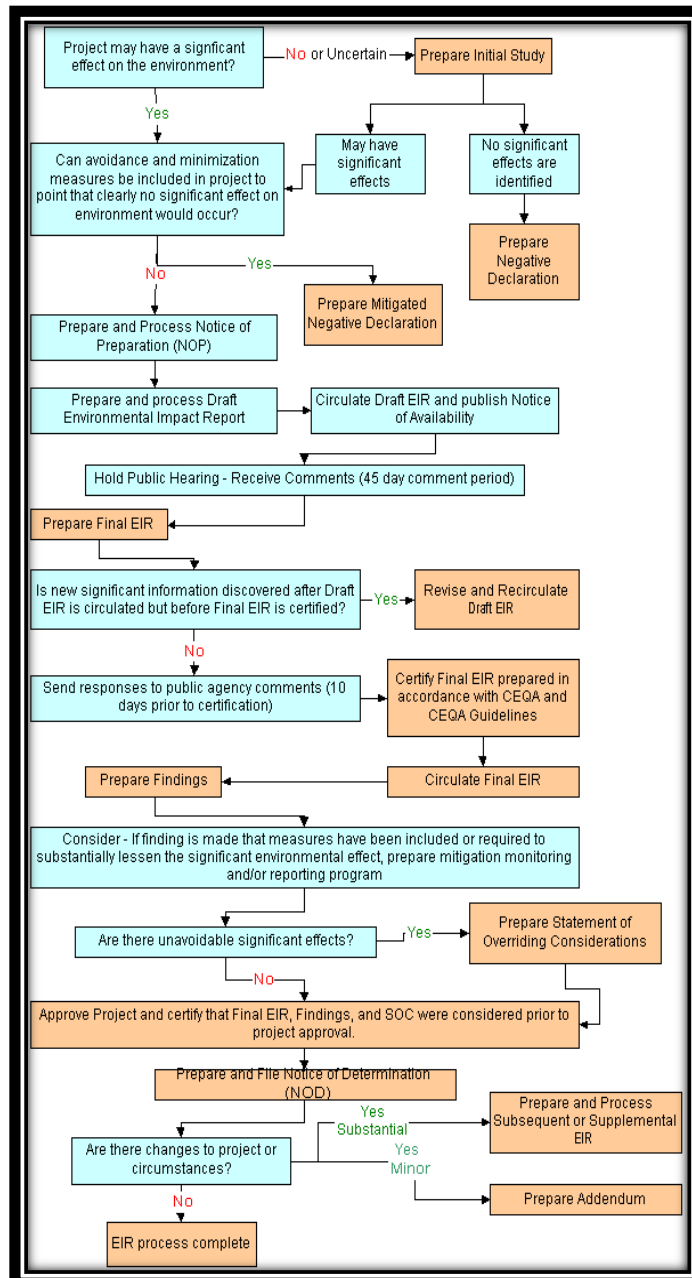


Figure 17.1 – CEQA Environmental Impact Report (EIR) Decision Tree
 Source: Caltrans Environmental Handbook, Volume I: Guidance for Compliance

17.3 Pre-PID Meeting:

This SR 49 Realignment Study recommends that EDCTC, El Dorado County, and the City of Placerville conduct a pre-PID meeting with Caltrans to communicate a shared view of the project and to establish an understanding of the procedures, roles, and responsibilities before the development of the PSR-PDS begins.

According to the Caltrans Project Development Procedures Manual (PDPM), the purpose of the pre-PID meeting is to:

- ▣ Review the PSR-PDS development process.
- ▣ Set the framework for getting consensus of purpose and need.
- ▣ Set the framework for agreeing on the design concept and scope, including relinquishment requirements.
- ▣ Agree on the basic design standards.
- ▣ Identify known design deficiencies and highlight areas requiring further investigation.
- ▣ Identify the funding sources, and if appropriate, identify the cooperative features of the project.

18. PROJECT CONTACTS

EDCTC:	Dan Bolster	(530) 642-5262
Caltrans District 3 Project Management:	Clark Peri	(916) 274-0538
Caltrans District 3 Transportation Planning:	Gabriel Corley	(916) 274-0611
City of Placerville:	Randy Pesses	(530) 642-5557
El Dorado County Department of Transportation:	Jim Ware	(530) 621-7533
T.Y. Lin International:	Keith D. Rhodes	(916) 366-6331
Environmental Stewardship Planning:	Steve Peterson	(916) 455-1115
Fehr & Peers:	Dave Robinson	(916) 773-1900
HDR The Hoyt Company:	Kim Pallari	(916) 448-2440

19. RESOURCES

- ▣ *Caltrans Design Information Bulletin (DIB) 79-03; (design guidance for resurfacing, restoration, and rehabilitation (3R) type projects)*
- ▣ *Caltrans Environmental Handbook, Volume I: Guidance for Compliance*
- ▣ *Caltrans Highway Design Manual 2008*
- ▣ *Caltrans Project Development Procedures Manual, 2007*
- ▣ *Caltrans Transportation Funding Opportunities Guidebook - 2008*
- ▣ *City of Placerville General Plan*
- ▣ *City of Placerville General Plan Background Report – 1989*
- ▣ *City of Placerville Non-Motorized Transportation Plan*
- ▣ *City of Placerville Pedestrian Plan*
- ▣ *El Dorado County Bicycle Transportation Plan*
- ▣ *El Dorado County General Plan 2004*
- ▣ *El Dorado County Highway Design Manual (Local Agency Standards)*
- ▣ *El Dorado County Long-Range and Short-Range Transit Plan*
- ▣ *El Dorado County Transit Authority (EDCTA) Transit Route Maps*
- ▣ *Placerville Drive Multi-Modal Corridor Mobility Plan*
- ▣ *State Route 49 Long-Range Corridor Study, 1990*

- ▣ *State Route 49 Transportation Concept Report, September 2000*
- ▣ *Sacramento Placerville Transportation Corridor (SPTC) El Dorado Trail Priority Map*
- ▣ *1975 – Resolution Rescinding Previously Adopted Freeway Location South of Highway 50*
- ▣ *1982 – Notice of Intent to Consider Rescinding Adopted Controlled Access Highway Location*

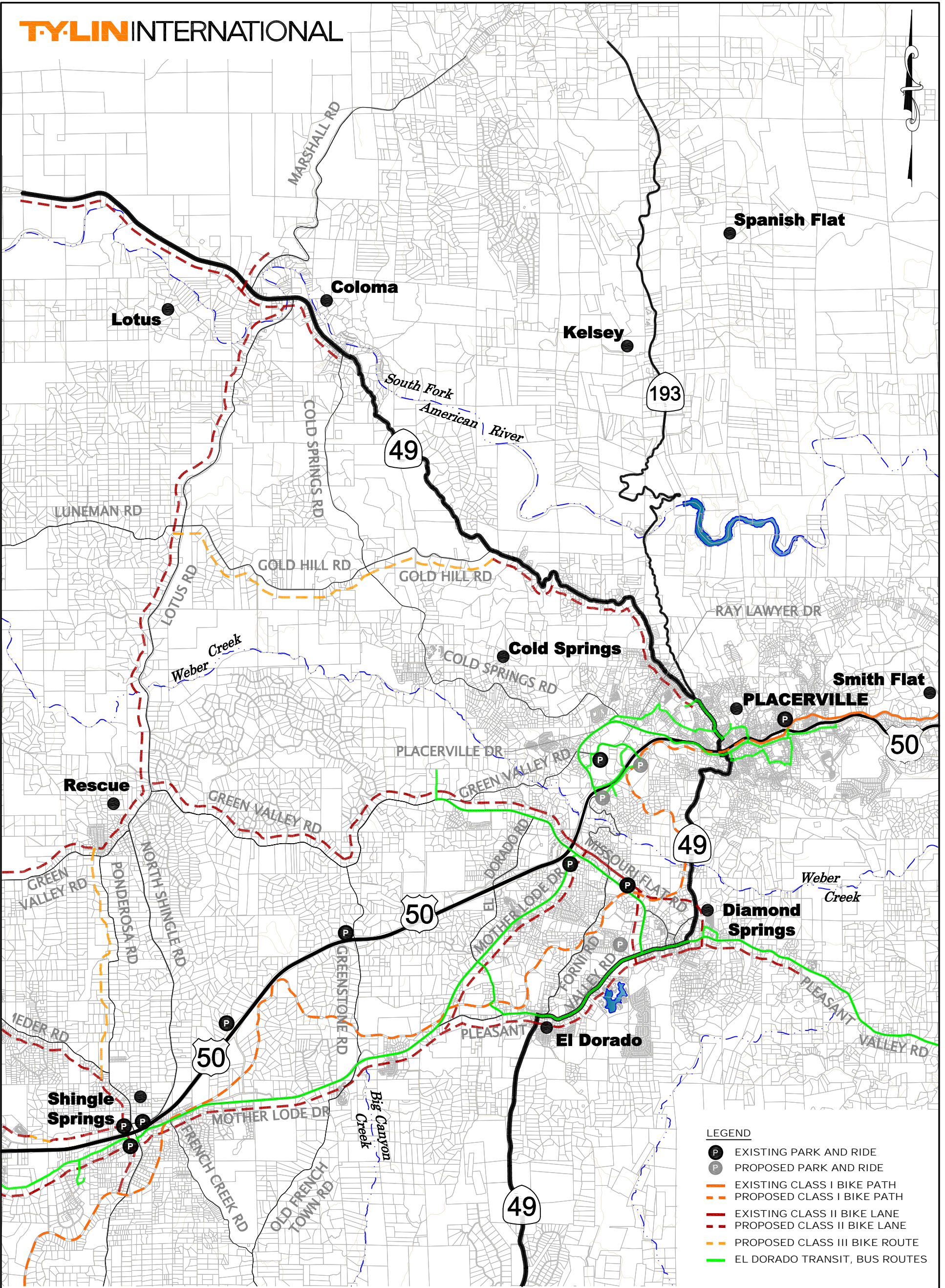
20. LIST OF ATTACHMENTS

Attachment	A	Project Area Map
Attachment	B	Typical Cross Section
Attachment	C	Level 1 Screening
	C-1	Level 1 Screening – Map of Alternatives
	C-2	Level 1 Screening – Results
	C-3	Level 1 Screening – Scoring Assumptions
Attachment	D	Intermediate Level 1 Screening
	D-1	Intermediate Level 1 Screening – Map of Alternatives
	D-2	Intermediate Level 1 Screening – Results
	D-3	Intermediate Level 1 Screening – Scoring Assumptions
Attachment	E	Level 2 Screening
	E-1	Level 2 Screening – Map of Alternatives
	E-2	Level 2 Screening – Results
	E-3	Level 2 Screening – Scoring Assumptions
Attachment	F	Preliminary Cost Estimates
	F-1	Alternative 3E
	F-2	Alternative 5G
	F-3	Alternative 5H
Attachment	G	Design Criteria Memorandum
Attachment	H	Environmental Constraints and Opportunities Analysis
Attachment	I	Traffic Analysis Memorandum
Attachment	J	Public Comments
	J-1	Public Comments Matrix
	J-2	State Parks Letter to EDCTC dated October 26, 2009
	J-3	Media Articles
		Georgetown Gazette Article – October 22, 2009
		Sacramento Bee Article – October 16, 2009
	J-4	Concerns Regarding Cold Springs Road
	J-5	Public Meeting #1 Summary – April 30, 2009
	J-6	Public Meeting #2 Summary – October 14, 2009
	J-7	Additional Public Comments
	J-8	Stakeholders Advisory Committee (SAC) Meeting Minutes
	J-9	EDCTC Board Presentations, Meeting Minutes, and Staff Reports
Attachment	K	Project Development Team Members
Attachment	L	1964 State Route 49 Route Adoption Documents



PROJECT AREA MAP

ATTACHMENT A



- LEGEND**
- EXISTING PARK AND RIDE
 - PROPOSED PARK AND RIDE
 - EXISTING CLASS I BIKE PATH
 - PROPOSED CLASS I BIKE PATH
 - EXISTING CLASS II BIKE LANE
 - PROPOSED CLASS II BIKE LANE
 - PROPOSED CLASS III BIKE ROUTE
 - EL DORADO TRANSIT, BUS ROUTES

PROJECT AREA BASE MAP

STATE ROUTE 49

REALIGNMENT STUDY

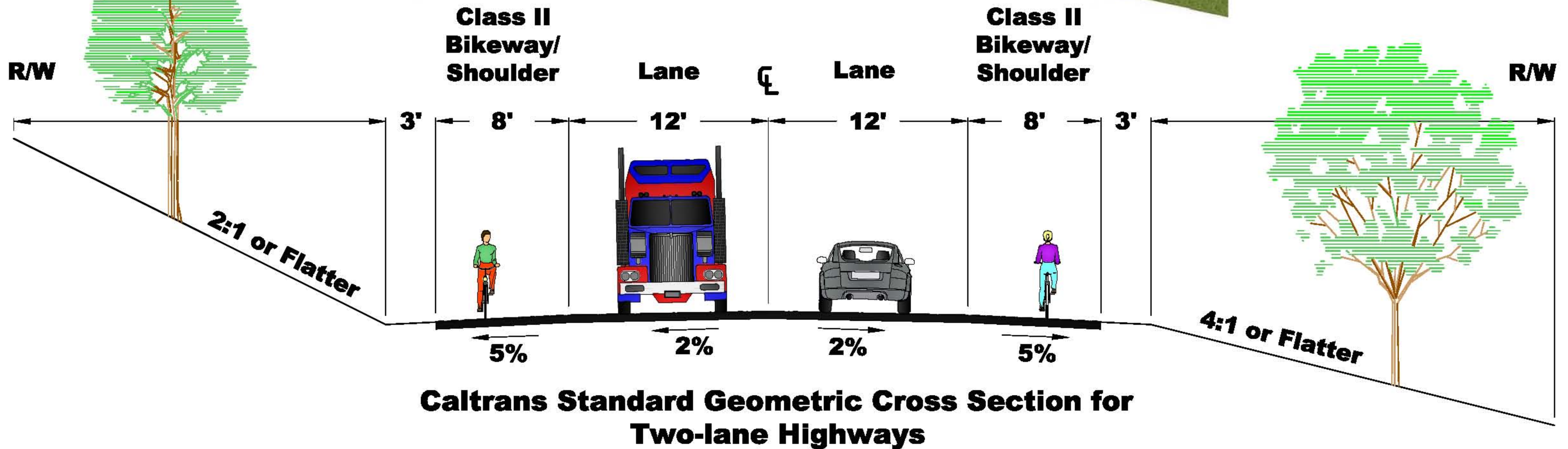
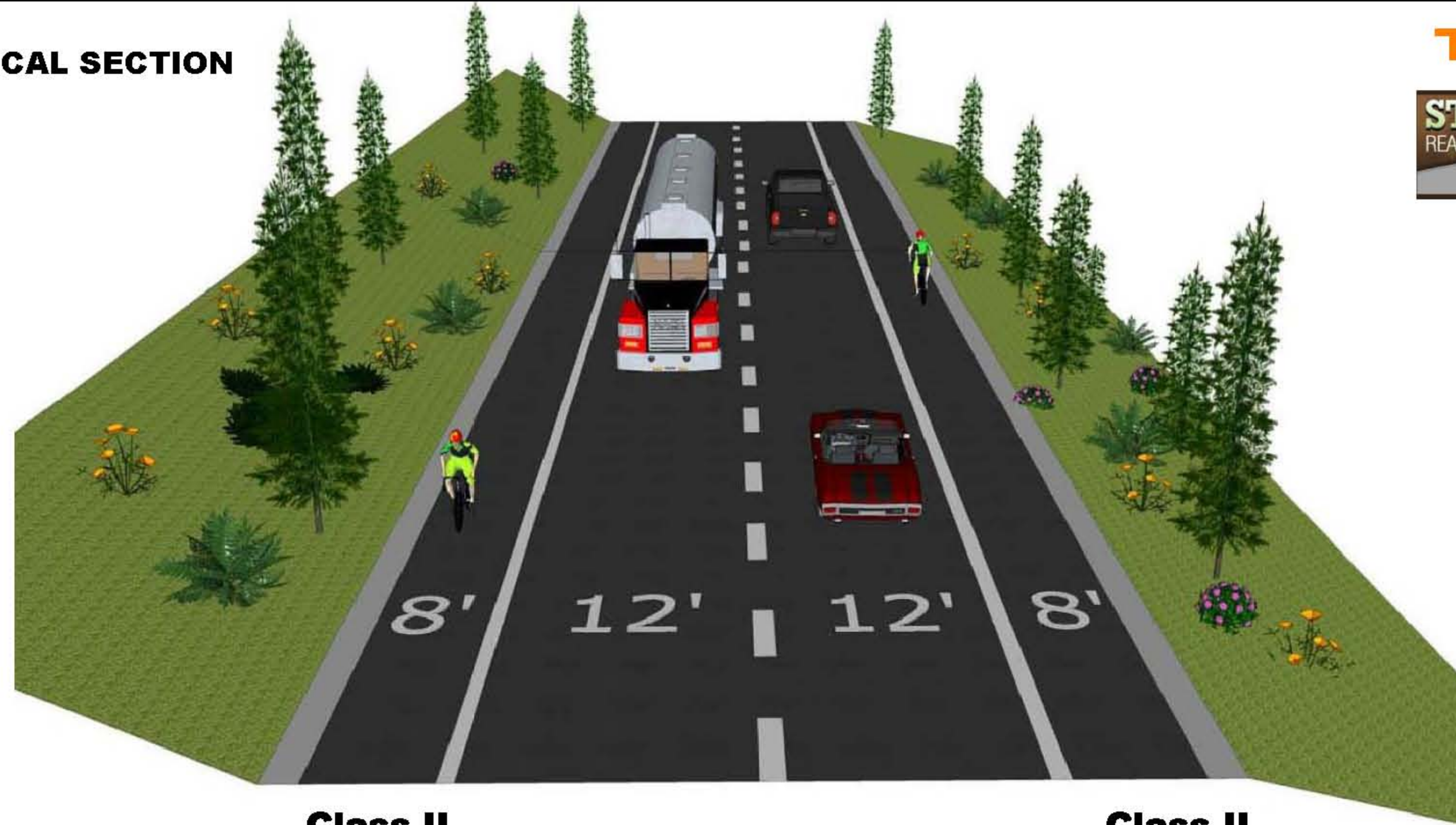


TYPICAL CROSS SECTION

ATTACHMENT B

SR49 PROPOSED TYPICAL SECTION

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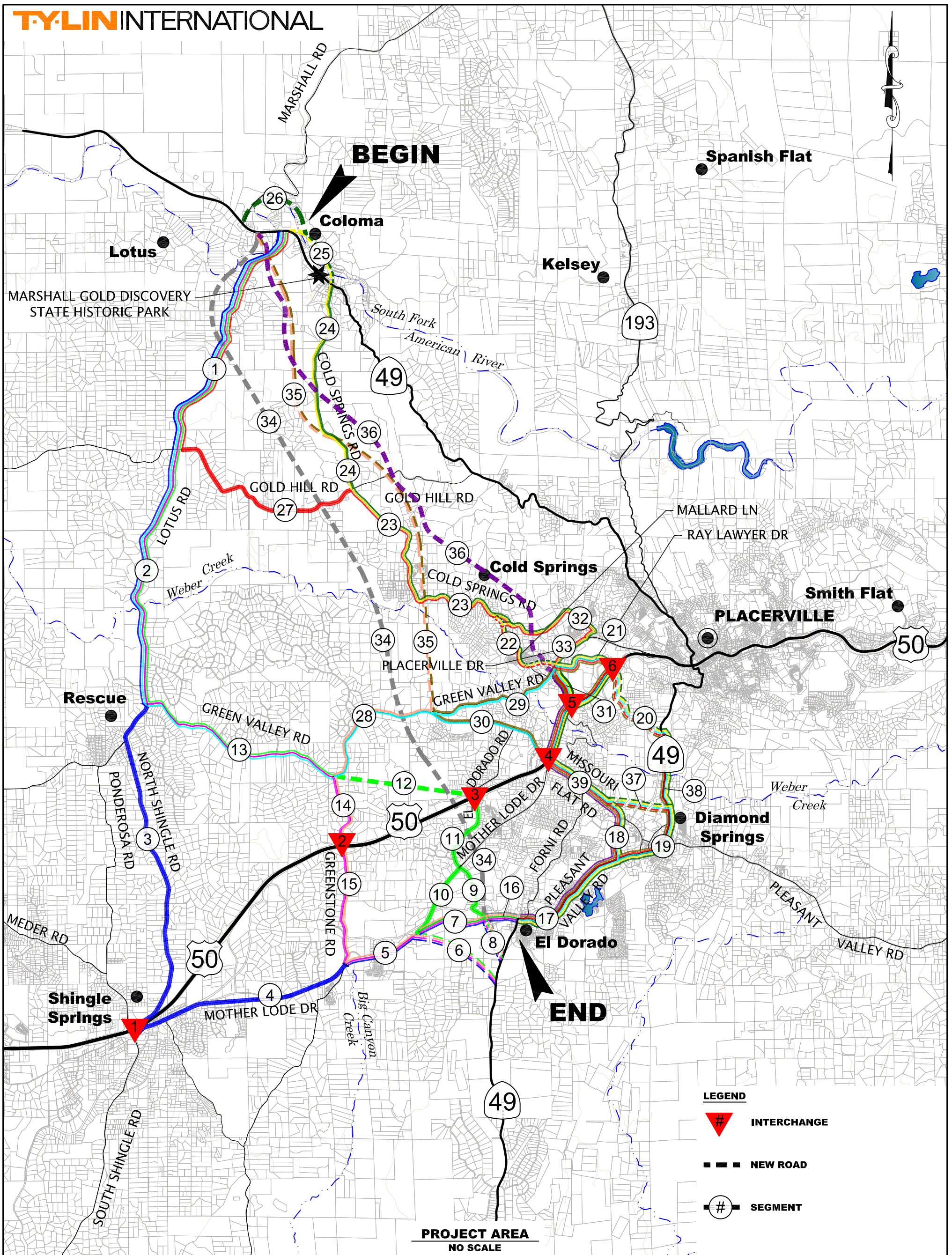


LEVEL 1 SCREENING

ATTACHMENT C



LEVEL 1 SCREENING MAP OF ALTERNATIVES



ALTERNATIVES FOR LEVEL 1 SCREENING

- █ ALTERNATIVE 1
- █ ALTERNATIVE 2
- █ ALTERNATIVE 3
- █ ALTERNATIVE 4
- █ ALTERNATIVE 5
- █ ALTERNATIVE 6
- █ ALTERNATIVE 7
- █ ALTERNATIVE 8
- █ ALTERNATIVE 9
- █ ALTERNATIVE 10
- █ ALTERNATIVE 11

STATE ROUTE 49
REALIGNMENT STUDY





LEVEL 1 SCREENING

LEGEND

LEVEL 1 SCREENING RESULTS

SR 49 Realignment Study

LEVEL 1 SCREENING ANALYSIS MATRIX

Please enter either "Y" for "Yes" in the spaces provided for each criteria under each alternative. A blank denotes a "No".

SCREENING CRITERIA	ALTERNATIVES																																																							
	Group 1			Group 2			Group 3			Group 4			Group 5						Group 6				Group 7		Group 8			Group 9					10	Group 11																						
Criteria 1A: Purpose and Need & Key Project Goals	1A	1B	1C	2A	2B	2C	3A	3B	3C	3D	3E	4A	4B	4C	4D	4E	5A	5B	5C	5D	5E	5F	5G	5H	6A	6B	6C	6D	6E	6F	6G	6H	7A	7B	8A	8B	8C	9A	9B	9C	9D	9E	10	11A	11B	11C	11D	11E	11F	11G	11H					
A. Improve traffic operations for existing and future traffic demands, and the efficient movement of people, goods, and services on SR 49 from Colona to El Dorado	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y			
B. Improve interregional and regional conditions on the SR 49 and regional transportation system by improving traffic operations from Colona to El Dorado	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
C. Ensure compatibility with planned zoning and land uses in the project area identified in the El Dorado County General Plan and policies; City of Placerville General Plan and the Marshall Gold Discovery State Historic Park General Plan.				Y		Y	Y	Y	Y	Y	Y						Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		
D. Eliminate the existing alignment of SR 49 through Marshall Gold Discovery State Historic Park	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		
E. Eliminate the at-grade intersection of SR 49 and Route 50	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		
F. Reduce travel times within the corridor and the total vehicle-hours traveled in the corridor during peak traffic times				Y	Y	Y						Y	Y	Y	Y	Y																			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
G1. Relieve SR 49 traffic impacts to densely populated residential areas and business districts of City of Placerville	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		
G2. Relieve SR 49 traffic impacts to densely populated residential areas and business districts of Diamond Springs	Y	Y	Y	Y	Y	Y																																																		
H. Minimize environmental impacts and concerns (i.e. jobs, corridor demographics, cultural resources, population growth and distribution projections, existing and future development)							Y	Y	Y	Y	Y										Y	Y	Y	Y																																
I. Reduce the amount of resources required to achieve improved conditions in the corridor by the utilization of existing local roads				Y		Y						Y	Y									Y	Y	Y	Y																															
J. Maximize multi-modal opportunities locally and interregionally (i.e. bicycle, pedestrian, and transit)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		
K. Contribute to the remedy for current and future deficiencies in transportation safety in the SR 49 corridor	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
L. Maintain a context sensitive solutions approach to local and interregional transportation issues							Y	Y	Y	Y	Y											Y	Y	Y	Y																															
Criteria 1B: Constructability / Operational Feasibility	1A	1B	1C	2A	2B	2C	3A	3B	3C	3D	3E	4A	4B	4C	4D	4E	5A	5B	5C	5D	5E	5F	5G	5H	6A	6B	6C	6D	6E	6F	6G	6H	7A	7B	8A	8B	8C	9A	9B	9C	9D	9E	10	11A	11B	11C	11D	11E	11F	11G	11H					
A. Not likely to require excessive cost to construct			Y			Y				Y	Y											Y																																		
B. Not likely to result in serious community disruption			Y			Y	Y	Y	Y	Y	Y											Y	Y	Y	Y																															
C. Not likely to cause unacceptable adverse social, economical, environmental, or cultural resource impacts			Y			Y	Y	Y	Y	Y	Y											Y	Y	Y	Y																															
Decision																																																								
Total "Yes"	8	8	13	9	9	14	12	13	13	15	16	9	9	9	9	9	8	9	10	10	16	12	13	14	8	9	9	9	9	8	9	9	9	9	9	9	9	9	9	9	9	8	9	10	10	10	10	8	9	9	9	9				
Rank	44	44	6	17	17	4	10	6	6	3	1	17	17	17	17	17	44	17	12	12	1	10	6	4	44	17	17	17	17	44	17	12	12	1	10	6	4	44	17	17	17	17	17	44	17	12	12	12	44	17	12					
Alternative advanced to Level 2 for further consideration (Yes/No) if Rank < 10?			Y			Y	Y	Y	Y	Y	Y											Y	Y	Y																																

TYLININTERNATIONAL





LEVEL 1 SCREENING SEGMENTS

Level 1 Screening Criteria Scoring Assumptions:**Criteria 1A: Purpose and Need & Key Project Goals**

- A. Improve traffic operations for existing and future traffic demands, and the efficient movement of people, goods, and services on SR 49 from Coloma to El Dorado
It was assumed that all alternatives met this screening criterion, given that all alternatives would remove traffic from existing SR 49.
- B. Improve interregional and regional conditions on the SR 49 and regional transportation system by improving traffic operations from Coloma to El Dorado
It was assumed that all alternatives met this screening criterion, since the alternatives would provide an overall better alignment (less curves, slightly wider roadway, etc.) than the existing SR 49.
- C. Ensure compatibility with planned zoning and land uses in the project area identified in the El Dorado County General Plan and policies; City of Placerville General Plan; and the Marshall Gold Discovery State Historic Park General Plan.
Any alternative which included a new roadway segment (which was not included in the El Dorado County, City of Placerville or Marshall Gold Discovery State Historic Park general plan) was marked as “no”, i.e. considered as not meeting the criterion. Alternatives in group 6 were considered to meet the criterion since the Marshall Gold Discovery State Historic Park General Plan discusses alternatives to reroute SR 49 and remove it from the park. Alternatives using the Ray Lawyer Drive extension, or the extension of Diamond Springs Parkway were marked a “yes” (i.e. meet the criterion) since these roadway extensions are already included in the County and City of Placerville’s planning documents.
- D. Eliminate the existing alignment of SR 49 through Marshall Gold Discovery State Historic Park
All alternatives would meet this criterion. In the majority of the alternatives the roadway would remain, however it would no longer be called SR 49.
- E. Eliminate the at-grade intersection of SR 49 and Route 50
All alternatives would meet this criterion.
- F. Reduce travel times within the corridor and the total vehicle-hours traveled in the corridor during peak traffic times
Travel times were for each alternative were estimated using estimated travel time information provided by Map Quest. The estimated travel time was obtained for the existing SR 49 alignment to travel from Coloma to El Dorado, and this travel time was compared to the travel time calculated by Map Quest for each alternative alignment. If the travel time listed for the alternative alignment was less than the travel time listed for the existing SR 49 alignment than the alternative was marked “yes” and considered to meet the criterion.

- G. Relieve SR 49 traffic impacts to densely populated residential areas and business districts of City of Placerville

It was assumed that all alternatives would meet this criterion since all the alternatives re-route SR 49 from the dense residential areas and the downtown district of Placerville.

Relieve SR 49 traffic impacts to densely populated residential areas and business districts of Diamond Springs

Any alternative using roadway segment 17, Pleasant Valley Road from Missouri Flat to existing SR 49, was marked as not meeting this criterion. All other alternatives were marked as “yes”.

- H. Minimize environmental impacts and concerns (i.e. jobs, corridor demographics, cultural resources, population growth and distribution projections, existing and future development)

The alternatives listed in Groups 1 and 2 were considered to be a “no”, not meeting this criterion, due to the fact that these alternatives moved SR 49 to the east of the central business district of Placerville. Direct impacts of the move are not known at this preliminary stage, however the assumption was made that taking SR 49 out of Placerville may have an impact to existing businesses in the central business district. Any alternative which considered a new road segment or the construction of a new bridge (i.e. segments 25 and 26 in Marshall Gold park) were also marked as “no”, with the assumption that these alternatives would have a greater environmental impact. All alternatives which included roadway segment 22 (widening and partial realignment of Mallard Lane) were also considered as not meeting the criterion and were marked “no”. It was assumed that the disruption to or relocation of existing businesses along this route would result in a greater environmental impact.

- I. Reduce the amount of resources required to achieve improved conditions in the corridor by the utilization of existing local roads

Any alternative which considered a new road segment, the construction of a new bridge (i.e. segments 25 and 26 in Marshall Gold Park) or the expansion of the existing Ray Lawyer Drive overcrossing into a full interchange was considered as not meeting this criterion and was marked “no” in the matrix. It was assumed that these alternatives which required new construction would have either a greater cost (i.e. new construction of an interchange or construction of a new structure) or greater right of way impacts thus increasing the alternative cost. All alternatives which included roadway segment 22 (widening and partial realignment of Mallard Lane) were also considered as not meeting the criterion and were marked “no”. It was assumed that the disruption to or relocation of existing businesses along this route would result in costly right of way impacts.

- J. Maximize multi-modal opportunities locally and interregionally (i.e. bicycle, pedestrian, and transit)

It was assumed that all alternatives would meet this criterion since none of the alternatives proposed would preclude implementation of the County's planned bicycle and multi-modal routes.

- K. Contribute to the remedy for current and future deficiencies in transportation safety in the SR 49 corridor

It was assumed that all alternatives would meet this criterion. Essentially all of the alternatives proposed would provide a roadway better geometric features than the existing SR 49 alignment through the majority of the proposed alignment.

- L. Maintain a context sensitive solutions approach to local and interregional transportation issues

Caltrans uses "Context Sensitive Solutions" as an approach to plan, design, construct, maintain, and operate its transportation system. These solutions use innovative and inclusive approaches that integrate and balance community, aesthetic, historic, and environmental values with transportation safety, maintenance, and performance goals. The intent of this criterion is to provide and alternative which balances the needs of the community (i.e. an alternative which would be an economic, social, and cultural asset to community, will aesthetically fit the surrounding area, will provide opportunities for enhancements to non-motorized travel as well as provide for safe and efficient movement of people and goods).

The assumption was made that all alternatives in Groups 1 and 2 did not meet this criterion due to the fact that SR 49 was removed from the City of Placerville. It was felt that these alternatives were no sensitive to the needs of the Placerville business district by locating the state highway away from the business district. All alternatives which proposed construction of a new roadway segment, or a new bridge (i.e. segments 25 and 26 in Marshall Gold park) were also considered as not providing a context sensitive solution since these alternatives were more likely to have impacts to the community including right of way and aesthetic impacts. There was also question as to whether or not some of these alternatives were sensitive to the nature (i.e. rural and/or historical characteristics) of the communities which would be affected. Hence all alternatives proposing a new roadway segment or new bridge construction were marked "no". All alternatives which included roadway segment 22 (widening and partial realignment of Mallard Lane) were also considered as not meeting the criterion and were marked "no". It was assumed that the disruption to or relocation of existing businesses along this route would not meet the criterion of providing a context sensitive solution due to the negative impact to existing businesses..

Criteria 1B: Constructability / Operational Feasibility

- A. Not likely to require excessive cost to construct

Any alternative which considered a new road segment, the construction of a new bridge (i.e. segments 25 and 26 in Marshall Gold Park) or the expansion of the existing Ray Lawyer Drive overcrossing into a full interchange was considered as

not meeting this criterion and was marked “no” in the matrix. It was assumed that these alternatives which required new construction would have either a greater cost (i.e. new construction of an interchange or construction of a new structure) or greater right of way impacts thus increasing the alternative cost. All alternatives which included roadway segment 22 (widening and partial realignment of Mallard Lane) were also considered as not meeting the criterion and were marked “no”. It was assumed that the disruption to or relocation of existing businesses along this route would result in costly right of way impacts.

B. Not likely to result in serious community disruption

Any alternative which considered a new road segment, the construction of a new bridge (i.e. segments 25 and 26 in Marshall Gold Park) was considered as not meeting this criterion and was marked “no” in the matrix. It was assumed that these alternatives which required a significant amount of new construction and greater right of way impacts would have more impacts to the community than the alternatives using existing facilities. All alternatives which included roadway segment 22 (widening and partial realignment of Mallard Lane) were also considered as not meeting the criterion and were marked “no”. It was assumed that the disruption to or relocation of existing businesses along this route would result in community disruption.

C. Not likely to cause unacceptable adverse social, economical, environmental, or cultural resource impacts

Any alternative which considered a new road segment, the construction of a new bridge (i.e. segments 25 and 26 in Marshall Gold Park) was considered as not meeting this criterion and was marked “no” in the matrix. It was assumed that these alternatives which required a significant amount of new construction and greater right of way impacts would have greater social, economical, environmental or cultural resource impacts than those alternatives which utilized existing roads. All alternatives which included roadway segment 22 (widening and partial realignment of Mallard Lane) were also considered as not meeting the criterion and were marked “no”. It was assumed that the disruption to or relocation of existing businesses along this route would result in greater social economical, or environmental impacts .

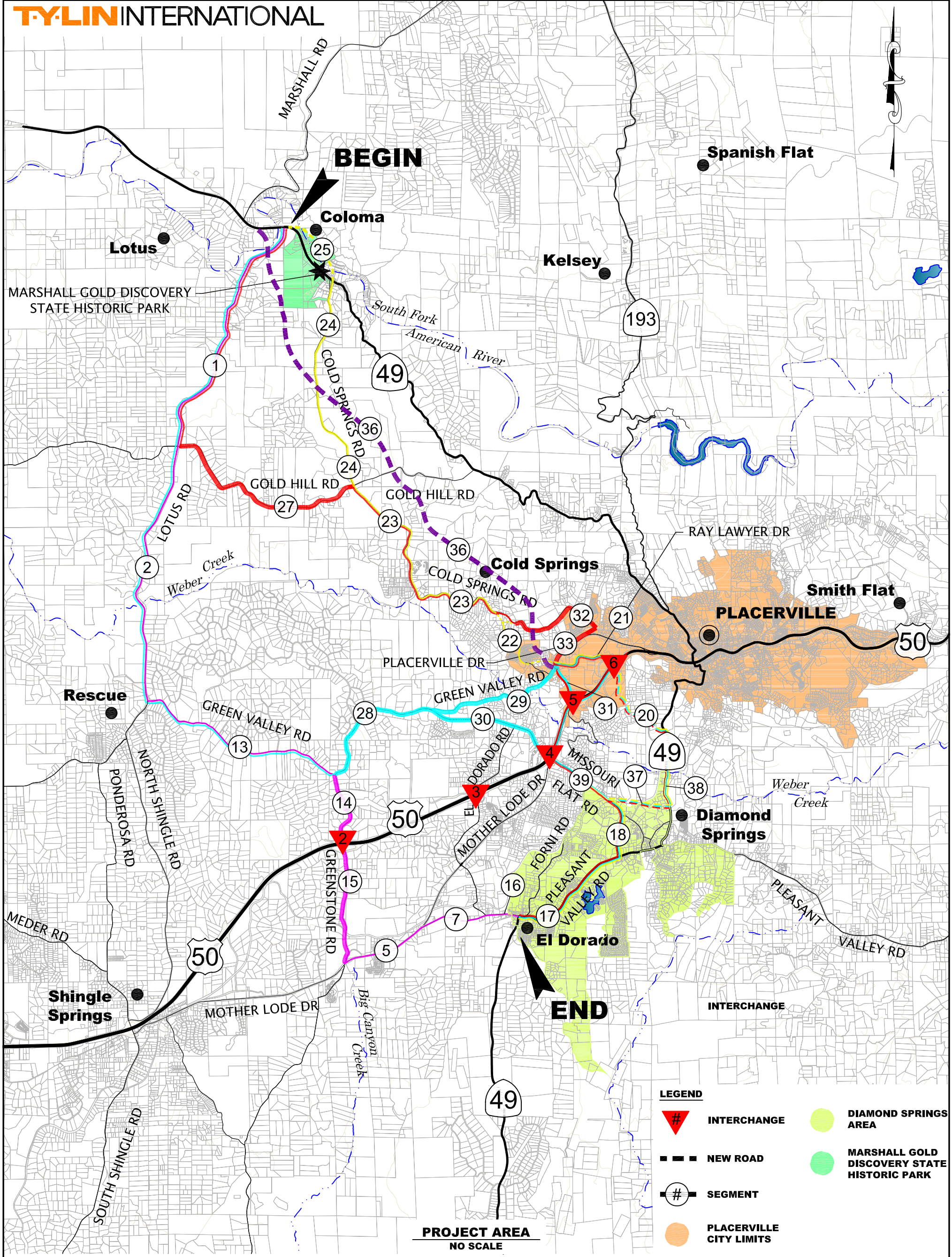


INTERMEDIATE LEVEL 1 SCREENING

ATTACHMENT D



INTERMEDIATE LEVEL 1 SCREENING MAP OF ALTERNATIVES



ALTERNATIVES FOR INTERMEDIATE LEVEL 1 SCREENING

- ALTERNATIVE GROUP 10
- ALTERNATIVE GROUP 2
- ALTERNATIVE GROUP 3
- ALTERNATIVE GROUP 5
- ALTERNATIVE GROUP 11

STATE ROUTE 49
REALIGNMENT STUDY

edctc
TRANSPORTATION COMMISSION

INTERMEDIATE LEVEL 1 SCREENING RESULTS

INTERMEDIATE LEVEL 1 SCREENING RESULTS

INTERMEDIATE LEVEL 1 SCREENING CRITERIA ⁽²⁾												
%Wt	Goal ⁽¹⁾	Criteria	Group 2		Group 3			Group 5			Group 11	
			2C	3B	3C	3D	3E	5E	5G	5H	10	11B
20%	Goal 1: Safe transport of goods and people (i.e. commercial, regional, and local) regionally and interregionally for vehicle, bicycle, and pedestrian travel (i.e. improve sharp curves, steep grades, and traveled way of SR 49 for modern transportation demands).	# of curves with advisory speed limits per mile	1	2	3	3	4	2	1	3	4	1
		# of grades >7%	3	3	3	3	3	1	1	1	4	1
		# of constraints that prevent widening (i.e. side-slopes >2:1, and right of way requiring removal of buildings)	2	2	2	2	3	3	3	3	4	2
		# of school zones	4	2	1	1	1	2	3	2	3	3
15%	Goal 2: Efficient transport of goods and people (i.e. commercial, regional, and local) regionally and interregionally for vehicle, bicycle, and pedestrian travel	Travel time reduction (Regional)	3	1	1	1	3	3	2	2	4	4
		Travel time reduction (Local)	3	1	1	2	2	3	3	3	4	3
		Vehicle-miles traveled reduction	1	1	1	1	1	1	1	1	4	1
15%	Goal 3: Improve accessibility for commercial, regional, and local traffic between residential areas and business districts of the City of Placerville, Diamond Springs, and El Dorado.	Alignment within the City of Placerville city limits.	4	2	2	3	4	2	2	2	3	2
		Alignment within the Diamond Springs business district.	4	1	1	1	1	1	1	1	1	1
		Alignment within the El Dorado business district.	1	4	4	4	4	4	4	4	4	4
		Population (within 1/2 mile buffer of alternative) divided by route distance	1	2	1	1	2	3	4	3	3	4
		Employment (within 1/2 mile buffer of alternative) divided by route distance	1	2	2	2	2	3	3	3	4	3
		Population and employment (within 1/2 mile buffer of alternative) divided by route distance	1	2	2	2	2	3	4	4	4	4
15%	Goal 4: Improve accessibility for commercial, regional, and local traffic between residential areas, communities, and business districts along SR 49 from El Dorado to Coloma.	Population within 1/2 mile Buffer of Alternative	1	3	3	2	2	3	4	3	2	3
		Employment within 1/2 mile Buffer of Alternative	1	2	3	2	2	3	3	4	2	2
15%	Goal 5: Maximize the use of existing roads to minimize resources required to achieve improved conditions in the SR 49 corridor and support the projected land uses of the adopted El Dorado County and City of Placerville General Plans.	Use of existing local roads only	4	3	4	4	4	4	3	4	1	2
		# of new bridges required	4	4	4	4	4	4	4	4	1	2
5%	Goal 6: Minimize impacts to historic, cultural, and natural resources.	Potential to conflict with historic resources including structures, towns and districts.	1	2	2	2	2	1	1	1	2	1
		Located in a 7.5-minute quadrangle in which special-status species have been previously recorded as identified in the California Natural Diversity Database (CNDDB).	2	2	2	2	2	2	2	2	2	2
		Potential to impact bodies of water as identified on the National Wetland Inventory.	2	2	2	2	2	2	2	2	2	2
		Located within or adjacent to Areas More Likely to Contain Asbestos.	1	1	1	1	1	1	1	1	3	3
		Buffer for More Likely to Contain Asbestos or Fault Line	3	3	3	3	3	3	3	3	4	3
15%	Goal 7: Ensure compatibility with land uses in the project area identified in the El Dorado County General Plan, City of Placerville General Plan, and the Marshall Gold Discovery State Historic Park General Plan.	No conflicts with other planned projects & consistent with all current General Plans	1	1	1	1	1	1	1	1	1	4
100%	TOTAL - INTERMEDIATE LEVEL 1 SCREENING	6.95	6.15	6.15	6.45	7.45	7.15	7.15	7.35	8.85	6.8	
	RANK	6	9	9	8	2	4	4	3	1	7	

(1) The goals of eliminating SR 49 through the Marshall Gold Discovery State Historic Park (MGDSHP) and the at-grade intersection of SR 49/US 50 are critical to the success of the project that they are common to all alternatives; therefore, a not used in the screening.

(2) The Intermediate Level 1 Screening Criteria is consistent with the goal of the MGDSHP Master Plan in the sense that a goal identifies what needs are to be done v.s. a plan or methodology that defines how something is going to be done. If State Park's goal is to reduce conflicts in the park between vehicles and non-motorized traffic and to reduce the impacts of vehicles on park buildings, then it doesn't matter how an alternative does that, only that it does it. Realigning SR 49 out of the park to Lotus Road will address the goals of the MGDSHP Master Plan.

Intermediate Level 1 Screening Criteria Scoring Assumptions

Goal 1: Safe transport of goods and people (i.e. commercial, regional, and local) regionally and interregionally for vehicle, bicycle, and pedestrian travel (i.e. improve sharp curves, steep grades, and traveled way of SR 49 for modern transportation demands).

A. # of curves with advisory speed limits per mile.

The number of curves with advisory speed limits on each segment were counted per mile. The resulting ratio was used to score each alternative as follows:

$$\begin{aligned} \text{Ratio} < 0.7 &= 4 \\ 0.7 < \text{Ratio} < 0.8 &= 3 \\ 0.8 < \text{Ratio} < 0.9 &= 2 \\ 0.9 < \text{Ratio} &= 1 \end{aligned}$$

B. # of grades >7%.

SR49 is assumed to be a mountainous rural highway with a maximum required grade of 7%, per Caltrans HDM 204. The existing profile of the proposed alignments were evaluated based on the number of grades that exceed 7%. The No-Build alternative was used as the baseline of the scoring with 5 grades exceeding 7%. Therefore, any alternative with 5 or more grades exceeding 7% received a score of 1. Each alternative was scored based on the following:

$$\begin{aligned} 0 \text{ \#grades exceeding } 7\% &= 4 \\ 0 < \text{\#grades exceeding } 7\% < 3 &= 3 \\ \text{Not used} &= 2 \\ 3 < \text{\#grades exceeding } 7\% \text{ \& greater} &= 1 \end{aligned}$$

C. # of constraints that prevent widening (i.e. side-slopes >2:1, and right of way requiring removal of buildings).

Each alternative was evaluated based on the number of isolated areas within each segment that would require road widenings were the existing side-slopes exceed a grade of 2:1 and/or the right-of-way required would result in building removals. Each alternative was scored based on the following:

$$\begin{aligned} \text{\#of constraints} < 10 &= 4 \\ 10 < \text{\#of constraints} < 15 &= 3 \\ 15 < \text{\#of constraints} < 20 &= 2 \\ 20 < \text{\#of constraints} &= 1 \end{aligned}$$

D. # of school zones.

Each alternative was evaluated based on the number of school zones within each segment that would require a 25 mph speed limit. Each alternative was scored based on the following:

$$\begin{aligned} \text{\#of school zones} < 2 &= 4 \\ 2 < \text{\#of school zones} < 4 &= 3 \\ 4 < \text{\#of school zones} < 5 &= 2 \\ 5 < \text{\#of school zones} &= 1 \end{aligned}$$

Intermediate Level 1 Screening Criteria Scoring Assumptions

Goal 2: Efficient transport of goods and people (i.e. commercial, regional, and local) regionally and interregionally for vehicle, bicycle, and pedestrian travel.

A. Travel time reduction (Regional)

(See attached memorandum from Fehr & Peers entitled, "Scoring Assumptions for the Intermediate Level 1 Screening of the State Route 49 Realignment Study" dated September 28, 2009 for scoring assumptions for this criteria)

B. Travel time reduction (Local)

(See attached memorandum from Fehr & Peers entitled, "Scoring Assumptions for the Intermediate Level 1 Screening of the State Route 49 Realignment Study" dated September 28, 2009 for scoring assumptions for this criteria)

C. Vehicle-miles traveled reduction

The number of vehicle-miles traveled on each alternative were counted. The No-Build alternative was used as the baseline of the scoring with 1 for a total vehicle-miles traveled of 14.1 miles. Therefore, any alternative with 14.1 or more vehicle-miles traveled received a score of 1. Each alternative was scored based on the following:

$$\# \text{of vehicle-miles} < 14.1 = 4$$

$$14.1 < \# \text{of vehicle-miles} = 1$$

Goal 3: Improve accessibility for commercial, regional, and local traffic between residential areas and business districts of the City of Placerville, Diamond Springs, and El Dorado.

A. Alignment within the City of Placerville city limits.

The number of miles on each segment within the City limits on each alternative were analyzed. Each alternative was scored based on the following:

$$\# \text{of miles w/in City Limits} < 0 = 4$$

$$0 < \# \text{of miles w/in City Limits} < 2 = 3$$

$$2 < \# \text{of miles w/in City Limits} < 3 = 2$$

$$3 < \# \text{of miles w/in City Limits} = 1$$

B. Alignment within the Diamond Springs business district.

The number of miles on each segment within the Diamond Springs business district on each alternative were analyzed. Each alternative was scored based on the following:

$$\# \text{of miles w/in DS BD} < 0 = 4$$

$$0 < \# \text{of miles w/in DS BD} = 1$$

C. Alignment within the El Dorado business district.

The number of miles on each segment within the El Dorado business district on each alternative were analyzed. Each alternative was scored based on the following:

$$\# \text{of miles w/in ED BD} < 0 = 4$$

$$0 < \# \text{of miles w/in ED BD} = 1$$

D. Population (within 1/2 mile buffer of alternative) divided by route distance.

(See attached memorandum from Fehr & Peers entitled, "Scoring Assumptions for the Intermediate Level 1 Screening of the State Route 49 Realignment Study" dated September 28, 2009 for scoring assumptions for this criteria)

E. Employment (within 1/2 mile buffer of alternative) divided by route distance.

Intermediate Level 1 Screening Criteria Scoring Assumptions

(See attached memorandum from Fehr & Peers entitled, "Scoring Assumptions for the Intermediate Level 1 Screening of the State Route 49 Realignment Study" dated September 28, 2009 for scoring assumptions for this criteria)

- F. Population and employment (within 1/2 mile buffer of alternative) divided by route distance.

(See attached memorandum from Fehr & Peers entitled, "Scoring Assumptions for the Intermediate Level 1 Screening of the State Route 49 Realignment Study" dated September 28, 2009 for scoring assumptions for this criteria)

Goal 4: Improve accessibility for commercial, regional, and local traffic between residential areas, communities, and business districts along SR 49 from El Dorado to Coloma.

(See attached memorandum from Fehr & Peers entitled, "Scoring Assumptions for the Intermediate Level 1 Screening of the State Route 49 Realignment Study" dated September 28, 2009 for scoring assumptions for Goal 4)

- A. Population within 1/2 mile Buffer of Alternative
B. Employment within 1/2 mile Buffer of Alternative

Goal 5: Maximize the use of existing roads to minimize resources required to achieve improved conditions in the SR 49 corridor and support the projected land uses of the adopted El Dorado County and City of Placerville General Plans.

- A. Use of existing local roads only

The number of miles of new roads on each alternative were measured. Each alternative was scored based on the following:

*#of new road miles < 0 = 4
0 < #of new road miles < 2 = 3
2 < #of new road miles < 5 = 2
5 < #of new road miles = 1*

- B. # of new bridges required

The number of new bridges required on each alternative was counted. Each alternative was scored based on the following:

*#of new bridges < 0 = 4
0 < #of new bridges < 2 = 2
2 < #of new bridges = 1*

Goal 6: Minimize impacts to historic, cultural, and natural resources.

(See attached memorandum from ESP entitled, "SR 49 Realignment Project – Intermediate Level 1 Screening" dated August 26, 2009 for scoring assumptions used for Goal 6)

- A. Potential to conflict with historic resources including structures, towns and districts.
B. Located in a 7.5-minute quadrangle in which special-status species have been previously recorded as identified in the California Natural Diversity Database (CNDDDB).
C. Potential to impact bodies of water as identified on the National Wetland Inventory.
D. Located within or adjacent to Areas More Likely to Contain Asbestos.
E. Buffer for More Likely to Contain Asbestos or Fault Line

Intermediate Level 1 Screening Criteria Scoring Assumptions

Goal 7: Ensure compatibility with land uses in the project area identified in the El Dorado County General Plan, City of Placerville General Plan, and the Marshall Gold Discovery State Historic Park General Plan.

- A. No conflicts with other planned projects & consistent with all current General Plans
The goals of the MGDSHP GP is to eliminate SR 49 traffic through the park and eliminate all traffic through the park. Only Alternative 11B satisfies the MGDSHP GP. All other alternatives are compatible with all GPs except the MGDSHP; therefore, Alt 11B received a score of 4, while all others received a score of 1.



ENVIRONMENTAL STEWARDSHIP & PLANNING
INCORPORATED

Memorandum

To: Keith Rhodes, P.E.
From: Steve Peterson, Amanda Rose and Martin Rose
Date: August 26, 2009
Re: State Route 49 Realignment Project – Intermediate Level 1 Screening

The El Dorado County Transportation Commission (EDCTC) is developing and preparing a feasibility study for the realignment of State Route 49 (SR 49) from the intersection of SR 49 with Lotus Road in the town of Coloma to the intersection of SR 49 with Pleasant Valley Road in the town of El Dorado. Through the completion of the Level 1 Screening, the EDCTC and the T.Y. LIN International (TYLI) team have chosen 10 alternative alignments to consider for further evaluation; however, the feasibility study will ultimately evaluate three potential alignments for SR 49 and a no project alternative so an Intermediate Level 1 Screening is necessary to select which three alternatives will advance to the Level 2 Screening Evaluation.

Environmental Stewardship & Planning, Inc. (ESP) has prepared this Intermediate Level 1 Screening to provide a cursory evaluation of cultural resources and natural resources within and adjacent to the 10 alternative alignments. ESP used the following criteria to evaluate the 10 alternative alignments:

- The proposed alternative alignment would have the potential to conflict with historic resources, including structures, towns and districts.
- The proposed alternative alignment is located in a 7.5-minute quadrangle in which special-status species have been previously recorded as identified in the California Natural Diversity Database (CNDDDB).
- The proposed roadway segment has the potential to impact bodies of water as identified on the National Wetland Inventory.

- The proposed roadway segment is located within or adjacent to Areas More Likely to Contain Asbestos.
 - The proposed roadway segment is located within or adjacent to Quarter Mile Buffer for More Likely to Contain Asbestos or Fault Line.
-

Cultural Resources

Based on a cursory review of the El Dorado County General Plan Environmental Impact Report (EIR), one property located within the project area is listed on the National Register of Historic Places (NRHP)/California Register of Historic Places (CRHP). The Town of Coloma is listed on the NRHP/CRHP, and development of Alternative Group 11 would have the potential to impact cultural resources within the Town.

The El Dorado County General Plan EIR also identifies California State Historic Landmarks adjacent to the project area. Three sites are located adjacent to the alternative alignments: the Town of Diamond Springs, the El Dorado-Nevada House-Pony Express Route, and Coloma Road.

The Town of Diamond Springs is registered as California Historical Landmark #487. Diamond Springs is known for producing a 25-pound gold nugget, one of the largest gold findings ever discovered in El Dorado County. Development of Alternative Groups 5 and 11 would have the potential to impact cultural resources within the Town of Diamond Springs.

The El Dorado-Nevada House-Pony Express Route is registered as California Historical Landmark #700 and was an important station of the Central Overland Pony Express. Its location is the southwest corner of Pleasant Valley Road near Church Street in the community of El Dorado. Development of Alternative Group 2 would have the potential to impact the El Dorado-Nevada House-Pony Express Route.

Coloma Road is registered as California Historical Landmark #748. The old Coloma Road was used by thousands of miners traveling to and from the dig sites. Because Alternative Group 11 crosses the old Coloma Road, development of Alternative Group 11 would have the potential to impact the California Historical Landmark #748.

Because a record search from the North Central Information Center has not been conducted, the cursory review conducted for the Intermediate Level 1 Screening likely does not include all cultural resources located within or adjacent to the 10 alternative alignments.

Natural Resources

ESP conducted a query of the CNDDDB for all special-status species within the Coloma, Shingles, Garden Valley, and Placerville, California 7.5-minute U.S. Geological Survey (USGS) topographic quadrangles. The CNDDDB identified eight wildlife special-status species and 13 plant special-status species that have been previously recorded within the four quadrangles identified above. Table 1 indicates the special-status species, the species' listing, a brief description of habitat requirements, and the quadrangle where the species was recorded.

Table 1. Special-Status Species with the Potential to be Located Within the Project Area

Species Name (<i>Scientific Name</i> /Common Name)	Listing Status	Habitat Requirements	Location of Recordation
Animals			
<i>Accipiter gentilis</i> Northern goshawk	CSC	Within and in the vicinity of coniferous forest. Uses old nests and maintains alternate sites	Garden Valley
<i>Actinemys marmorata marmorata</i> Northwestern pond turtle	CSC	Associated with permanent or nearly permanent water in a wide variety of habitats	Garden Valley, Coloma
<i>Agelaius tricolor</i> Tricolored blackbird	CSC	Marshes and blackberry thickets	Placerville, Garden Valley, Coloma
<i>Ardea alba</i> Great egret	SLC	Colonial nester in large trees	Placerville
<i>Lasionycteris noctivagans</i> Silver-haired bat	—	Primarily a coastal and montane forest dweller feeding over streams, ponds and open brushy areas	Garden Valley
<i>Myotis yumanensis</i> Yuma myotis	—	Optimal habitats are open forests and woodlands with sources of water over which to feed	Garden Valley
<i>Phrynosoma coronatum (frontale population)</i> Coast (California) horned lizard	CSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes	Shingle Springs
<i>Rana boylei</i> Foothill yellow-legged frog	CSC	Streams and rivers to 2,088 m (6,000 ft)	Coloma
Plants			
<i>Allium jepsonii</i> Jepson's onion	CNPS List 1B	Cismontane woodland, Lower montane coniferous	Shingle Springs
<i>Arctostaphylos nissenana</i> Nissenan manzanita	CSC, CNPS List 1B	Closed-cone forest, chaparral	Placerville, Garden Valley
<i>Calystegia stebbinsii</i> Stebbins' morning-glory	FE, CE	Chaparral, cismontane woodland	Coloma, Shingle Springs
<i>Ceanothus roderickii</i> Pine Hill ceanothus	FE, CR	Chaparral, woodland within rocky serpentine and gabbro soils	Shingle Springs
<i>Chlorogalum grandiflorum</i> Red Hills soaproot	CNPS List 1B	Chaparral, woodland within rocky serpentine and gabbro soils	Garden Valley, Shingle Springs
<i>Clarkia biloba ssp. brandegeae</i> Brandegee's clarkia	SLC, CNPS List 1B	Chaparral, woodland within rocky serpentine and gabbro soils	Placerville, Garden Valley, Coloma
<i>Fremontodendron decumbens</i> Pine Hill flannelbush	FE, CR, CNPS List 1B	Chaparral, cismontane woodland	Shingle Springs
<i>Galium californicum ssp. sierrae</i> El Dorado bedstraw	FE, CR, CNPS List 1B	Woodland within rocky serpentine and gabbro soils	Shingle Springs
<i>Helianthemum suffrutescens</i> Bisbee Peak rush-rose	CNPS List 3	Chaparral	Shingle Springs

Table 1. Special-Status Species with the Potential to be Located Within the Project Area (Continued)			
Species Name (Scientific Name/Common Name)	Listing Status	Habitat Requirements	Location of Recordation
<i>Horkelia parryi</i> Parry's horkelia	CNPS List 1B	Chaparral, cismontane woodland	Placerville, Garden Valley
<i>Packera layneae</i> Layne's ragwort	FT	Chaparral, woodland, rocky serpentine and gabbro soils	Placerville, Garden Valley, Coloma, Shingle Springs
<i>Viburnum ellipticum</i> Oval-leaved viburnum	CNPS List 2	Chaparral, cismontane woodland, lower montane coniferous forest	Placerville
<i>Wyethia reticulata</i> El Dorado County mule ears	CNPS List 1B	Chaparral, cismontane woodland, and coniferous forest	Coloma, Shingle Springs
Source: CNDDDB, 2009 Status: FE = Federal Endangered CE = California State Endangered FT = Federal Threatened CT = California State Threatened FC = Federal Candidate CSC = California Species of Concern CR = California Rare SLC = Sacramento District Species of Local Concern CNPS List 1B = Rare or Endangered in California and Elsewhere CNPS List 2 = Rare or Endangered in California CNPS List 3 = Require more information			

The table, above, summarizes the previous occurrences of special-status species within the project area. The CNDDDB is not all-inclusive because only special-status species that have been observed are included, and the absence of recorded occurrences for a species in the CNDDDB would not preclude the possibility of its existence in an area if the site is within the species' range and suitable habitat is present.

Because special-status species have been identified in all of the four project area quadrangles and because the project area supports suitable habitat for special-status plants and animal species, development along the 10 alternative alignments has the potential to impact special-status species.

ESP conducted a query of the National Wetland Inventory (NWI) for the Coloma, Shingle Springs, Garden Valley, and Placerville, California 7.5-minute U.S. Geological Survey (USGS) topographic quadrangles. A review of the NWI mapping does not reflect all wetlands within the project area, but rather provides an overview of known water features. Therefore, the information contained within Table 2, below, likely does not include all potentially affected wetlands/waters of the U.S. As shown in Table 2 and based on the NWI mapping, wetlands/waters of the U.S. are not located immediately adjacent to three roadway segments: 21, 29 and 37.

Table 2. Wetlands Present Within or Adjacent to Project Roadway Segments		
Segment	Alternative Group(s)	Wetlands Present Within or Adjacent to Segment Alignment
1	2C, 3 (B, C, D, and E), and 5 (E, G, and H)	Freshwater Forested/Shrub Wetland, NHD stream crossing
2	2C and 3 (B, C, D, and E)	Freshwater Pond
5	2C	Dry Creek crossing
7	2C	Dry Creek crossing, Freshwater Emergent Wetland
13	2C and 3 (B, C, D, and E)	Freshwater Pond, Freshwater Forested/Shrub Wetland, Dry Creek
14	2C	Freshwater Emergent Wetland, Dry Creek crossing
15	2C	Freshwater Pond
16	2C	Dry Creek crossing
17	3 (B, C, D, and E), 5 (E, G, and H), 10, and 11	Freshwater Emergent Wetland
18	3 (B, C, D, and E), 5 (E, G, and H), 10, and 11B	Freshwater Emergent Wetland
20	3B, 5G, and 11B	Hangtown Creek crossing (first order tributary)
21	3 (B and C), 5 (G and H), and 11B	None immediately adjacent
22	11B	Hangtown Creek crossing, Hangtown Creek crossing (first order tributary)
23	5 (E, G, and H) and 11B	NHD stream crossing
24	11B	Shingle Creek crossing, NHD stream crossing
25	11B	South Fork American River (Riverine) crossing, Freshwater Forested/Shrub Wetland
27	5 (E, G, and H)	Freshwater Emergent Wetland, Freshwater Pond
28	3 (B, C, D, and E)	Mound Springs Creek crossing, Indian Creek crossing
29	3 (B, C, and D)	None immediately adjacent
30	3E	Freshwater Forested/Shrub Wetland, Mound Springs Creek crossing, Freshwater Pond, Freshwater Emergent Wetland
31	3D and 5E	Hangtown Creek crossing (first order tributary)
32	5 (E, G, and H)	Freshwater Pond
33	5 (E, G, and H)	Hangtown Creek crossing, NHD stream crossing
36	10	Hangtown Creek crossing, Freshwater Pond, NHD stream crossing,
37	3B, 5G, and 11B	None immediately adjacent
38	3B, 5G, 11B	Weber Creek crossing
39	3(C, D, and E), 5(E and H), and 10	Freshwater Forested/Shrub Wetland
Source: National Wetland Inventory Map, 2009 NHD = National Hydrography Dataset		

Because wetlands/waters of the U.S. have been identified within and adjacent to the roadway segments comprising the 10 alternative alignments, development of any of the 10 alternative alignments has the potential to impact wetlands/waters of the U.S.

Soils

ESP conducted a cursory evaluation of the potential for naturally occurring asbestos (NOA) occurring within the project area. The El Dorado County Air Quality Management District (EDCAQMD) has adopted an El Dorado County Naturally Occurring Asbestos Review Area Map which identifies those areas more likely to contain

NOA. Ground disturbance activities within these areas are subject to additional County regulatory requirements to minimize human exposure potential. Six roadway segments (1, 2, 13, 14, 15 and 27) are located within areas “More Likely to Contain Asbestos” according to the July 22, 2005 El Dorado County Naturally Occurring Asbestos Review Area Map. Although it is unknown whether NOA occurs in these areas, there is the potential for NOA occurrence and disturbance. Based on this review, development of Alternative Groups 2, 3, and 5 have the potential to disturb NOA.

The six roadway segments identified above also traverse areas classified as “Quarter Mile Buffer for More Likely to Contain Asbestos or Fault Line” on the July 22, 2005 El Dorado County Naturally Occurring Asbestos Review Area Map. In addition to these six roadway segments, three additional roadway segments also cross the “Quarter Mile Buffer for More Likely to Contain Asbestos or Fault Line”: 7, 16, and 17. Although it is unknown whether NOA occurs in these areas, there is the potential for NOA occurrence and disturbance. Based on this review, development of Alternative Groups 2, 3, 5 and 11 have the potential to disturb NOA.

Conclusion

The Intermediate Level 1 Screening provided a cursory review of available resource materials, such as the El Dorado County General Plan EIR, the CNDDDB for the Coloma, Shingle Springs, Garden Valley, and Placerville quadrangles, the NWI mapping for the four project area quadrangles, and the July 22, 2005 El Dorado County Naturally Occurring Asbestos Review Area Map. Based on the Intermediate Level 1 Screening, ESP has determined that the 10 alternative alignments would result in similar environmental impacts and have received scores ranging from 0.9 to 1.3 (out of a possible 4). The scores reflect the potential significance of the impact resulting from development of the proposed alternative alignments. Table 3 shows the results of the scoring.

Intermediate Level 1 Screening Criteria		Group 2	Group 3			Group 5			Group 10	Group 11	
		2C	3B	3C	3D	3E	5E	5G	5H	10	11B
Goal 6: Minimize impacts to cultural and natural resources.	Potential to conflict with historic resources, including structures, towns and districts.	1	2	2	2	2	1	1	1	2	1
	Located in a 7.5-minute quadrangle in which special-status species have been previously recorded as identified in the California Natural Diversity Database (CNDDDB).	2	2	2	2	2	2	2	2	2	2
	Potential to impact bodies of water as identified on the National Wetland Inventory.	2	2	2	2	2	2	2	2	2	2
	Located within or adjacent to Areas More Likely to Contain Asbestos.	1	1	1	1	1	1	1	1	3	3
	Buffer for More Likely to Contain Asbestos or Fault Line	3	3	3	3	3	3	3	3	4	3
	TOTAL	0.9	1	1	1	1	0.9	0.9	0.9	1.3	1.1

As shown in Table 3, Alternative Group 10 received the highest score (1.3) while Alternative Groups 2 and 5 received the lowest score (0.9).

MEMORANDUM

Date: September 28, 2009

To: Keith Rhodes, T.Y. Lin International

From: David B. Robinson & Bill Penney, Fehr & Peers

Subject: *Scoring Assumptions for the Intermediate Level 1 Screening of the State Route 49 Realignment Study*

RS09-2661

Fehr & Peers has completed the Intermediate Level 1 Screening for the alternative route analysis of the State Route 49 (SR 49) Realignment Study. The following describes the methodology used to evaluate each screening criterion. Under each criterion, scores ranging from 1 to 4 points were given to each alternative. A score of 4 points was given to alternatives that had the most desirable results under each screening criterion, while 1 point was given to the alternatives that had the least desirable results. The number of alternatives given a certain point value was determined based on similarities in the results of each alternative under each screening criterion.

Goal 2: Efficient transport of goods and people (i.e. commercial, regional, and local) regionally and interregional for vehicle, bicycle, and pedestrian travel.

- Travel Time Reduction (Regional) – the El Dorado County Travel Demand Forecasting (TDF) Model was used to determine the average bi-directional travel times along the entire length of each of the 11 proposed alternative routes during the PM peak hour.
- Travel Time Reduction (Local) – the methodologies were the same for this criterion as was for the regional travel times; however, the local results were obtained by calculating the average bi-directional travel times within an approximate 2 mile buffer of the US 50 / Missouri Flat Road interchange for each of the proposed alternative routes. This area was selected based on its centralized location within the study area.

Goal 3: Improve accessibility for commercial, regional, and local traffic between residential areas and business districts of the City of Placerville, Diamond Springs, and El Dorado.

- Population (within ½ mile buffer of alternative) divided by route distance – GIS based software and information from the 2000 US Census for El Dorado County was used to determine the total number of people within a half mile buffer of each alternative. This was used in combination with the total route distance for each alternative to calculate persons per mile over the entire length of each alternative route.
- Employment (within ½ mile buffer of alternative) divided by route distance – this criterion was determined in the same manner as was described for the population divided by route

distance; however, employment totals were used instead of population totals to determine the accessibility of each route to jobs.

- Population and employment (within ½ mile buffer of alternative) divided by route distance – this criterion is a combined total of the population and employment within a half mile buffer of each alternative.

Goal 4: Improve accessibility for commercial, regional, and local traffic between residential areas, communities, and business districts along SR 49 from El Dorado to Coloma

- Population within ½ mile buffer of alternative – similar to the description above for the population per route mile, this criterion was analyzed to compare the accessibility for the greatest number of people regardless of the length of each route. As compared to the population per route distance, this criterion does not account for the circuitous nature that some of the alternative routes have. The directness of each route has a large effect on the total population within a half mile buffer.
- Employment within ½ mile buffer of alternative – as described before, employment totals were used instead of population totals to determine the route offering accessibility to the greatest number of jobs.

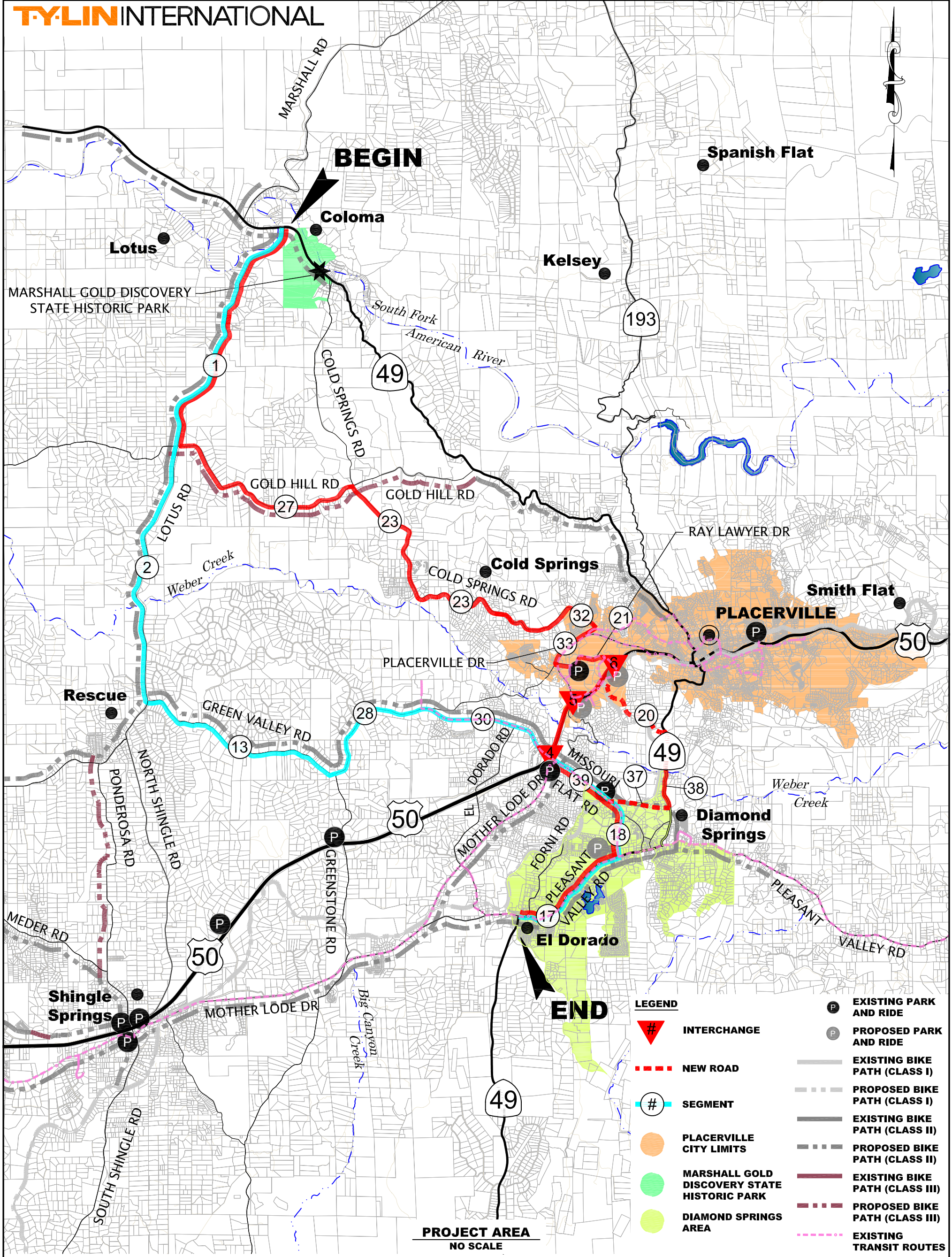


LEVEL 2 SCREENING

ATTACHMENT E



LEVEL 2 SCREENING MAP OF ALTERNATIVES



ALTERNATIVES FOR LEVEL 2 SCREENING

— ALTERNATIVE GROUP 3

— ALTERNATIVE GROUP 5

STATE ROUTE 49
REALIGNMENT STUDY





LEVEL 2 SCREENING RESULTS

Scoring definitions are as follows:
 1 = No improvement or unacceptable impact
 2 = Marginal improvement or high impact
 3 = Acceptable improvement or moderate impact
 4 = Substantial improvement or low impact

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 3301 C Street, Bldg 100-M
 Sacramento, CA 95816
 o: 916.366.6331 f: 916.366.6536

SCREENING CRITERIA			No Build	Group 3		Group 5	
Criterion 2A: Transportation Benefits	Objective	Criteria		3E	5G	5H	
Transportation Goal 1: Safe transport of goods and people (i.e.commercial, regional, and local) regionally and interregionally for vehicle, bicycle, and pedestrian travel (i.e. improve sharp curves, steep grades, and traveled way of SR 49 for modern transportation demands)	Increase safety	# of curves with advisory speed limits per mile	1	4	2	3	
		# of grades >7%	1	3	1	1	
		# of constraints that prevent widening (i.e. side-slopes >2:1, and right of way requiring removal of buildings)	1	3	4	4	
		# of school zones	4	1	3	2	
Transportation Goal 2: Efficient transport of goods and people (i.e. commercial, regional, and local) regionally and interregionally for vehicle, bicycle, and pedestrian travel	Increase vehicular mobility	Travel time reduction (Regional)	1	3	2	2	
		Travel time reduction (Local)	1	2	3	3	
		Roadway segment performance (Regional). Miles of Alignment operating at acceptable LOS.	1	1	3	3	
		Vehicle-miles traveled reduction	1	1	1	1	
Transportation Goal 3: Improve accessibility for commercial, regional, and local traffic between residential areas and business districts of the City of Placerville, Diamond Springs, and El Dorado	Improve vehicular accessibility	Alignment within the City of Placerville city limits	1	4	1	1	
		Alignment within the Diamond Springs business district	1	4	1	2	
		Alignment within the El Dorado business district	4	1	4	4	
		Population (within 1/2 mile buffer of alternative) divided by route distance	1	2	4	3	
		Employment (within 1/2 mile buffer of alternative) divided by route distance	1	2	3	3	
		Population and employment (within 1/2 mile buffer of alternative) divided by route distance	1	2	4	4	
Transportation Goal 4: Improve accessibility for commercial, regional, and local traffic between residential areas and business districts along SR 49 from Coloma to El Dorado	Improve vehicular accessibility	Population within 1/2 mile Buffer of Alternative	1	2	4	3	
		Employment within 1/2 mile Buffer of Alternative	1	2	3	4	
Transportation Goal 5: Maximize the use of existing roads to minimize resources required to achieve improved conditions in the SR 49 corridor and support the projected land uses of the adopted El Dorado County and City of Placerville General Plans	Utilize existing local roads for realignment	Use of existing local roads only	1	4	3	4	
		# of bridge widenings required	4	2	3	3	
		# of new bridges required	4	4	4	4	
Transportation Goal 6A: Relieve SR 49 traffic impacts to Downtown business district of City of Placerville.	Realign SR 49 from Downtown business district of City of Placerville	Alignment within the business district.	1	4	1	1	
Transportation Goal 6B: Relieve SR 49 traffic impacts to business districts of Diamond Springs.	Realign SR 49 from business district of Diamond Springs	Alignment within the business district.	1	2	1	2	
Transportation Goal 7: Maximize multi-modal opportunities locally and interregional (i.e. bicycle, pedestrian, and transit) as specified in the Caltrans Deputy Directive (DD) 64.	Identify increase in, or proximity to transit routes, park and ride lots, and pedestrian and bicycle trails and facilities	# of bicycle facility connections (existing or feasible future)	1	1	1	1	
		# of transit facility connections (existing or feasible future)	1	1	3	4	
		# of park-n-ride facility connections (existing or feasible future)	1	3	3	4	
Transportation Goal 8A: Relieve SR 49 traffic impacts to densely populated residential areas of the City of Placerville.	Realign SR 49 from densely populated residential areas of City of Placerville	# of residential streets connections	1	4	2	2	
		# of residential areas directly impacted	1	4	2	2	
Transportation Goal 8B: Relieve SR 49 traffic impacts to densely populated residential areas of the Diamond Springs.	Realign SR 49 from densely populated residential areas of Diamond Springs	# of residential streets connections	1	2	1	2	
		# of residential areas directly impacted	1	2	1	2	
SUBTOTAL CRITERIA 2A - TRANSPORTATION BENEFITS			40	70	68	74	

Scoring definitions are as follows:
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 4 = Substantial improvement or low impact

SCREENING CRITERIA						
Criterion 2B: Responsiveness to Environmental Goals	Objective	Criteria	No Build	Group 3		Group 5
				3E	5G	5H
Environmental Goal 1: Maintain visual integrity along the project corridor.	AESTHETICS / VISUAL - Avoid/minimize potential impacts on aesthetics to the area	Would the project result in substantial degradation to the existing visual character or quality of the site and its surroundings?	4	3	1	3
Environmental Goal 2: Maintain agricultural land uses adjacent to the project corridor.	AGRICULTURAL RESOURCES - Avoid / minimize potential impacts to agricultural lands (e.g., Farmland and lands under Williamson Act Contracts).	Would the project result in the conversion of Farmland or conflict with Williamson Act Contracts?	4	3	2	2
Environmental Goal 3: Strive to achieve and maintain established local, State and Federal air quality standards.	AIR QUALITY - Avoid / minimize potential impacts on air quality	Would the project result in an exceedance of established air quality emissions?	4	1	1	1
Environmental Goal 4: Maintain and protect wildlife and wildlife habitat resources of significant biological and ecological value.	SPECIES - Avoid / minimize potential impacts on native and special-status plant and wildlife species	Would the project result in an impact to native or special-status plant and wildlife species or their habitat?	4	2	2	2
Environmental Goal 5: Maintain and protect fisheries resources of significant biological and ecological value.	WATERS OF THE U.S./WETLANDS - Avoid / minimize potential impacts to waters of the U.S. and wetlands	Would the project result in impacts to waters of the U.S. and/or wetlands?	4	2	2	2
		Acres of vegetation removal	4	3	1	2
Environmental Goal 6: Maintain and protect vegetation resources of significant biological and ecological value.	TREES - Avoid / minimize oak tree removal	Would the project result in the removal of oak woodlands?	4	2	2	2
Environmental Goal 7: Preserve and protect historic and archaeological resources.	CULTURAL RESOURCES - Avoid / minimize potential impacts to historic and archaeological resources	Would the project result in impacts to historic and/or archaeological resources?	4	1	1	1
Environmental Goal 8: Maintain geological integrity of the natural environment.	GEOLOGY/SOILS - Avoid/minimize potential impacts on geology/soils to the area	Would the project result in increased risk from geologic conditions (such as liquefaction, ground-shaking, landslides), result in soil erosion, or result in exposure of the project to unstable soils? Would the project result in increased risk of exposure to naturally occurring asbestos?	4	1	2	2
Environmental Goal 9: Protect adjacent land uses and travelers from exposure to hazards and hazardous materials.	HAZARDS/HAZARDOUS MATERIALS - Avoid / minimize potential impacts to increased risk of hazards and exposure to hazardous materials	Would the project result in an increased risk of exposure of workers and/or the public to hazards and/or hazardous materials? Would the project impair an adopted emergency response or evacuation plan?	4	3	3	3
Environmental Goal 10: Maintain water quality in the environment.	HYDROLOGY AND WATER QUALITY - Avoid / minimize potential impacts to water quality	Would the project have the potential to degrade water quality or alter drainage patterns?	4	2	2	2
Environmental Goal 11: Protection and conservation of existing land uses adjacent to the project corridor.	LAND USE AND PLANNING - Avoid / minimize potential conflicts with the County General Plan, City General Plan, and/or the Marshall Gold Discovery State Historic Park General Plan.	Would the project conflict with the County General Plan, City General Plan, and/or the Marshall Gold Discovery State Historic Park General Plan?	4	3	3	3
Environmental Goal 12: Ensure that adjacent land uses are not subjected to noise beyond acceptable levels.	NOISE - Avoid / minimize potential noise impacts to adjacent land uses.	Would the project result in increased noise levels in exceedance of accepted noise standards?	4	1	1	1
Environmental Goal 13: Protect existing residences consistent with applicable planning documents.	POPULATION AND HOUSING - Avoid / minimize potential displacement of existing residences.	Would the project result in displacement of a substantial number of existing residences?	4	2	2	2
Environmental Goal 14: Provide public services to project corridor.	PUBLIC SERVICES - Avoid / minimize potential impacts on public services.	Would the project result in potential impacts to public services (such as fire, police, schools, parks), public service facilities, or response times?	4	3	3	3
Environmental Goal 15: Promote recreational opportunities along the project corridor.	RECREATIONAL - Avoid/minimize potential impacts on existing or planned recreational facilities	Would the project result in impacts to existing or planned recreational facilities?	4	3	3	3
Environmental Goal 16: Provide the safe, orderly, and efficient movement of people and goods.	TRANSPORTATION AND CIRCULATION - Avoid / minimize potential impacts to the transport of people and goods within the project corridor.	Would the project result in worsened roadway operations and/or inefficient delivery of goods and services? Would the project result in inadequate emergency access?	4	2	2	2
Environmental Goal 17: Provide sufficient utility and service systems to the project corridor.	UTILITIES AND SERVICE SYSTEMS - Avoid/minimize potential impacts on utilities and service systems.	Would the project result in disruptions to utilities and/or services, require construction of additional service facilities, and/or comply with federal, state and local statutes related to solid waste?	4	3	3	3
SUBTOTAL CRITERIA 2B - RESPONSIVENESS TO ENVIRONMENTAL GOALS			72	40	36	39

LEVEL 2 SCREENING ANALYSIS MATRIX

12/24/2009

Scoring definitions are as follows:

- 1 = No improvement or unacceptable impact
- 2 = Marginal improvement or high impact
- 3 = Acceptable improvement or moderate impact
- 4 = Substantial improvement or low impact

TYLIN INTERNATIONAL

3301 C Street, Bldg 100-M
 Sacramento, CA 95816
 o: 916.366.6331 f: 916.366.6536

SUMMARY OF RESULTS OF LEVEL 2 SCREENING	No Build	Group 3		Group 5	
		3E	5G	5H	
SUBTOTAL CRITERIA 2A - TRANSPORTATION BENEFITS	40	70	68	74	
SUBTOTAL CRITERIA 2B - RESPONSIVENESS TO ENVIRONMENTAL GOALS	*	40	36	39	
TOTAL	40	110	104	113	
RANK		2	3	1	
**CONSTRUCTION COSTS (in millions) \$					
	\$0	\$17.4	\$28.8	\$23.6	

* Scoring for "No Build" Criteria 2B is not included to allow distinction of the alternatives to one another in regards to their impacts to the environment.

** Excludes right of way costs and engineering support

LEVEL 2 SCREENING SCORING ASSUMPTIONS

Level 2 Screening Criteria Scoring Assumptions

Criterion 2A: Transportation Benefits

Transportation Goal 1: Safe transport of goods and people (i.e. commercial, regional, and local) regionally and interregionally for vehicle, bicycle, and pedestrian travel (i.e. improve sharp curves, steep grades, and traveled way of SR 49 for modern transportation demands)

Objective: Increase safety

A. # of curves with advisory speed limits per mile.

The number of curves with advisory speed limits on each segment were counted per mile.

The resulting ratio was used to score each alternative as follows:

<i>Ratio < 0.7</i>	<i>= 4</i>
<i>0.7 < Ratio < 0.9</i>	<i>= 3</i>
<i>0.9 < Ratio < 1.0</i>	<i>= 2</i>
<i>1.0 < Ratio</i>	<i>= 1</i>

B. # of grades >7%.

SR49 is assumed to be a mountainous rural highway with a maximum required grade of 7%, per Caltrans HDM 204. The existing profile of the proposed alignments were evaluated based on the number of grades that exceed 7%. The No-Build alternative was used as the baseline of the scoring with 5 grades exceeding 7%. Therefore, any alternative with 5 or more grades exceeding 7% received a score of 1. Each alternative was scored based on the following:

<i>0 #grades exceeding 7%</i>	<i>= 4</i>
<i>0 < #grades exceeding 7% < 3</i>	<i>= 3</i>
<i>Not used</i>	<i>= 2</i>
<i>3 < #grades exceeding 7% & greater</i>	<i>= 1</i>

C. # of constraints that prevent widening (i.e. side-slopes >2:1, and right of way requiring removal of buildings).

Each alternative was evaluated based on the number of isolated areas within each segment that would require road widenings were the existing side-slopes exceed a grade of 2:1 and/or the right-of-way required would resulted in building removals. Each alternative was scored based on the following:

<i>#of constraints < 10</i>	<i>= 4</i>
<i>10 < #of constraints < 15</i>	<i>= 3</i>
<i>15 < #of constraints < 20</i>	<i>= 2</i>
<i>20 < #of constraints</i>	<i>= 1</i>

D. # of school zones.

Each alternative was evaluated based on the number of school zones within each segment that would require a 25 mph speed limit. Each alternative was scored based on the following:

<i>#of school zones < 2</i>	<i>= 4</i>
<i>2 < #of school zones < 4</i>	<i>= 3</i>
<i>4 < #of school zones < 5</i>	<i>= 2</i>
<i>5 < #of school zones</i>	<i>= 1</i>

Level 2 Screening Criteria Scoring Assumptions

Transportation Goal 2: Efficient transport of goods and people (i.e. commercial, regional, and local) regionally and interregionally for vehicle, bicycle, and pedestrian travel.

Objective: Increase vehicular mobility

- A. Travel time reduction (Regional)
(See memorandum prepared by Fehr & Peers entitled, "Analysis Methodologies for the State Route 49 Realignment Study" dated November 11, 2009 for scoring assumptions for this criteria)
- B. Travel time reduction (Local)
(See memorandum prepared by Fehr & Peers entitled, "Analysis Methodologies for the State Route 49 Realignment Study" dated November 11, 2009 for scoring assumptions for this criteria)
- C. Roadway segment performance (Regional). Miles of Alignment operating at acceptable LOS.
(See memorandum prepared by Fehr & Peers entitled, "Analysis Methodologies for the State Route 49 Realignment Study" dated November 11, 2009 for scoring assumptions for this criteria)
- D. Vehicle-miles traveled reduction
The number of vehicle-miles traveled on each alternative were counted. The No-Build alternative was used as the baseline of the scoring with 1 for a total vehicle-miles traveled of 14.1 miles. Therefore, any alternative with 14.1 or more vehicle-miles traveled received a score of 1. Each alternative was scored based on the following:

$$\begin{aligned} \# \text{of vehicle-miles} < 14.1 &= 4 \\ 14.1 < \# \text{of vehicle-miles} &= 1 \end{aligned}$$

Transportation Goal 3: Improve accessibility for commercial, regional, and local traffic between residential areas and business districts of the City of Placerville, Diamond Springs, and El Dorado.

Objective: Improve vehicular accessibility

- A. Alignment within the City of Placerville city limits.
The number of miles on each segment within the City limits on each alternative were analyzed. Each alternative was scored based on the following:

$$\begin{aligned} \# \text{of miles w/in City Limits} < 0 &= 4 \\ 0 < \# \text{of miles w/in City Limits} < 2 &= 3 \\ 2 < \# \text{of miles w/in City Limits} < 3 &= 2 \\ 3 < \# \text{of miles w/in City Limits} &= 1 \end{aligned}$$
- B. Alignment within the Diamond Springs business district.
The number of miles on each segment within the Diamond Springs business district on each alternative were analyzed. Each alternative was scored based on the following:

$$\begin{aligned} \# \text{of miles w/in DS BD} < 0 &= 4 \\ 0 < \# \text{of miles w/in DS BD} &= 1 \end{aligned}$$
- C. Alignment within the El Dorado business district.

Level 2 Screening Criteria Scoring Assumptions

The number of miles on each segment within the El Dorado business district on each alternative were analyzed. Each alternative was scored based on the following:

$$\begin{aligned} \# \text{ of miles w/in ED BD} < 0 &= 4 \\ 0 < \# \text{ of miles w/in ED BD} &= 1 \end{aligned}$$

- D. Population (within 1/2 mile buffer of alternative) divided by route distance.
(See memorandum prepared by Fehr & Peers entitled, "Analysis Methodologies for the State Route 49 Realignment Study" dated November 11, 2009 for scoring assumptions for this criteria)
- E. Employment (within 1/2 mile buffer of alternative) divided by route distance.
(See memorandum prepared by Fehr & Peers entitled, "Analysis Methodologies for the State Route 49 Realignment Study" dated November 11, 2009 for scoring assumptions for this criteria)
- F. Population and employment (within 1/2 mile buffer of alternative) divided by route distance.
(See memorandum prepared by Fehr & Peers entitled, "Analysis Methodologies for the State Route 49 Realignment Study" dated November 11, 2009 for scoring assumptions for this criteria)

Transportation Goal 4: Improve accessibility for commercial, regional, and local traffic between residential areas, communities, and business districts along SR 49 from El Dorado to Coloma.

Objective: Improve vehicular accessibility

- A. Population within 1/2 mile Buffer of Alternative
(See memorandum prepared by Fehr & Peers entitled, "Analysis Methodologies for the State Route 49 Realignment Study" dated November 11, 2009 for scoring assumptions for this criteria)
- B. Employment within 1/2 mile Buffer of Alternative
(See memorandum prepared by Fehr & Peers entitled, "Analysis Methodologies for the State Route 49 Realignment Study" dated November 11, 2009 for scoring assumptions for this criteria)

Transportation Goal 5: Maximize the use of existing roads to minimize resources required to achieve improved conditions in the SR 49 corridor and support the projected land uses of the adopted El Dorado County and City of Placerville General Plans.

Objective: Utilize existing local roads for realignment

- A. Use of existing local roads only
The number of miles of new roads on each alternative were measured. Each alternative was scored based on the following:
 - # of new road miles < 0 = 4*
 - 0 < # of new road miles < 2 = 3*
 - 2 < # of new road miles < 5 = 2*
 - 5 < # of new road miles = 1*

Level 2 Screening Criteria Scoring Assumptions

B. # of bridge widenings required

The number of bridge widenings required on each alternative was counted. Each alternative was scored based on the following:

$0 < \text{\#of bridge widenings} < 1$	= 4
$1 < \text{\#of bridge widenings} < 2$	= 3
$2 < \text{\#of bridge widenings} < 5$	= 2
$5 < \text{\#of bridge widenings}$	= 1

C. # of new bridges required

The number of new bridges required on each alternative was counted. Each alternative was scored based on the following:

$\text{\#of new bridges} = 0$	= 4
$0 < \text{\#of new bridges} < 2$	= 2
$2 < \text{\#of new bridges}$	= 1

Transportation Goal 6A: Relieve SR 49 traffic impacts to Downtown business district of City of Placerville.

Objective: Realign SR 49 from Downtown business district of City of Placerville

A. Alignment within the business district.

<i>within Business District/City Limits</i>	= 1
<i>within 1 mile of Business District/City Limits</i>	= 2
<i>within 1.5 miles of Business District/City Limits</i>	= 3
<i>within 2 miles of Business District/City Limits</i>	= 4

Transportation Goal 6B: Relieve SR 49 traffic impacts to business districts of Diamond Springs.

Objective: Realign SR 49 from business district of Diamond Springs

A. Alignment within the business district.

<i>within Business District/City Limits</i>	= 1
<i>within 1 mile of Business District/City Limits</i>	= 2
<i>within 1.5 miles of Business District/City Limits</i>	= 3
<i>within 2 miles of Business District/City Limits</i>	= 4

Transportation Goal 7: Maximize multi-modal opportunities locally and interregional (i.e. bicycle, pedestrian, and transit) as specified in the Caltrans Deputy Directive (DD) 64.

Objective: Identify increase in, or proximity to transit routes, park and ride lots, and pedestrian and bicycle trails and facilities

A. # of bicycle facility connections (existing or feasible future)

$9 < \text{\#of bicycle connections}$	= 1
$\text{\#of bicycle connections} < 8$	= 4

B. # of transit facility connections (existing or feasible future)

$\text{\#of transit connections} < 6$	= 1
$6 < \text{\#of transit connections} < 7$	= 3

Level 2 Screening Criteria Scoring Assumptions

- $7 < \# \text{ of transit connections} = 4$
- C. # of park-n-ride facility connections (existing or feasible future)
- $\# \text{ of park-n-ride connections} = 0 = 1$
- $0 < \# \text{ of park-n-ride connections} < 1 = 2$
- $1 < \# \text{ of park-n-ride connections} < 4 = 3$
- $4 < \# \text{ of park-n-ride connections} = 4$

Transportation Goal 8A: Relieve SR 49 traffic impacts to densely populated residential areas of the City of Placerville.

Objective: Realign SR 49 from densely populated residential areas of City of Placerville

- A. # of residential streets connections
- $0 < \# \text{ of residential streets connections} < 8 = 4$
- $8 < \# \text{ of residential streets connections} < 11 = 3$
- $11 < \# \text{ of residential streets connections} < 18 = 2$
- $18 < \# \text{ of residential streets connections} = 1$
- B. # of residential areas directly impacted
- $0 < \# \text{ of residential areas impacted} < 1 = 4$
- $1 < \# \text{ of residential areas impacted} < 2 = 3$
- $2 < \# \text{ of residential areas impacted} < 4 = 2$
- $4 < \# \text{ of residential areas impacted} = 1$

Transportation Goal 8B: Relieve SR 49 traffic impacts to densely populated residential areas of the Diamond Springs.

Objective: Realign SR 49 from densely populated residential areas of Diamond Springs

- A. # of residential streets connections
- $0 < \# \text{ of residential streets connections} < 1 = 4$
- $1 < \# \text{ of residential streets connections} < 6 = 3$
- $6 < \# \text{ of residential streets connections} < 12 = 2$
- $12 < \# \text{ of residential streets connections} = 1$
- B. # of residential areas directly impacted
- $0 < \# \text{ of residential areas impacted} < 1 = 4$
- $1 < \# \text{ of residential areas impacted} < 2 = 3$
- $2 < \# \text{ of residential areas impacted} < 4 = 2$
- $4 < \# \text{ of residential areas impacted} = 1$

Level 2 Screening Criteria Scoring Assumptions

Criterion 2B: Responsiveness to Environmental Goals

Environmental Goal 1: Maintain visual integrity along the project corridor.

Objective: AESTHETICS / VISUAL - Avoid/minimize potential impacts on aesthetics to the area

- A. Would the project result in substantial degradation to the existing visual character or quality of the site and its surroundings?
(See memorandum prepared by ESP entitled, " State Route 49 Realignment Project – Constraints and Opportunities Analysis" dated November 13, 2009 for scoring assumptions for this criteria)

Environmental Goal 2: Maintain agricultural land uses adjacent to the project corridor.

Objective: AGRICULTURAL RESOURCES - Avoid / minimize potential impacts to agricultural lands (e.g., Farmland and lands under Williamson Act Contracts).

- A. Would the project result in the conversion of Farmland or conflict with Williamson Act Contracts?
(See memorandum prepared by ESP entitled, " State Route 49 Realignment Project – Constraints and Opportunities Analysis" dated November 13, 2009 for scoring assumptions for this criteria)

Environmental Goal 3: Strive to achieve and maintain established local, State and Federal air quality standards.

Objective: AIR QUALITY - Avoid / minimize potential impacts on air quality

- A. Would the project result in an exceedance of established air quality emissions?
(See memorandum prepared by ESP entitled, " State Route 49 Realignment Project – Constraints and Opportunities Analysis" dated November 13, 2009 for scoring assumptions for this criteria)

Environmental Goal 4: Maintain and protect wildlife and wildlife habitat resources of significant biological and ecological value.

Objective: SPECIES - Avoid / minimize potential impacts on native and special-status plant and wildlife species

- A. Would the project result in an impact to native or special-status plant and wildlife species or their habitat?
(See memorandum prepared by ESP entitled, " State Route 49 Realignment Project – Constraints and Opportunities Analysis" dated November 13, 2009 for scoring assumptions for this criteria)

Environmental Goal 5: Maintain and protect fisheries resources of significant biological and ecological value.

Objective: WATERS OF THE U.S./WETLANDS - Avoid / minimize potential impacts to waters of the U.S. and wetlands

- A. Would the project result in impacts to waters of the U.S. and/or wetlands?
(See memorandum prepared by ESP entitled, " State Route 49 Realignment Project – Constraints and Opportunities Analysis" dated November 13, 2009 for scoring assumptions for this criteria)

- B. Acres of vegetation removed (Assumes an average widening of 16 feet).

Level 2 Screening Criteria Scoring Assumptions

<i>0 < #of acres of vegetation removed <20</i>	<i>= 4</i>
<i>20 < #of acres of vegetation removed <23</i>	<i>= 3</i>
<i>23 < #of acres of vegetation removed <27</i>	<i>= 2</i>
<i>27 < #of acres of vegetation removed</i>	<i>= 1</i>

Environmental Goal 6: Maintain and protect vegetation resources of significant biological and ecological value.

Objective: TREES - Avoid / minimize oak tree removal

- A. Would the project result in the removal of oak woodlands?

(See memorandum prepared by ESP entitled, " State Route 49 Realignment Project – Constraints and Opportunities Analysis" dated November 13, 2009 for scoring assumptions for this criteria)

Environmental Goal 7: Preserve and protect historic and archaeological resources.

Objective: CULTURAL RESOURCES - Avoid / minimize potential impacts to historic and archaeological resources

- A. Would the project result in impacts to historic and/or archaeological resources?

(See memorandum prepared by ESP entitled, " State Route 49 Realignment Project – Constraints and Opportunities Analysis" dated November 13, 2009 for scoring assumptions for this criteria)

Environmental Goal 8: Maintain geological integrity of the natural environment.

Objective: GEOLOGY/SOILS - Avoid/minimize potential impacts on geology/soils to the area

- A. Would the project result in increased risk from geologic conditions (such as liquefaction, ground-shaking, landslides), result in soil erosion, or result in exposure of the project to unstable soils? Would the project result in increased risk of exposure to naturally occurring asbestos?

(See memorandum prepared by ESP entitled, " State Route 49 Realignment Project – Constraints and Opportunities Analysis" dated November 13, 2009 for scoring assumptions for this criteria)

Environmental Goal 9: Protect adjacent land uses and travelers from exposure to hazards and hazardous materials.

Objective: HAZARDS/HAZARDOUS MATERIALS - Avoid / minimize potential impacts to increased risk of hazards and exposure to hazardous materials

- A. Would the project result in an increased risk of exposure of workers and/or the public to hazards and/or hazardous materials? Would the project impair an adopted emergency response or evacuation plan?

(See memorandum prepared by ESP entitled, " State Route 49 Realignment Project – Constraints and Opportunities Analysis" dated November 13, 2009 for scoring assumptions for this criteria)

Environmental Goal 10: Maintain water quality in the environment.

Objective: HYDROLOGY AND WATER QUALITY - Avoid / minimize potential impacts to water quality

- A. Would the project have the potential to degrade water quality or alter drainage patterns?

Level 2 Screening Criteria Scoring Assumptions

(See memorandum prepared by ESP entitled, " State Route 49 Realignment Project – Constraints and Opportunities Analysis" dated November 13, 2009 for scoring assumptions for this criteria)

Environmental Goal 11: Protection and conservation of existing land uses adjacent to the project corridor.

Objective: LAND USE AND PLANNING - Avoid / minimize potential conflicts with the County General Plan, City General Plan, and/or the Marshall Gold Discovery State Historic Park General Plan.

- A. Would the project conflict with the County General Plan, City General Plan, and/or the Marshall Gold Discovery State Historic Park General Plan?

(See memorandum prepared by ESP entitled, " State Route 49 Realignment Project – Constraints and Opportunities Analysis" dated November 13, 2009 for scoring assumptions for this criteria)

Environmental Goal 12: Ensure that adjacent land uses are not subjected to noise beyond acceptable levels.

Objective: NOISE - Avoid / minimize potential noise impacts to adjacent land uses.

- A. Would the project result in increased noise levels in exceedance of accepted noise standards?

(See memorandum prepared by ESP entitled, " State Route 49 Realignment Project – Constraints and Opportunities Analysis" dated November 13, 2009 for scoring assumptions for this criteria)

Environmental Goal 13: Protect existing residences consistent with applicable planning documents.

Objective: POPULATION AND HOUSING - Avoid / minimize potential displacement of existing residences.

- A. Would the project result in displacement of a substantial number of existing residences?

(See memorandum prepared by ESP entitled, " State Route 49 Realignment Project – Constraints and Opportunities Analysis" dated November 13, 2009 for scoring assumptions for this criteria)

Environmental Goal 14: Provide public services to project corridor.

Objective: PUBLIC SERVICES - Avoid / minimize potential impacts on public services.

- A. Would the project result in potential impacts to public services (such as fire, police, schools, parks), public service facilities, or response times?

(See memorandum prepared by ESP entitled, " State Route 49 Realignment Project – Constraints and Opportunities Analysis" dated November 13, 2009 for scoring assumptions for this criteria)

Environmental Goal 15: Promote recreational opportunities along the project corridor.

Objective: RECREATIONAL - Avoid/minimize potential impacts on existing or planned recreational facilities

- A. Would the project result in impacts to existing or planned recreational facilities?

(See memorandum prepared by ESP entitled, " State Route 49 Realignment Project – Constraints and Opportunities Analysis" dated November 13, 2009 for scoring assumptions for this criteria)

Level 2 Screening Criteria Scoring Assumptions

Environmental Goal 16: Provide the safe, orderly, and efficient movement of people and goods.

Objective: TRANSPORTATION AND CIRCULATION - Avoid / minimize potential impacts to the transport of people and goods within the project corridor.

- A. Would the project result in worsened roadway operations and/or inefficient delivery of goods and services? Would the project result in inadequate emergency access?
(See memorandum prepared by ESP entitled, " State Route 49 Realignment Project – Constraints and Opportunities Analysis" dated November 13, 2009 for scoring assumptions for this criteria)

Environmental Goal 17: Provide sufficient utility and service systems to the project corridor.

Objective: UTILITIES AND SERVICE SYSTEMS - Avoid/minimize potential impacts on utilities and service systems.

- A. Would the project result in disruptions to utilities and/or services, require construction of additional service facilities, and/or comply with federal, state and local statutes related to solid waste?
(See memorandum prepared by ESP entitled, " State Route 49 Realignment Project – Constraints and Opportunities Analysis" dated November 13, 2009 for scoring assumptions for this criteria)



PRELIMINARY COST ESTIMATES

ATTACHMENT F



PRELIMINARY COST ESTIMATES

ALTERNATIVE 3E

PRELIMINARY PROJECT CONSTRUCTION COST ESTIMATE SUMMARY

District-County-Route 03 - ED - 49
 Type of Estimate Feasibility Study
 KP (PM) _____
 EA _____
 Program Code _____

PROJECT DESCRIPTION:

Limits: SR 49 from El Dorado to Coloma

Proposed Realign SR 49

Improvement (Scope): _____

Alternative: 3E

ROADWAY ITEMS	\$	<u>17,174,000</u>
STRUCTURE ITEMS	\$	<u>250,600</u>
SUBTOTAL CONSTRUCTION	\$	<u>17,424,600</u>
RIGHT OF WAY (current value)	\$	_____
TOTAL PROJECT COST	\$	<u>17,424,600</u>

Reviewed by Signature _____ Date _____
Program Manager

Approved by Signature Keith D. Rhodes Date 4-Mar-10
Project Manager

Resources:

Caltrans Comparative Bridge Costs (Jan 07)

Caltrans Contract Cost Data 2006

Caltrans Project Development Procedures Manual - Appendix AA

PRELIMINARY PROJECT CONSTRUCTION COST ESTIMATE

District-County-Route	03 - ED - 49
KP (PM)	0
EA	0

I. ROADWAY ITEMS

<u>Section 1 Earthwork</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Roadway Excavation	28,629	CY	\$ 25.00	\$ 715,725	
_____			\$ _____	\$ _____	
_____			\$ _____	\$ _____	
_____			\$ _____	\$ _____	
_____			\$ _____	\$ _____	
				Subtotal Earthwork	\$ 715,725
<u>Section 2 Pavement Structural Section</u>					
Asphalt Concrete Overlay (Assume 2")	35,270	TON	\$ 75.00	\$ 2,645,250	
Asphalt Concrete (Assume 6")	19,325	TON	\$ 75.00	\$ 1,449,375	
Aggregate Base (Assume 12")	19,086	CY	\$ 40.00	\$ 763,440	
_____			\$ _____	\$ _____	
_____			\$ _____	\$ _____	
_____			\$ _____	\$ _____	
_____			\$ _____	\$ _____	
_____			\$ _____	\$ _____	
				Subtotal Pavement Structural Section	\$ 4,858,065
<u>Section 3 Drainage</u>					
15% of Section 1 & 2			\$ _____	\$ 836,069	
_____			\$ _____	\$ _____	
				Subtotal Drainage	\$ 836,069

PRELIMINARY PROJECT CONSTRUCTION COST ESTIMATE

District-County-Route	03 - ED - 49
KP (PM)	0
EA	0

Section 6 Minor Items

	<u>Item Cost</u>	<u>Section Cost</u>
(Subtotal Sections 1-5) \$ 8,081,997 x (25%) = \$ 2,020,499		
<u>Total Minor Items</u>		\$ 2,020,499

Section 7 Roadway Mobilization

(Subtotal Sections 1-6) \$ 10,102,496 x (10%) = \$ 1,010,250		
<u>Total Roadway Mobilization</u>		\$ 1,010,250

Section 8 Roadway Additions

Supplemental Work		
(Subtotal Sections 1-6) \$ 10,102,496 x (10%) = \$ 1,010,250		
Contingencies		
(Subtotal Sections 1-6) \$ 10,102,496 x (50%) = \$ 5,051,248		
<u>Total Roadway Additions</u>		\$ 6,061,498

TOTAL ROADWAY ITEMS **17,174,244**
 (Total Sections 1 - 8)

Estimate Prepared By	Keith D. Rhodes	Phone #		Date	12/28/2009
	(Print Name)				
Estimate Checked By		Phone #		Date	
	(Print Name)				

PRELIMINARY PROJECT CONSTRUCTION COST ESTIMATE

District-County-Route	03 - ED - 49
KP (PM)	0
EA	0

II. STRUCTURE ITEMS

	STRUCTURE			
	<u>No. 1</u>	<u>No. 2</u>	<u>No. 3</u>	
Bridge Name	Bridge Widening	Bridge Widening		
Structure Type	PC/PS Slab	PC/PS Slab		
Width (out to out)	16.00	16		
Span Lengths	20.00	20		
Total Area (sf)	320.00	320.00		
Footing Type (pile/spread)	Pile	Pile		
Cost Per Square Foot	\$ 290.00	\$ 290.00		
Total Cost	\$ 92,800.00	\$ 92,800.00		
10% Mobilization	\$ 9,280.00	\$ 9,280.00		
25% Contingency	\$ 23,200.00	\$ 23,200.00		
Bridge Removal	\$ 0.00	\$ 0.00		
Total Cost for Structure	\$ 125,280.00	\$ 125,280.00	\$	
Other	\$	\$	\$	
SUBTOTAL STRUCTURES ITEMS				\$ 250,560
(Sum of Total Cost for Structures)				
Railroad Related Costs:	\$	\$	\$	\$ 0
SUBTOTAL RAILROAD ITEMS				\$ 0
TOTAL STRUCTURES ITEMS				\$ 250,560

COMMENTS:

Estimate Prepared By Keith D. Rhodes Phone # 916-366-6331 Date 3/4/2010
 (Print Name)

NOTE: If appropriate, attach additional pages and backup.

PRELIMINARY PROJECT CONSTRUCTION COST ESTIMATE

District-County-Route	03 - ED - 49
KP (PM)	0
EA	0

III. RIGHT OF WAY

	<u>Current Values (Future Use)</u>	<u>Escalation Rates</u>	<u>Escalated Values*</u>
Acquisition, including excess lands, and damages to remainder(s)	\$ _____	\$ 10%	\$ 0
Utility Relocation (Agency share)	\$ _____	\$ 10%	\$ 0
Clearance/Demolition	\$ _____	\$ 10%	\$ 0
RAP (Relocation Assistance Program)	\$ _____	\$ 10%	\$ 0
Title and Escrow Fees	\$ _____	\$ 10%	\$ 0
Total Current R/W	\$ 0	Total Escalated R/W	\$ 0
CONSTRUCTION CONTRACT WORK	\$ _____	\$ 0	\$ 0

* Anticipated Date of Right of Way Certification _____

COMMENTS:

Estimate Prepared By _____ Phone # _____ Date _____
(Print Name)



PRELIMINARY COST ESTIMATES

ALTERNATIVE 5H

PRELIMINARY PROJECT CONSTRUCTION COST ESTIMATE SUMMARY

District-County-Route 03 - ED - 49
 Type of Estimate Feasibility Study
 KP (PM) _____
 EA _____
 Program Code _____

PROJECT DESCRIPTION:

Limits: SR 49 from El Dorado to Coloma

Proposed Realign SR 49

Improvement (Scope): _____

Alternative: 5G

ROADWAY ITEMS	\$	<u>28,533,000</u>
STRUCTURE ITEMS	\$	<u>250,600</u>
SUBTOTAL CONSTRUCTION	\$	<u>28,783,600</u>
RIGHT OF WAY (current value)	\$	_____
TOTAL PROJECT COST	\$	<u>28,783,600</u>

Reviewed by Signature _____ Date _____
Program Manager

Approved by Signature Keith D. Rhodes Date 4-Mar-10
Project Manager

Resources:

Caltrans Comparative Bridge Costs (Jan 07)

Caltrans Contract Cost Data 2006

Caltrans Project Development Procedures Manual - Appendix AA

PRELIMINARY PROJECT CONSTRUCTION COST ESTIMATE

District-County-Route	03 - ED - 49
KP (PM)	0
EA	0

I. ROADWAY ITEMS

<u>Section 1 Earthwork</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Roadway Excavation	66,176	CY	\$ 25.00	\$ 1,654,400	
_____	_____	_____	\$ _____	\$ _____	
_____	_____	_____	\$ _____	\$ _____	
_____	_____	_____	\$ _____	\$ _____	
_____	_____	_____	\$ _____	\$ _____	
Subtotal Earthwork					\$ 1,654,400

<u>Section 2 Pavement Structural Section</u>					
Asphalt Concrete Overlay (Assume 2")	33,211	TON	\$ 75.00	\$ 2,490,825	
Asphalt Concrete (Assume 6")	44,669	TON	\$ 75.00	\$ 3,350,175	
Aggregate Base (Assume 12")	44,117	CY	\$ 40.00	\$ 1,764,680	
_____	_____	_____	\$ _____	\$ _____	
_____	_____	_____	\$ _____	\$ _____	
_____	_____	_____	\$ _____	\$ _____	
_____	_____	_____	\$ _____	\$ _____	
_____	_____	_____	\$ _____	\$ _____	
Subtotal Pavement Structural Section					\$ 7,605,680

<u>Section 3 Drainage</u>					
15% of Section 1 & 2			\$ _____	\$ 1,389,012	
_____	_____	_____	\$ _____	\$ _____	
Subtotal Drainage					\$ 1,389,012

PRELIMINARY PROJECT CONSTRUCTION COST ESTIMATE

District-County-Route	03 - ED - 49
KP (PM)	0
EA	0

II. STRUCTURE ITEMS

	STRUCTURE			
	<u>No. 1</u>	<u>No. 2</u>	<u>No. 3</u>	
Bridge Name	Bridge Widening	Bridge Widening		
Structure Type	PC/PS Slab	PC/PS Slab		
Width (out to out)	16.00	16		
Span Lengths	20.00	20		
Total Area (sf)	320.00	320.00		
Footing Type (pile/spread)	Pile	Pile		
Cost Per Square Foot	\$ 290.00	\$ 290.00		
Total Cost	\$ 92,800.00	\$ 92,800.00		
10% Mobilization	\$ 9,280.00	\$ 9,280.00		
25% Contingency	\$ 23,200.00	\$ 23,200.00		
Bridge Removal	\$ 0.00	\$ 0.00		
Total Cost for Structure	\$ 125,280.00	\$ 125,280.00	\$	
Other	\$	\$	\$	
SUBTOTAL STRUCTURES ITEMS				\$ 250,560
(Sum of Total Cost for Structures)				
Railroad Related Costs:	\$	\$	\$	\$ 0
SUBTOTAL RAILROAD ITEMS				\$ 0
TOTAL STRUCTURES ITEMS				\$ 250,560

COMMENTS:

Estimate Prepared By Keith D. Rhodes Phone # _____ Date 3/4/2010
 (Print Name)

NOTE: If appropriate, attach additional pages and backup.

PRELIMINARY PROJECT CONSTRUCTION COST ESTIMATE

District-County-Route	03 - ED - 49
KP (PM)	0
EA	0

III. RIGHT OF WAY

	<u>Current Values (Future Use)</u>	<u>Escalation Rates</u>	<u>Escalated Values*</u>
Acquisition, including excess lands, and damages to remainder(s)	\$ _____	\$ 10%	\$ 0
Utility Relocation (Agency share)	\$ _____	\$ 10%	\$ 0
Clearance/Demolition	\$ _____	\$ 10%	\$ 0
RAP (Relocation Assistance Program)	\$ _____	\$ 10%	\$ 0
Title and Escrow Fees	\$ _____	\$ 10%	\$ 0
Total Current R/W	\$ 0	Total Escalated R/W	\$ 0
CONSTRUCTION CONTRACT WORK	\$ _____	\$ 0	\$ 0

* Anticipated Date of Right of Way Certification _____

COMMENTS:

Estimate Prepared By _____ Phone # _____ Date _____
(Print Name)



PRELIMINARY COST ESTIMATES

ALTERNATIVE 5G

PRELIMINARY PROJECT CONSTRUCTION COST ESTIMATE SUMMARY

District-County-Route 03 - ED - 49
 Type of Estimate Feasibility Study
 KP (PM) _____
 EA _____
 Program Code _____

PROJECT DESCRIPTION:

Limits: SR 49 from El Dorado to Coloma

Proposed Realign SR 49

Improvement (Scope): _____

Alternative: 5H

ROADWAY ITEMS	\$	<u>23,500,000</u>
STRUCTURE ITEMS	\$	<u>125,300</u>
SUBTOTAL CONSTRUCTION	\$	<u>23,625,300</u>
RIGHT OF WAY (current value)	\$	_____
TOTAL PROJECT COST	\$	<u>23,625,300</u>

Reviewed by Signature _____ Date _____
Program Manager

Approved by Signature Keith D. Rhodes Date 4-Mar-10
Project Manager

Resources:

Caltrans Comparative Bridge Costs (Jan 07)

Caltrans Contract Cost Data 2006

Caltrans Project Development Procedures Manual - Appendix AA

PRELIMINARY PROJECT CONSTRUCTION COST ESTIMATE

District-County-Route	03 - ED - 49
KP (PM)	0
EA	0

I. ROADWAY ITEMS

<u>Section 1 Earthwork</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Roadway Excavation	49,280	CY	\$ 25.00	\$ 1,232,000	
_____	_____	_____	\$ _____	\$ _____	
_____	_____	_____	\$ _____	\$ _____	
_____	_____	_____	\$ _____	\$ _____	
_____	_____	_____	\$ _____	\$ _____	
				Subtotal Earthwork	\$ 1,232,000

<u>Section 2 Pavement Structural Section</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Asphalt Concrete Overlay (Assume 2")	34,478	TON	\$ 75.00	\$ 2,585,850	
Asphalt Concrete (Assume 6")	33,264	TON	\$ 75.00	\$ 2,494,800	
Aggregate Base (Assume 12")	32,853	CY	\$ 40.00	\$ 1,314,120	
_____	_____	_____	\$ _____	\$ _____	
_____	_____	_____	\$ _____	\$ _____	
_____	_____	_____	\$ _____	\$ _____	
_____	_____	_____	\$ _____	\$ _____	
_____	_____	_____	\$ _____	\$ _____	
				Subtotal Pavement Structural Section	\$ 6,394,770

<u>Section 3 Drainage</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
15% of Section 1 & 2			\$ _____	\$ 1,144,016	
_____	_____	_____	\$ _____	\$ _____	
				Subtotal Drainage	\$ 1,144,016

PRELIMINARY PROJECT CONSTRUCTION COST ESTIMATE

District-County-Route	03 - ED - 49
KP (PM)	0
EA	0

Section 6 Minor Items

	<u>Item Cost</u>	<u>Section Cost</u>
(Subtotal Sections 1-5) \$ <u>11,058,818</u> x (25%) = \$ <u>2,764,705</u>		
	<u>Total Minor Items</u>	\$ <u>2,764,705</u>

Section 7 Roadway Mobilization

(Subtotal Sections 1-6) \$ <u>13,823,523</u> x (10%) = \$ <u>1,382,352</u>		
	<u>Total Roadway Mobilization</u>	\$ <u>1,382,352</u>

Section 8 Roadway Additions

Supplemental Work (Subtotal Sections 1-6) \$ <u>13,823,523</u> x (10%) = \$ <u>1,382,352</u>		
Contingencies (Subtotal Sections 1-6) \$ <u>13,823,523</u> x (50%) = \$ <u>6,911,762</u>		
	<u>Total Roadway Additions</u>	\$ <u>8,294,114</u>

TOTAL ROADWAY ITEMS	<u>23,499,989</u>
	<small>(Total Sections 1 - 8)</small>

Estimate Prepared By	<u>Keith D. Rhodes</u> <small>(Print Name)</small>	Phone # <u> </u>	Date <u>12/28/2009</u>
Estimate Checked By	<u> </u> <small>(Print Name)</small>	Phone # <u> </u>	Date <u> </u>

PRELIMINARY PROJECT CONSTRUCTION COST ESTIMATE

District-County-Route	03 - ED - 49
KP (PM)	0
EA	0

II. STRUCTURE ITEMS

	STRUCTURE			
	<u>No. 1</u>	<u>No. 2</u>	<u>No. 3</u>	
Bridge Name	Bridge Widening			
Structure Type	PC/PS Slab			
Width (out to out)	16.00			
Span Lengths	20.00			
Total Area (sf)	320.00			
Footing Type (pile/spread)	Pile			
Cost Per Square Foot	\$ 290.00			
Total Cost	\$ 92,800.00			
10% Mobilization	\$ 9,280.00			
25% Contingency	\$ 23,200.00			
Bridge Removal	\$ 0.00			
Total Cost for Structure	\$ 125,280.00	\$	\$	
Other	\$	\$	\$	
<u>SUBTOTAL STRUCTURES ITEMS</u>				\$ 125,280
(Sum of Total Cost for Structures)				
Railroad Related Costs:	\$	\$	\$	0
<u>SUBTOTAL RAILROAD ITEMS</u>				\$ 0
<u>TOTAL STRUCTURES ITEMS</u>				\$ 125,280

COMMENTS:

Estimate Prepared By Keith D. Rhodes Phone # _____ Date 3/4/2010
 (Print Name)

NOTE: If appropriate, attach additional pages and backup.

PRELIMINARY PROJECT CONSTRUCTION COST ESTIMATE

District-County-Route	03 - ED - 49
KP (PM)	0
EA	0

III. RIGHT OF WAY

	<u>Current Values (Future Use)</u>	<u>Escalation Rates</u>	<u>Escalated Values*</u>
Acquisition, including excess lands, and damages to remainder(s)	\$ _____	\$ 10%	\$ 0
Utility Relocation (Agency share)	\$ _____	\$ 10%	\$ 0
Clearance/Demolition	\$ _____	\$ 10%	\$ 0
RAP (Relocation Assistance Program)	\$ _____	\$ 10%	\$ 0
Title and Escrow Fees	\$ _____	\$ 10%	\$ 0
Total Current R/W	\$ 0	Total Escalated R/W	\$ 0
CONSTRUCTION CONTRACT WORK	\$ _____	\$ 0	\$ 0

* Anticipated Date of Right of Way Certification _____

COMMENTS:

Estimate Prepared By _____ Phone # _____ Date _____
 (Print Name)



DESIGN CRITERIA MEMORANDUM

ATTACHMENT G



SR 49 Realignment Study

STATE ROUTE 49 El Dorado to Coloma

El Dorado County, CA

DESIGN CRITERIA MEMORANDUM

Introduction

The El Dorado County Transportation Commission (EDCTC) has initiated the State Route 49 (SR 49) Realignment Study, which is a feasibility study for the realignment of SR 49 from its intersection with Pleasant Valley Road in the town of El Dorado to the intersection of SR 49 with Lotus Road in the town of Coloma. The SR 49 Realignment Study will explore alternative alignments of SR 49 between Coloma and El Dorado that will improve traffic operations on the state and regional transportation system. Alignments that are examined will eliminate the existing alignment of SR 49 through Marshall Gold Discovery State Historic Park and the at-grade intersection of SR 49 and Highway 50.

The purpose of this Design Criteria Memorandum is to present a range of design criteria that will be utilized by TY Lin International when analyzing alternative alignments. The proposed design criteria will be used to estimate costs for right-of-way acquisition, construction, and environmental mitigation for up to three alternatives. Proposed design criteria will also help determine the feasibility and constructability of alternative alignments.

Design criteria were collected from the following four sources:

1. El Dorado County Highway Design Manual and Std. Plans (Local Agency Standards)
2. El Dorado County Drainage Manual (Local Agency Standards)
3. Caltrans Design Information Bulletin (DIB) 79-03; (design guidance for resurfacing, restoration, and rehabilitation (3R) type projects)
4. Caltrans Highway Design Manual

This document shall be updated on an as-needed basis. ***Latest update dated December 18, 2009.***



DESIGN CRITERIA

Table 1: Functional Classification

State Route 49 (SR 49)		
Designation	Classification	Terrain
Conventional Hwy	Rural/Urban ⁽¹⁾	Rolling

Table 2: Design Designation

SR 49 (existing from Caltrans SR 49 TCR, September 2000)			
	Segment 2	Segment 3	Segment 4
ADT (2010)	16616	32340	7396
ADT (2030)*	23522	76623	17865
DHV*	3528	11493	2680
Truck % (T)	6%	6%	10%
Directional Split (D)	55%	55%	64%
LOS	E	F	E
Concept LOS	E	F	E

* ADT values for the year 2030 are projected based on given annual % traffic growth values contained in the TCR. DHV calculated using 0.15*ADT.

Table 3: General Roadway Design Criteria

	Local Agency*	Caltrans HDM (DIB 79-03)**	HDM (New Construction)	Proposed
<i>Basic Design Criteria</i>				
Design Speed (mph)	Index 101.2	HDM Table 101.2	Table 101.2	
SR 49 (Rural)	55	50 - 60	50 - 60	55
SR 49 (Urban)	45	30 - 60	30 - 60	45
Design Vehicle	Index 404.2	HDM Index 404.2	Index 404.2	
SR 49	WB40/CA LEGAL	CA LEGAL	CA LEGAL	CA LEGAL
<i>Minimum Sight Distances</i>				
Stopping (ft)		HDM Table 201.1	Table 201.1	
SR 49 (Rural)	HDM	500	500	500
SR 49 (Urban)	HDM	360	360	360
Passing (ft)		HDM Table 201.1	Table 201.1	
SR 49 (Rural)	N/A	1950	1950	1950
SR 49 (Urban)	N/A	1650	1650	1650
Decision (ft)		HDM Table 201.7	Table 201.7	
SR 49 (Rural)	N/A	865	865	865
SR 49 (Urban)	N/A	675	675	675



	Local Agency*	Caltrans HDM (DIB 79-03)**	HDM (New Construction)	Proposed
Geometric Design Criteria				
<u>Typical Cross Section</u>				
Minimum Lane Width (ft)	Index 301.1	Index 3.3.3.6.1.1	Index 301.1	
SR 49 (Rural)	12	12	12	12
SR 49 (Urban)	12	12	12	12
Minimum Shoulder Width (ft)	Index 301.1	Index 3.3.3.6.1.2.1	Table 307.2	
SR 49, ADT < 250	8	0	2 or 4, ADT < 400	8
SR 49, 251 < ADT < 1000	8	2		
SR 49, 1001 < ADT < 3000	8	4	8, ADT > 400	
SR 49, ADT > 3001	8	8		
Minimum Structural Section (AC/AB)				
SR 49	HDM Ch. 610	HDM Ch. 610	HDM Ch. 610	TBD ⁽²⁾
Minimum R/W Width (ft)	Index 301.1	HDM Index 306.1	Index 306.1	
SR 49 (Rural)	60	40 - 82 ⁽³⁾⁽⁴⁾	130	40 ⁽³⁾⁽⁴⁾
SR 49 (Urban)	60	40 - 82 ⁽³⁾⁽⁴⁾	130	
Normal Cross Slope (%)	Index 301.2	HDM Index 301.2(2)(b)	Index 301.2(2)(a)	
SR 49	2	1.5 min / 3 max	2	2 ⁽⁵⁾
Side (Cut & Fill) Slopes	Index 304.1	HDM Index 304.1	Index 304.1	
SR 49	2H:1V	2H:1V (CUT); 4H:1V (FILL)	2H:1V (CUT); 4H:1V (FILL)	1.5H:1V (CUT); 2H:1V (FILL) ⁽⁶⁾
Minimum Bike Lane Width (ft)	Topic 1003	HDM Index 1003.2(1)(c)	Index 1003.2(1)(c)	
SR 49 (Rural), w/o curb & gutter	HDM	4	4	4 ⁽⁷⁾
SR 49 (Urban), w/ curb & gutter	HDM	5	5	5 ⁽⁷⁾
Minimum Sidewalk Width (ft)	Std. Plan RS-07	HDM Index 105.1	Index 105.1	
SR 49	6	5	5	5 ⁽⁸⁾
Curb and Gutter Type	Std. Plan RS-07	HDM Index 303.1	Index 303.1	
SR 49	Type 2	not recommended for speeds > 45mph	not recommended for speeds > 45mph	Type 2 (for V < 45 mph) ⁽⁸⁾
Choker Width/Shoulder Backing (ft)		HDM Figure 307.2	Figure 307.2	
SR 49	N/A	3	3	3
<u>Horizontal and Vertical Alignment</u>				



	Local Agency*	Caltrans HDM (DIB 79-03)**	HDM (New Construction)	Proposed
Maximum Superelevation (%)	Index 202.2	HDM Table 202.2	Table 202.2	
SR 49 (Rural)	6	12	12	12
SR 49 (Urban)	4	6	6	6
Min Horizontal Curve Radius (ft)	Index 203.2	HDM Table 203.2	Table 203.2	
SR 49 (Rural)	1062	1000	1000	1000
SR 49 (Urban)	750	700	700	700
Profile Grade (%) (min/max)	Index 204.3	HDM Table 204.3	Table 204.3	
SR 49 (Rural)	HDM	0.3 / 5	0.3 / 5	0.3 / 5 ⁽⁹⁾
SR 49 (Urban)	HDM	0.3 / 7	0.3 / 7	0.3 / 7 ⁽⁹⁾
Maximum Grade Break w/o Curve (%)	Index 204.4	HDM Index 204.4	Index 204.4	
SR 49	HDM	0.5	0.5	0.5
Minimum Vertical Curve Length (ft)	Index 204.4	HDM Index 204.4	Index 204.4	
SR 49 (Rural)	HDM	10*V	10*V	10*V
SR 49 (Urban)	HDM	10*V	10*V	10*V
SR 49, A < 2% or V < 40 mph	HDM	200	200	200
Clearances				
Clear Recovery Zone (ft)		HDM Index 309.1(2)	Index 309.1(2)	
SR 49	N/A	20	20	20 ⁽¹⁰⁾
Minimum Horizontal Clearance (ft)		HDM Index 309.1(3)(c)	Index 309.1(3)(c)	
SR 49	N/A	4 or Std. shoulder width	4 or Std. shoulder width	4 or Std. shoulder width
Minimum Vertical Clearance (ft)		HDM Index 309.2	Index 309.2	
SR 49	N/A	15	15	15
Intersection Criteria				
Minimum Curb Return/Turning Radius (ft)		HDM Index 404.3(3)	Index 404.3(3)	
SR 49	N/A	50	50	50
Intersection/Corner Sight Distance (ft)		HDM Table 405.1A	Table 405.1A	
SR 49 (Rural)	N/A	605	605	605
SR 49 (Urban)		495	495	495



	Local Agency*	Caltrans HDM (DIB 79-03)**	HDM (New Construction)	Proposed
Drainage				
Cross Drainage Storm Frequency (Culverts)		HDM Index 821.3(2)	Index 821.3(2)	
SR 49	N/A	100 yr	100 yr	100 yr
	Local Agency*	Caltrans HDM (DIB 79-03)**	HDM (New Construction)	Proposed
Roadway Drainage Storm Frequency (Spread)	EDDM Index 3.3.5	HDM Table 831.3	Table 831.3	
SR 49 (Rural)	10 yr	25 yr	25 yr	25 yr
SR 49 (Urban)	10 yr	10 yr	10 yr	10 yr
<p>*Local agency standards taken from El Dorado County Highway Design Manual (http://www.co.el-dorado.ca.us/DOT/pdf/NewDesignManual.pdf) and the County of El Dorado Drainage Manual (EDDM) (http://www.co.el-dorado.ca.us/DOT/pdf/DrainageManual.pdf).</p> <p>**Caltrans DIB 79-03 gives design guidance and standards for Roadway Rehabilitation (3R) Projects. Design Criteria not fully covered by DIB 79-03 will default to the Caltrans Highway Design Manual (HDM) criteria for new construction, unless noted otherwise.</p>				

Notes:

- (1) The project area is mostly rural. However, there are sections of urban classification including the areas within the city limits of Placerville, El Dorado, and Diamond Springs.
- (2) Structural section (AC/AB) will be determined from HDM Ch. 610 using projected traffic volumes for proposed alignments and assumed minimum R-values
- (3) DIB 79-03 does not specify a minimum R/W width. The 82' shown here is meant to convey the width of R/W required to construct the minimum widths of the cross section components that are specified by DIB 79-03, which sum to the full R/W width.
 $82' = 24'(2-12' \text{ lanes}) + 16'(2-8' \text{ shldr}) + 6'(2-3' \text{ chokers}) + 36'(2-18' \text{ catch to hinge})$.
 The 40' shown here is meant to convey the width of R/W under several constraints; therefore, limited to edge of shoulder to edge of shoulder.
 $40' = 24'(2-12' \text{ lanes}) + 16'(2-8' \text{ shldr})$.
- (4) Recommended 130' minimum width will be used when feasible.
- (5) Normal Cross Slope for all widening and overlays will use 1.5 - 3 % range; all new construction will use 2% Normal Cross Slope.
- (6) Flatter side slopes (e.g. 3H:1V Cut and 4H:1V Fill) will be used when feasible.
- (7) Bike lanes to be included as part of the required paved shoulder.
- (8) Use of sidewalk and or curb and gutter is not anticipated except in select locations where pedestrian access improvements are necessary or in urban areas. Where signs or utility poles are located within sidewalk, a minimum 4' clear width shall be provided (per ADA).
- (9) Profile grades not exceeding 7% may be used in areas where terrain is considered mountainous.



⁽¹⁰⁾ Planting Guidelines: Large trees should be planted at least 30' from the ETW where the posted speed limit is 35 mph or greater with no curb or barrier present, per HDM 902.3(4)(a).



ENVIRONMENTAL CONSTRAINTS AND OPPORTUNITIES ANALYSIS

ATTACHMENT H



Technical Memorandum

To: Keith Rhodes, P.E.

From: Steve Peterson, Amanda Rose and Martin Rose

Date: February 24, 2010

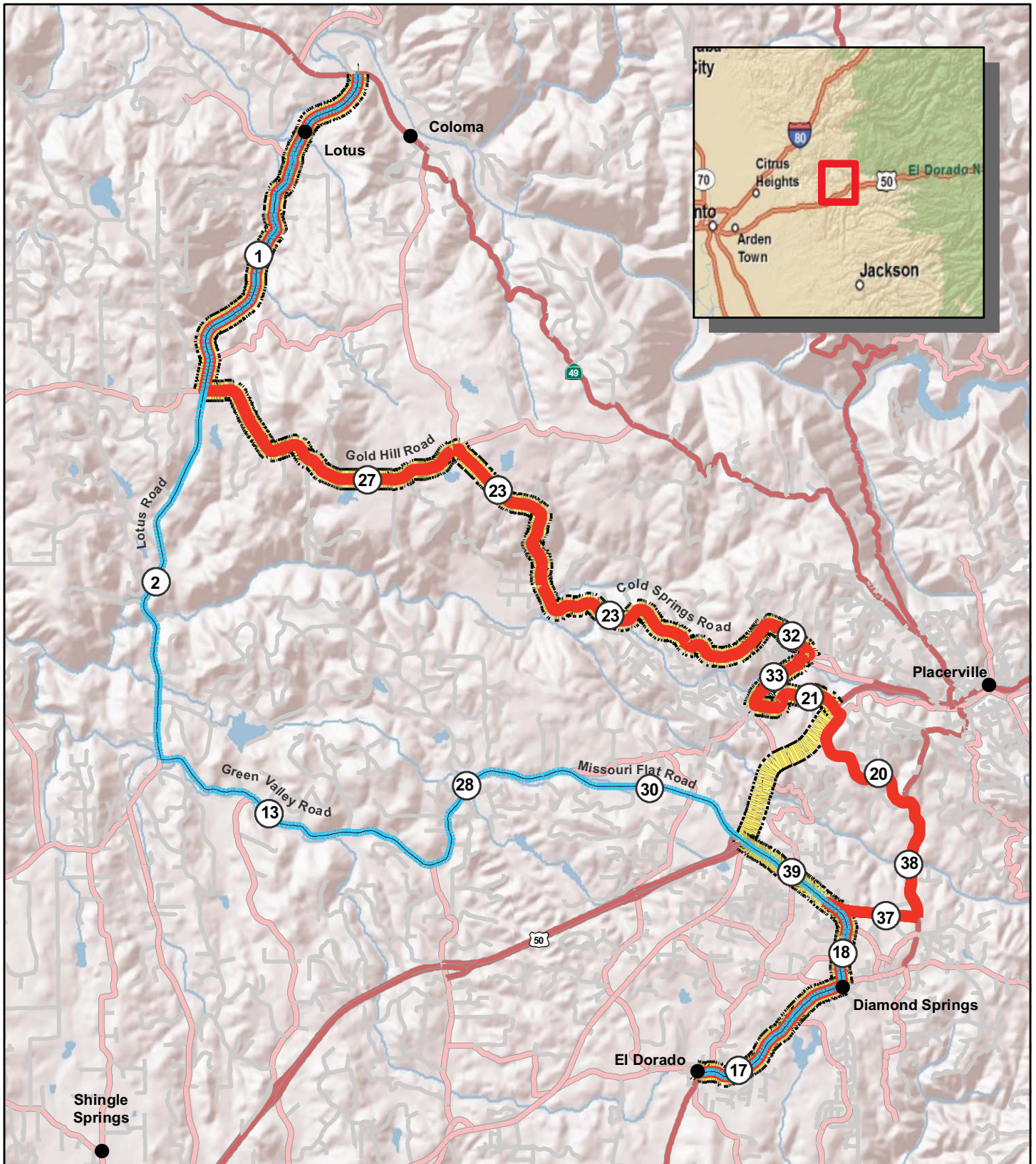
Re: State Route 49 Realignment Project – Constraints and Opportunities Analysis

The El Dorado County Transportation Commission (EDCTC) was awarded a Partnership Planning grant by Caltrans to study the realignment of SR 49 between the towns of Coloma and El Dorado (see Figure 1). The EDCTC is developing and preparing a feasibility study for the realignment of SR 49 from the intersection of SR 49 with Lotus Road in the town of Coloma to the intersection of SR 49 with Pleasant Valley Road in the town of El Dorado. The EDCTC will consider the use of existing local roads for the SR 49 realignment and will consider alternatives that maximize bicycle, pedestrian, and transit opportunities in the region. Through the completion of the Level 1 Screening, the Stakeholders Advisory Committee (SAC), the EDCTC and the T.Y. LIN International (TYLI) team chose 10 alternative alignments to consider for further evaluation. After conducting an Intermediate Level 1 Screening, the Project Development Team (PDT) selected three alternatives (Figure 1) which would be evaluated with a greater level of detail during the Level 2 Screening process.








Environmental Stewardship & Planning, Inc. (ESP) has prepared this technical memorandum to identify potential design opportunities and potential impacts associated with realignment of SR 49 along the selected alternative alignments. This technical memorandum evaluates the resources identified within the standard California Environmental Quality Act (CEQA) Initial Study Checklist, with an emphasis on biological and cultural resources, sensitive receptors, potential hazards and hazardous materials, and bicycle, pedestrian and transit opportunities within the project corridor.

Project Purpose and Need

State Route 49 (SR 49) provides a regional and interregional route for the movement of goods and people within El Dorado County. The purpose of the SR 49 Realignment Study is to evaluate potential alternative alignments for the safe and efficient transport of goods and people (i.e. tourists and local traffic) along SR 49 from Coloma to the community of El Dorado while minimizing impacts to historic, cultural, and natural resources.



State Route 49 Realignment - Constraints and Opportunities Analysis
Figure 1: Project Area and Alternatives 3E, 5G, and 5H

- | | | | |
|---|----------------|---|-------------|
|  | Alternative 3E |  | Highways |
|  | Alternative 5G |  | Major Roads |
|  | Alternative 5H |  | Minor Roads |
|  | Segments | | |



0 0.5 1 Miles

Source: ESRI 2009, TYLin 2009.

The study is needed to evaluate potential alignments that will eliminate the existing alignment of SR 49 through Marshall Gold Discovery State Historic Park and the at-grade intersection of SR 49 and Route 50 and will respond to current and projected regional and local traffic demand on the state and local road systems along SR 49 and U.S. Highway 50, especially through densely populated residential areas and the business districts of the City of Placerville and the communities of Coloma, Diamond Springs, and El Dorado. The sharp curves and steep grades of the existing alignment within the study area, in conjunction with the commercial traffic combined with regional and local traffic, are not adequate for modern transportation demands, resulting in congestion and reduce traffic safety for vehicle, bicycle, and pedestrian travel. The study will focus on the use of existing roads to reduce the amount of resources necessary to achieve improved conditions in the SR 49 corridor and support the adopted general plans of El Dorado County, City of Placerville, and the Marshall Gold Discovery State Historic Park.

The project team identified the following project goals for the SR 49 Realignment Project:

- Improve interregional and regional conditions on the State and regional transportation system by improving traffic operations.
- Explore alternatives that relieve SR 49 traffic impacts to densely populated residential areas and business districts of City of Placerville, El Dorado, and Diamond Springs.
- Reduce travel times within the corridor and the total vehicle-hours traveled during peak commute times.
- Consider and analyze land uses identified in the City of Placerville, El Dorado County and Marshall Gold Discovery State Historic Park General Plans to ensure that potential new alignments are compatible with planned zoning and land uses in the project area.
- Consider how potential new alignments may affect jobs, corridor demographics, population growth and distribution projections, as well as current and future traffic demand and transportation needs.
- Consider alternatives that maximize bicycle, pedestrian, and transit opportunities; contribute to the remedy for current and future deficiencies in transportation safety in the corridor; and maintain a context sensitive solutions approach to local and interregional transportation issues.

Project Background

In 2000, the California Department of Transportation (Caltrans) prepared a Transportation Concept Report (TCR), which looked at the existing conditions along the entire State Route (SR) 49 alignment (from the Amador/El Dorado County line to the Sierra/Plumas County line) and identified a 20-year vision for the alignment. The TCR notes that “Because the majority of . . . State Route 49 has a unique historical and topographical constraints, the possibility of significantly widening the roadway in most areas is precluded” (Caltrans, 2000). The TCR also identifies that the existing SR 49 alignment through Diamond Springs is narrow and was

constructed along unstable hills in many areas, so a parallel corridor would likely be more realistic than widening the SR 49 corridor (Caltrans, 2000).

Existing Conditions

The present alignment of SR 49 routes local, regional, and interregional commercial traffic through densely populated residential areas and the business districts of the City of Placerville and the towns of Coloma, Diamond Springs, and El Dorado. The facility in its present state has numerous short radius curves, switchbacks, and a considerable number of steep grades (see Figure 1). The basic width of the traveled way is only 18 feet and there are almost no usable shoulders.

Project Alternatives

The EDCTC has tentatively selected three alternative alignments (Alternatives 3E, 5G, and 5H) for evaluation during the Level 2 Screening, which includes this Constraints and Opportunities Analysis. As shown on Figure 1, Alternative 3E begins at the SR 49/Lotus Road intersection in Coloma, and continues south along Lotus Road to the Lotus Road/Green Valley Road intersection. Alternative 3E continues east along Green Valley Road and then connects to Missouri Flat Road. From Missouri Flat Road, Alternative 3E crosses U.S. Highway 50 and then continues south to Pleasant Valley Road where it continues west until it reaches the Pleasant Valley Road/SR 49 intersection in the community of El Dorado (Figure 1).

As shown in Figure 1, Alternative 5G also begins at the SR 49/Lotus Road intersection in Coloma, and continues south along Lotus Road to the Lotus Road/Gold Hill Road intersection. Alternative 5G continues east toward the Gold Hill Road/Cold Springs Road intersection. Alternative 5G continues southeast along Cold Springs Road to Pierroz Road to Placerville Drive. Moving southwest along Placerville Drive, Alternative 5G continues to Ray Lawyer Drive and continues eastward over the U.S. 50 overpass. Alternative 5G includes two new roadway segments: the Ray Lawyer Drive Extension, which would continue south from its proposed intersection with Forni Road and intersect with SR 49; and the Diamond Springs Parkway Extension, which would connect SR 49 to Missouri Flat Road. From Missouri Flat Road, Alternative 5G would continue south to Pleasant Valley Road, where it continues west until it reaches the Pleasant Valley Road/SR 49 intersection in the community of El Dorado.

As shown on Figure 1, Alternative 5H begins at the SR 49/Lotus Road intersection in Coloma, and continues south along Lotus Road to the Lotus Road/Gold Hill Road intersection. Alternative 5H continues east toward the Gold Hill Road/Cold Springs Road intersection. Alternative 5H continues southeast along Cold Springs Road to Pierroz Road to Placerville Drive. Moving southwest along Placerville Drive, Alternative 5H continues to Ray Lawyer Drive and continues eastward to the proposed U.S. 50 westbound on-ramp. Alternative 5H would include a new westbound on-ramp at the U.S. 50/Ray Lawyer Drive interchange. Alternative 5H would continue along westbound U.S. 50 to the Missouri Flat Road interchange, where it would continue south to Pleasant Valley Road, and continue west until it reaches the Pleasant Valley Road/SR 49 intersection in the community of El Dorado.

As discussed above, the existing SR 49 alignment has an approximate width of 18 feet and there are very few usable shoulders. The proposed alignments are comprised primarily of existing roadways that will require modification to meet Caltrans' two-lane conventional highway standards. The standard right-of-way width for a two-lane conventional highway per Caltrans standards is 130 feet for new construction; however, all but two of the roadway segments proposed for the SR 49 Realignment Project are existing road segments. The proposed realignment project will include the following modifications to existing road segments: two eight-foot shoulders, two 12-foot lanes, and two three-foot buffers for a minimum of 46 feet of right-of-way.

The following summaries provide a discussion of the existing conditions adjacent to the existing roadway segments, as well as a general summary of the proposed overland roadway segments. These summaries are followed by a detailed discussion of the constraints and opportunities of the project on the environmental resources adjacent to the proposed alignments and are depicted on Figures 2 through 7.

Segment 1: Road Segment 1 is a common element amongst the three proposed alternatives. Segment 1 includes Lotus Road from the Lotus Road/State Route (SR) 49 intersection south to the Lotus Road/Gold Hill Road intersection. Segment 1 is a relatively flat, two-lane road, and the posted speed limit on Lotus Road is 45 miles per hour (mph) except in curved areas (30 mph) and near the Sutter's Mill Elementary School crossing and Henningsen Lotus Park pedestrian crossing (25 mph). Segment 1 contains unpaved shoulders in the northern portion of the segment, while the southern portion of the segment contains paved shoulders. A variety of land uses are adjacent to Segment 1, including Agricultural Lands, Low Density Residential, Medium Density Residential, Public Facilities, Rural Residential, and Tourist Recreational. Zoning designations adjacent to Segment 1 include Commercial, Single Family Three-Acre, Estate Residential Five-Acre, Estate Residential Ten-Acre, and Recreational Facilities. Oak trees, pine trees and overhead utility poles are located adjacent to the existing roadway throughout the alignment. Immediately south of the Lotus Road/SR 49 intersection, Lotus Road parallels the South Fork American River. The entrance to Fire Station 74 (5122 Firehouse Road) is located east of Segment 1. Sutter's Mill Elementary School is located at the southwestern corner of Segment 1.

Segment 2: Road Segment 2 is located along Lotus Road from the Lotus Road/Gold Hill Road intersection south to the Lotus Road/Green Valley Road intersection. Road Segment 2 is only included as part of Alternative 3E. Segment 2 is a relatively flat, two-lane road, and the posted speed limit is 45 mph with the exception of curved areas where the recommended speed limit is 35 mph. Land uses adjacent to Segment 2 include Industrial, Medium Density Residential, and Rural Residential. Zoning designations adjacent to Segment 2 include Estate Residential Five-Acre, Estate Residential Ten-Acre, Industrial, and Planned Development. Oak trees and pine trees are prevalent adjacent to the Segment 2 alignment, while overhead utility poles are most predominant in the southern portion of the Segment 2 corridor.

Segment 13: Road Segment 13 is located along Green Valley Road from the Lotus Road/Green Valley Road intersection east to the Green Valley Road/Greenstone Road intersection. Road Segment 13 is only included as part of Alternative 3E. Segment 13 is a relatively flat, two-lane

road, and the posted speed limit is 45 mph. Land uses adjacent to Segment 13 include Low Density Residential and Medium Density Residential. Zoning designations adjacent to Segment 13 include Estate Residential Five-Acre, Estate Residential 10-Acre, Planned Development, and Single-Family Three-Acre. Oak trees are prevalent adjacent to the Segment 13 alignment, while overhead utility poles are most predominant in the eastern portion of the Segment 13 corridor. Much of the Segment 13 alignment consists of narrow, graveled shoulders, and Dry Creek parallels Green Valley Road along the south side of the roadway. A school bus stop is located near the Green Valley Road/Blend O Green Way intersection.

Segment 17: Road Segment 17 is a common element amongst the three proposed alternatives. Segment 17 is located along Pleasant Valley Road from the Missouri Flat Road/Pleasant Valley Road intersection west to the Pleasant Valley Road/SR 49 intersection (at El Dorado). Land uses adjacent to Segment 17 include Commercial, High Density Residential, Industrial, Medium Density Residential, and Multi-Family Residential. Zoning designations adjacent to Segment 17 include Commercial, Estate Residential Ten-Acre, Industrial, Limited Multifamily Residential, Mobile Home Park, One-Family Residential, Planned Commercial, and Transportation Corridor. Segment 17 is a relatively flat, two-lane roadway with posted speed limits of 25, 35 and 40 mph. Most shoulders along Segment 17 are narrow and unpaved (gravel). Oak trees, pines trees and overhead utility poles are adjacent to the Segment 17 alignment. A traffic signal is located at the Pleasant Valley Road/Oro Lane/Koki Lane intersection.

Segment 18: Road Segment 18 is a common element amongst the three proposed alternatives. Segment 18 is located along Missouri Flat Road from the Missouri Flat Road/Proposed Diamond Springs Parkway intersection south to the Missouri Flat Road/Pleasant Valley Road intersection. Land uses adjacent to Segment 18 include Commercial and Industrial. Zoning designations adjacent to Segment 18 include Planned Commercial and Industrial. Oak trees, pine trees and overhead utility poles are present throughout the Segment 18 corridor. Paved shoulders (approximately two feet wide) and graveled shoulders are present throughout the alignment. Segment 18 is a two-lane roadway with a center left-turn lane. The posted speed limit is 45 mph. Westside Church is located on the west side of the roadway approximately 1,000 feet north of the Missouri Flat Road/Pleasant Valley Road intersection. A traffic signal is located at the Missouri Flat Road/Pleasant Valley Road intersection.

Segment 20: Road Segment 20 is a proposed roadway extension of Ray Lawyer Drive. The proposed roadway extension will be from the proposed Ray Lawyer Drive/U.S. Highway 50 interchange southeast to SR 49. Land uses adjacent to the proposed alignment include Single Family (City of Placerville, 1986) and Low Density Residential and Medium Density Residential (County of El Dorado, 2005). Zoning designations adjacent to Segment 20 include Estate Residential – 5 Acre, Estate Residential – 10 Acres, and One-Acre Residential (County of El Dorado, 2009) and Commercial, Highway Commercial, Public Facilities, and R-2 Multi-Family Residential (City of Placerville, 2009).

Segment 21: Road Segment 21 is located along Ray Lawyer Drive from the Placerville Drive/Ray Lawyer Drive intersection east to the proposed Ray Lawyer Drive/ U.S. Highway 50 interchange. Road Segment 21 is included as part of Alternatives 5G and 5H. Segment 21 is a two-lane road with sidewalk and Class 2 bicycle lanes on both sides of the roadway. The posted

speed limit is 35 mph. Land uses adjacent to Segment 21 include Commercial, Public/Quasi-Public, and Single Family (City of Placerville, 1986) and Commercial (County of El Dorado, 2005). Zoning designations adjacent to Segment 21 include Commercial, Business-Professional, Public Facilities, and R-3 Multi-Family Residential (City of Placerville, 2009). Oak trees, pine trees and overhead lighting are adjacent to the Segment alignment.

Segment 23: Road Segment 23 is located along Cold Springs Road from the Gold Hill Road/Cold Springs Road intersection east approximately 2.4 miles to Caswell Road. Road Segment 23 is included as part of Alternatives 5G and 5H. Road Segment 23 is a two-lane road, and land uses adjacent to Segment 23 include Agricultural Lands, Commercial, High Density Residential, Low Density Residential, Medium Density Residential, and Rural Residential. Zoning designations adjacent to Segment 23 include Commercial, Exclusive Agriculture, Multifamily Residential, Residential Estate – 5 Acre, and Residential Estate – 10 Acre. Paved shoulders (approximately two to four feet wide) and graveled shoulders are present throughout the alignment. Oak trees are adjacent to the Segment alignment.

Segment 27: Road Segment 27 is located along Gold Hill Road from the Lotus Road/Gold Hill Road intersection east to the Gold Hill Road/Cold Springs Road intersection. Road Segment 27 is included as part of Alternatives 5G and 5H. Road Segment 27 is a two-lane road, and land uses adjacent to Segment 27 include Agricultural Lands, Medium Density Residential, and Rural Residential. Zoning designations adjacent to Segment 27 include Estate Residential – 5 Acre, Estate Residential – 10 Acre, Exclusive Agriculture, Single-Family Three-Acre, and Residential Agriculture – 20 Acre. Paved shoulders (approximately two feet wide) and graveled shoulders are present throughout the alignment. Oak trees are adjacent to the Segment alignment.

Segment 28: Road Segment 28 is located along Green Valley Road from the Green Valley Road/Greenstone Road intersection east to the Green Valley Road/Missouri Flat Road intersection. Road Segment 28 is only included as part of Alternative 3E. Segment 28 is a relatively flat, two-lane road, and the posted speed limit is 45 mph with the exception of curved areas where the recommended speed limit is 30 mph and in the vicinity of Indian Creek School where the speed limit is 25 mph. Land uses adjacent to Segment 28 include Low Density Residential and Public Facilities. Zoning designations adjacent to Segment 28 include Planned Development, Estate Residential – 5 Acre, Estate Residential – 10 Acre, One-Acre Residential, and Exclusive Agriculture. Oak trees and overhead utility poles are present along the Segment 28 alignment. Much of the Segment 28 alignment consists of narrow, graveled shoulders; however, the eastern portion of Segment 28 consists of paved shoulders approximately two feet wide. Mounds Springs Creek parallels the south side of the roadway for the eastern portion of the Segment. A school bus stop is located near the Green Valley Road/Stone Mountain Road intersection, and the El Dorado County Office of Education is located in the eastern portion of Segment 28.

Segment 30: Road Segment 30 is located along Missouri Flat Road from the Green Valley Road/Missouri Flat Road intersection east to the Missouri Flat Road interchange at U.S. Highway 50. Road Segment 30 is only included as part of Alternative 3E. The posted speed limit is 45 to 55 mph along Segment 30. Land uses adjacent to Segment 30 include Commercial, Low Density Residential, Medium Density Residential, and Multi-Family

Residential. Zoning designations adjacent to Segment 30 include Commercial, General Commercial, Planned Commercial, Estate Residential – 5 Acre, Estate Residential – 10 Acre, One-Acre Residential, and One-Family Residential. Green Valley Community Church is located on the north side of Segment 30, near the Mound Springs Creek crossing. Oak trees, pines trees and overhead utility poles are adjacent to the Segment 30 alignment, while the eastern portion of Segment 30 includes commercial landscaping. Traffic signals are located at the Missouri Flat Road/El Dorado Road and Missouri Flat Road/Plaza Drive intersections, and roadway shoulders are approximately four feet wide for much of the alignment. Missouri Flat Road is a two-lane roadway for much of the Segment 30 alignment; however, it becomes a four-lane roadway approximately 900 feet north of the Missouri Flat Road interchange with U.S. Highway 50. Segment 30 is commercialized in the vicinity of the interchange with the presence of Prospector's Plaza and the Safeway Shopping Center. The Diamond Springs/El Dorado Fire Protection District Fire Station 48 is located along the west side of Segment 30, between Meadow View Lane and Headington Road.

Segment 32: Road Segment 32 is located along Cold Springs Road from Caswell Road to Pierroz Road approximately 0.25 mile. Road Segment 32 is included as part of Alternatives 5G and 5H. Road Segment 32 is a two-lane road, and land uses adjacent to Segment 32 include Agricultural Lands, Medium Density Residential, and Rural Residential. Zoning designations adjacent to Segment 32 include One-Acre Residential (County of El Dorado, 2009) and Commercial, Mobile Home Park, R-4 Multi-Family Residential, Open Space, Single-Family Acre Residential, and Single-Family Residential (City of Placerville, 2009). Paved shoulders (approximately two feet wide) and graveled shoulders are present throughout Segment 32. Oak trees are adjacent to the Segment alignment.

Segment 33: Road Segment 33 is a common element of Alternatives 5G and 5H. Segment 33 is located along Placerville Drive from the Pierroz Road/Cold Springs Road intersection southwest to the Pierroz Road/Placerville Drive intersection and then southwest to the Placerville Drive/Ray Lawyer Drive intersection. The posted speed limit is 35 mph, and the roadway Segment is a two-lane road with a center left-turn lane on the western portion of the Segment and Class 2 bicycle lanes on either side of the roadway. Land uses adjacent to Segment 33 include Commercial (City of Placerville, 1986). Zoning designations adjacent to Segment 39 include Commercial and Mobile Home Park (City of Placerville, 2009). Oak trees, pine trees, commercial landscaping and overhead utility poles are located throughout the Segment alignment. A traffic signal is located at the Placerville Drive/Ray Lawyer Drive intersection.

Segment 37: Road Segment 37 is the proposed Diamond Springs Parkway Extension. The proposed roadway extension will be from the proposed Missouri Flat Road/Diamond Springs Parkway intersection east to SR 49. Land uses adjacent to the proposed alignment include Industrial and Public Facilities. Zoning designations adjacent to Segment 37 include Industrial.

Segment 38: Road Segment 38 is located along SR 49 from the SR 49/Longhrut Road intersection south to the proposed SR/49/Diamond Springs Parkway intersection. Segment 38 is included as part of Alternative 5G. Oak trees, pine trees and overhead utility poles are adjacent to Segment 38. The posted speed limit is 35 mph, and the roadway Segment is a two-lane road with narrow, unpaved shoulders. Land uses adjacent to Segment 38 include Industrial, Low

Density Residential, and Medium Density Residential. Zoning designations adjacent to Segment 38 include Estate Residential – 5 Acre, Estate Residential – 10 Acre, and Industrial.

Segment 39: Road Segment 39 is located along Missouri Flat Road from the Missouri Flat Road interchange at U.S. Highway 50 southeast to the proposed Missouri Flat Road/Diamond Springs Parkway intersection. Road Segment 39 is included as part of Alternatives 3E and 5H. The posted speed limit is 45 mph, and the roadway Segment is a four-lane road until immediately south of the Missouri Flat Road/Golden Center Drive intersection where it becomes a two-lane road with a center left-turn lane. Land uses adjacent to Segment 39 include Commercial and Industrial. Zoning designations adjacent to Segment 39 include Commercial, General Commercial, Industrial, Single-Family Two-Acre, and One-Acre Residential. Traffic signals are located at the Missouri Flat Road/U.S. Highway 50 on- and off-ramp, Missouri Flat Road/Mother Lode Drive, Missouri Flat Road/Forni Road, and Missouri Flat Road/Golden Center Drive intersections. Class 2 bicycle lanes are present on both sides of the roadway, and sidewalk is present on the north side of Segment 39. Much of the native vegetation has been replaced with commercial landscaping, as much of Segment 39 is flanked by commercial uses on both sides of the roadway.

U.S. Highway 50: U.S. Highway 50 between the proposed Ray Lawyer Drive/U.S. Highway 50 interchange and the Missouri Flat Road/U.S. Highway 50 interchange is a segment of Alternative 5H. U.S. Highway 50 is a four-lane highway with a separating median.

This Environmental Constraints and Opportunities Analysis identifies potential design opportunities and potential impacts associated with all resources identified within the standard California Environmental Quality Act (CEQA) Initial Study Checklist, with an emphasis on biological and cultural resources, sensitive receptors, potential hazards and hazardous materials, and bicycle, pedestrian and transit opportunities within the project corridor. The following resource discussions provide an overview of existing conditions and potential constraints and opportunities associated with development of the proposed alternative alignments.

Under the No Project Alternative, SR 49 would not be realigned and would remain along its existing alignment from Coloma to the community El Dorado, and would not achieve the project goals of eliminating the at-grade intersection of SR 49 and U.S. Highway 50 or elimination of the alignment of SR 49 from the Marshall Gold Discovery State Historic Park. Because no plans to modify the existing SR 49 (through roadway widening) have been developed, the No Project Alternative will not result in significant impacts to existing resource conditions.

Aesthetics

The El Dorado County General Plan classifies visual resources into two categories: scenic resources and scenic views. Scenic resources are defined as specific features of a viewing area (or viewshed) such as trees, rock outcroppings, and historic buildings. Scenic resources are the primary focus of a viewshed and are typically foreground elements. Scenic views are defined as elements of the broader viewshed such as mountain ranges, valleys and ridgelines. Scenic views are generally middle- or background elements of a viewshed that can be seen from a range of viewpoints.

No scenic resources are located immediately adjacent to the proposed Alternative Alignments; however, one scenic resource (the historic townsite of Coloma [Marshall Gold Discovery State Historic Park]) is located along the No Project Alternative Alignment. The scenic resource is located along SR 49 north- and southbound in the Coloma area, and is identified as Locations 3a and 4b in the El Dorado County General Plan. SR 49 has been identified by Caltrans as eligible for state scenic highway status. If SR 49 becomes designated as state scenic highway by Caltrans, the County will be required to adopt a scenic corridor protection program for SR 49, which will protect views and place controls on incompatible land uses along the highway.

Within the proposed Alternative Alignments there is one scenic view, as defined by the El Dorado County General Plan. The scenic view is in all directions along Cold Springs Road in the Gold Hill area, and provides views of rolling hills and ridgelines. This scenic view is located along Segment 23, which is included in Alternative Alignments 5G and 5H. If either Alternative Alignment is selected, it is likely to have a less-than-significant impact on the scenic view. The area is considered a scenic view for the views of the rolling hills and ridgelines, and modification to the roadway will not impact the scenic view.

The City of Placerville General Plan defines nine subareas within the city limits that lend itself to the scenic resources and urban design analysis. Roadway segments considered for the SR 49 Realignment Project are located within three of the nine subareas. The three subareas are 1c, 3b and 7 as defined in the 1989 City of Placerville General Plan Background Report.

According to the City of Placerville General Plan Background Report, Subarea 1c consists of commercial uses in the foreground views with middleground views with scenic value; however, as stated in the General Plan Background Report, the foreground views dominate this subarea. Roadway Segments 21 (Ray Lawyer Drive) and 33 (Placerville Drive) are located within Subarea 1c.

Subarea 3b is predominantly suburban residential with grassland and agricultural areas. As stated in the General Plan Background Report, "Most portions of the residential area have high scenic value as do the grassland and agricultural area." Roadway Segment 32 and the easternmost portion of Segment 23 is located within Subarea 3b.

Subarea 7 is comprised of rural residential and agricultural uses, and "the area should . . . be considered as having high scenic resource value, particularly with respect to the Route 49 'scenic' corridor" (City of Placerville, 1989b). The northern portion of roadway Segment 20 (the future Ray Lawyer Drive Extension) is located within Subarea 7.

Because the proposed design for the SR 49 Realignment Project is not known at this time, it cannot be determined whether the project would impact scenic resources and/or scenic views. Because Alternative 5G includes two new roadway segments (Segments 20 and 37), Alternative 5G's visual resources impact is considered potentially significant until a project-specific visual resources evaluation can be conducted. In order to determine the project's effect on visual resources, a project-specific visual resources evaluation would be required during the CEQA review of the SR 49 Realignment Project.

Agricultural Resources

The California Department of Conservation, Division of Land Resource Protection Farmland Mapping and Monitoring Program (FMMP) issued the El Dorado County Important Farmland Map in 2006. The FMMP map shows that a majority of the lands adjacent to the proposed Alternative Alignment roadway segments are “Urban and Built-Up Land”, “Other Land”, and “Grazing Land”; however, Farmland is adjacent to some of the roadway segments. “Farmland of Local Importance” is located adjacent to Segments 1, 2, 13, 23, 27, 28, 30, and 38. “Prime Farmland” is located adjacent to Segment 27 (Gold Hill Road). Farmland within the project area is shown on Figure 2.

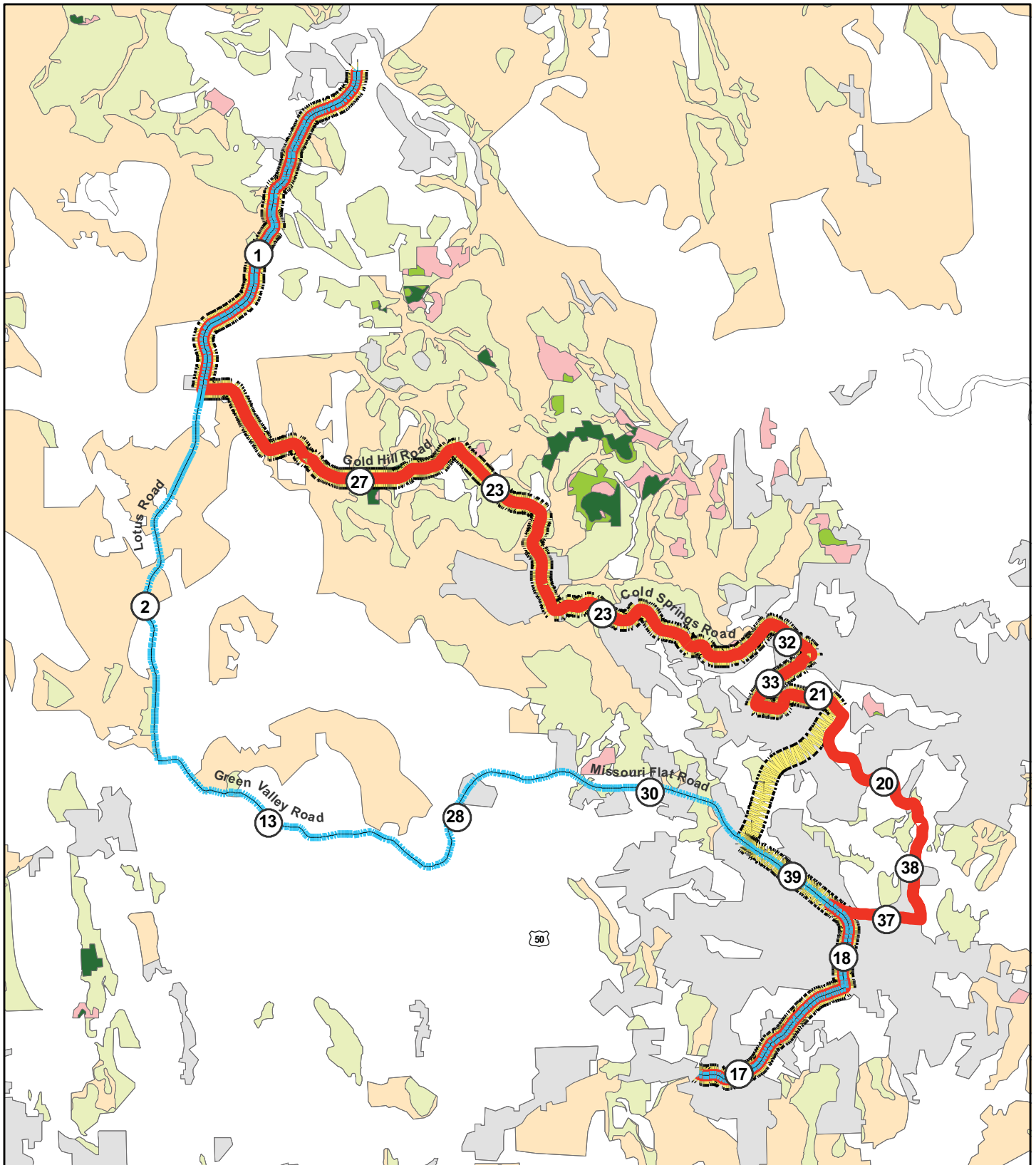
The El Dorado County General Plan identifies seven areas (Agricultural Districts) that are important to agriculture in the County. The Agricultural Districts are identified primarily by soils considered choice, which should be preserved for agricultural use. Portions of the project area (segments 1, 23, and 27) are located within the Gold Hill Agricultural District. El Dorado County General Plan Policy 8.1.3.2 requires agriculturally incompatible uses adjacent to agriculturally zoned land outside of a designated Agricultural District to provide a setback of 200 feet on parcels of 10 acres or larger. Within El Dorado County, lands under Williamson Act Contracts must be zoned Exclusive Agriculture or Agriculture Preserve. Because the proposed design for the SR 49 Realignment Project is not known at this time, it cannot be determined whether the project will result in development of incompatible uses adjacent to agriculturally zoned parcels. In order to determine the project’s impact on agriculturally zoned parcels, a project-specific agricultural resources evaluation, including evaluating distance of setback from proposed improvements and location of Williamson Act Contract lands with relation to the proposed improvements, will be required during the CEQA review of the SR 49 Realignment Project.

Air Quality

The project area is located within the Mountain Counties Air Basin (MCAB) and under the jurisdiction of the El Dorado County Air Quality Management District (EDCAQMD).

The Federal Clean Air Act requires the U.S. Environmental Protection Agency (EPA) to identify National Ambient Air Quality Standards (NAAQS) to protect public health and welfare. NAAQS have been established for ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, particulate matter (diameter 10 microns [PM₁₀] and diameter 2.5 microns [PM_{2.5}]) and lead. El Dorado County is designated as non-attainment for the federal ozone standard, and under the state AAQS and based on 2004 designations, El Dorado County is designated non-attainment for ozone and PM₁₀.

Local air quality regulations are established and regulated by the EDCAQMD. The EDCAQMD defined specific daily emissions thresholds that can be used to determine the significance of project emissions. Thresholds of significance for specific pollutants of concern are as follows:



State Route 49 Realignment - Constraints and Opportunities Analysis
Figure 2: Farmland in the Project Area

- | | | |
|----------------|----------------------------------|------------------|
| Alternative 3E | Prime Farmland | Grazing Land |
| Alternative 5G | Farmland of Statewide Importance | Developed Areas |
| Alternative 5H | Farmland of Local Importance | Other/not mapped |
| 17 Segments | Unique Farmland | |

N

 0 0.5 1 Miles
 Source: CA Dept. of Conservation 2006,
 ESRI 2009, TYLin 2009.

- ROG: 82 lbs/day
- NO_x: 82 lbs/day
- CO: AAQS
- PM₁₀: AAQS

Because the proposed design for the SR 49 Realignment Project is not known at this time, it cannot be determined whether the project will result in exceedances of established federal, state and local air quality standards. In order to determine the project's effect on air quality emissions (both construction-related and operational), a project-specific air quality evaluation will be required during the CEQA review of the SR 49 Realignment Project.

Biological Resources

Padre Associates, Inc. (Padre) conducted a query of the California Natural Diversity Database (CNDDDB, 2009) under the direction of ESP to identify occurrences of special-status plant and animal species in the vicinity of the proposed alignments. The Biogeographic Information and Observation System (BIOS), a similar program to CNDDDB, was also used to identify special-status species occurrences in the region. Aerial imagery was examined and habitats were mapped by field verification. Field surveys were conducted by driving all alignments and mapping habitats through windshield surveys. The defined survey area included 50 feet from either side of the centerline of the road. For overland portions of the alignments, a 100-foot wide survey corridor was viewed from public roadways. Transect or walk-over surveys were not conducted for any portions of the alignments due to scale of survey area, limited access, and reconnaissance nature of the report.

National Wetlands Inventory (NWI) maps and topographic maps were reviewed to identify the locations of potentially sensitive habitat types surrounding the proposed alignments. Soil survey maps were examined for gabbro and serpentine soils that could support any of the plant species collectively known as the Pine Hill Endemics.

Vegetation

The project site occurs primarily within a rural residential area. A mix of annual grassland and oak woodland comprise the majority of the habitat types between residential properties. The following is a brief description of the vegetation cover types observed along the proposed road alignments.

Oak Woodland. Oak woodland is a major component of the natural California landscape, accounting for over 9.5 million acres, or 9.5 percent of the total land cover in the state (Barbour and Major, 1988). This habitat is particularly important because of its high value to wildlife, and the diversity of wildlife species that it supports. However, because this habitat is frequently converted for agriculture or development, oak woodlands have been declining for many years. This situation is aggravated by low regeneration. As a consequence, oak woodland is recognized by the State of California as a valuable habitat that should be protected.

Oak woodland habitat in the foothills along the proposed roadway alignments is characterized by a dominant overstory of native oak species, primarily blue oak (*Quercus douglasii*) with a

complement of interior live oak (*Quercus wislizenii*). The habitat varies from oak savanna (defined by less than 30 percent canopy cover) to oak forest with a density of trees sufficient to create an overlapping and unbroken canopy. In response to the open space and absence of competition, trees that occur in savanna typically support larger crowns than their counterparts in the woodland environment. In general, interior live oaks tend to be smaller and are more susceptible to stunted growth and multiple trunk sprouting than blue oaks. See Table 1 for a complete list of estimated acreage for this vegetation community within all the proposed alignments.

There are a number of oak trees occurring along the proposed alignments, particularly within the overland portion of Alignment 3G. If any trees will be removed for construction of the realignment project, a tree survey should be conducted to determine the size and species of trees removed and to determine if trees are protected.

Oak savanna. Oak savanna is an oak-dominated community with less than 30 percent canopy cover. In response to the open space and absence of competition, trees that occur in savanna typically support larger crowns than their counterparts in woodland or forest environments. Oak savannas are frequently disturbed by natural (e.g., fire) or human (e.g., grazing) causes that reduce the formation of a shrub understory and support grassland development. In northern California, oak savanna is usually comprised of blue oak and valley oak (*Quercus lobata*). Oak savanna was not delineated as a separate habitat; however, its acreages were included in the oak woodland cover type.

Mixed Chaparral. The chaparral community consists of broad-leafed or needle-leafed, sclerophyllous (hard-leafed), medium-to-tall shrubs that form a dense cover on steep slopes. This cover type is dominated by chamise (*Adenostoma fasciculatum*), various species of manzanita (*Arctostaphylos* sp.), and ceanothus (*Ceanothus* sp.). Within the survey area, the dominant shrubs include whiteleaf manzanita (*Arctostaphylos viscida*), buckbrush (*Ceanothus cuneatus*), and coyote brush (*Baccharis pilularis*). Understory vegetation includes a mix of native and non-native species including herbaceous and annual grass species. This community occurs on steep, dry, and rocky slopes with little soil. It is fairly extensive throughout the foothills of the Sierra Nevada, but has been experiencing a decline in total acreage as a consequence of development. This cover class is described by Holland (1986) as Northern Mixed Chaparral (37110) and by Sawyer and Keeler-Wolf (1995) as Whiteleaf Manzanita Chaparral Series, Chamise Series, and Coyote Brush Series. See Table 1 for a complete list of estimated acreage for this vegetation community within all the proposed alignments.

Riparian Woodland/Riparian Scrub. This cover type is an open-to-dense, broadleaved, winter-deciduous shrubby streamside thicket dominated by willows (Holland, 1986). Fremont cottonwood (*Populus fremontii*) is typically associated with this habitat type. Dense stands usually have little understory or herbaceous stratum. More open stands have a grassy substratum. Other vegetation that is associated with this habitat type includes valley oak, Oregon ash (*Fraxinus latifolia*), Himalayan blackberry (*Rubus discolor*), and western sycamore (*Platanus racemosa*). See Table 1 for a complete list of estimated acreage for this vegetation community within all the proposed alignments.

Non-Native Annual Grassland. Non-native grasses that were introduced during European settlement dominate the annual grasslands in the project area. There is a limited diversity of plant species within this cover type. Typical species include non-native grasses such as Italian ryegrass (*Lolium multiflorum*), wild oat (*Avena fatua*), soft chess (*Bromus hordeaceus*), ripgut brome (*Bromus diandrus*), hare barley (*Hordeum murinum* ssp. *leporinum*), and canary grass (*Phalaris minor*). Native grasses including purple needlegrass (*Nassella pulchra*) and creeping wildrye (*Leymus triticoides*), can also be found. This cover type includes ruderal vegetation along the project alignments. See Table 1 for a complete list of estimated acreage for this vegetation community within all the proposed alignments.

Agriculture. Agricultural land can be found adjacent to the proposed alignments, specifically Alternative Alignments 5G and 5H. Orchards and vineyards account for the majority of the agricultural land along the Alignments. Most orchards and vineyards have an open understory to easily facilitate harvest. The herbaceous layer usually consists of bare soil or a cover crop. The cover crop can either be a natural or exotic perennial grasses (e.g., Bermuda grass), or annual grasses (annual ryegrass and soft chess) (Schultze, 1988). See Table 1 for a complete list of estimated acreage for this vegetation community within all the proposed alignments.

Rural Residential. This cover type occurs in areas of less development, usually in a rural setting. Areas of rural residential may contain natural vegetative communities, ornamental plantings, or a mixture of both often interspersed with development. This cover type may contain gravel driveways, lawns and other disturbances typical of a residential setting. Most houses and other development are spread further apart than in an urban or suburban residential setting. Species density and diversity varies within this cover type but is typically less disturbed than developed lands. See Table 1 for a complete list of estimated acreage for this vegetation community within all the proposed alignments.

Developed Lands. This cover type occurs in areas developed for residential or commercial purposes (i.e. homes, apartments, commercial buildings, and parking lots). The soil within developed areas has been modified or covered by construction practices. Air temperature is increased as heat absorbing materials, such as asphalt and concrete, are introduced; and shading is lost as the native tree canopy is removed (even though tree canopies may become denser as urban landscaping matures). Water quality and availability are diminished as impervious surfaces increase and urban pollutants accumulate; and, air quality diminishes as emissions from automobiles, homes, and commercial entities increase (Vessel and Wong, 1987; Leedy et al., 1978). Vegetation associated with developed lands includes primarily weedy and ornamental plant species. The majority of developed lands occurred within Placerville primarily in commercially developed areas. For the purposes of calculating acreages, the existing roadway was included under the developed lands cover type. See Table 1 below for a complete list of estimated acreage for this vegetation community within all the proposed alignments.

Table 1 Habitat Acreage Estimates for the Highway 49 Realignment Project	
Habitat Type	Proposed Alignments (acres)

	3E	5G	5H
Oak woodland	53.8	64.9	47.7
Annual Grassland	40.8	33	28.7
Chaparral	5.9	2.9	2.9
Riparian	3.6	2.4	2.7
Rural Residential	21.4	31.6	32.4
Agriculture	0	1.7	1.7
Swale	0.87	0.83	1.05
Pond	1.2	0.45	0.45
Channel	0.98	0.09	0.09
Developed	66.8	72.9	88.1
Total	194.35	210.77	205.79
Source: Padre Associates, 2009a			

Regulated Habitat Types

The proposed alignments contain habitats regulated by the U.S. Army Corps of Engineers (Corps) under Section 404 of the Clean Water Act; the California Department of Fish and Game under Section 1601 of the California Fish and Game Code, and the Central Valley Regional Water Quality Control Board under Section 401 of the Clean Water Act and the Porter-Cologne Act. These habitats could consist of ponds, wetland swales and channels and creeks. Numerous wetland features cross or parallel the proposed alignments. Wetland characteristics are detailed below.

Waters and Wetlands

This cover type is typically associated with topographically lower areas. Wetlands occur in areas where soils remain inundated or saturated for an extended period of time. Such soils support plant species (hydrophytes) that are adapted to life in oxygen-depleted soils. Freshwater emergent wetlands are among the most productive wildlife habitats in California, providing food, cover, and water for over 160 species of birds, and numerous mammals, amphibians, and reptiles (Kramer, 1988). Wetland areas are considered to be of high value due to the presence of water, and the sensitive wildlife dependent upon these habitat types.

Channels are characterized as permanent, intermittent, or ephemeral depending on the source and duration of flows. Vegetation within or adjacent to the channel are based on the length of time that the ground remains inundated. Channel habitat could contain a variety of plant species from tree- and/or shrub-dominated communities containing Fremont cottonwood, Himalayan blackberry, and willows (*Salix* sp.) to herbaceous vegetated channels supporting emergent wetland vegetation.

Swale habitat typically consists of less topographically steep water features with less of a defined channel than a creek. Swale habitat can be in the headwaters of a stream or channel, just prior to the defined channel. Swale habitat typically contains facultative herbaceous vegetation

consisting of Italian ryegrass, annual beard grass (*Polypogon monspeliensis*), curly dock (*Rumex crispus*), and willow herb (*Epilobium ciliatum*).

Pond habitat in the foothills of the Sierra Nevada Range is often constructed by humans to provide water for livestock or irrigation for crops. Pond habitat can contain a variety of wetland plant species at the waters edge. Plant species occurring within ponds will depend on the duration of inundation in the pond and can include emergent wetland vegetation if the pond has water year-round or seasonal wetland vegetation if the pond dries in the summer.

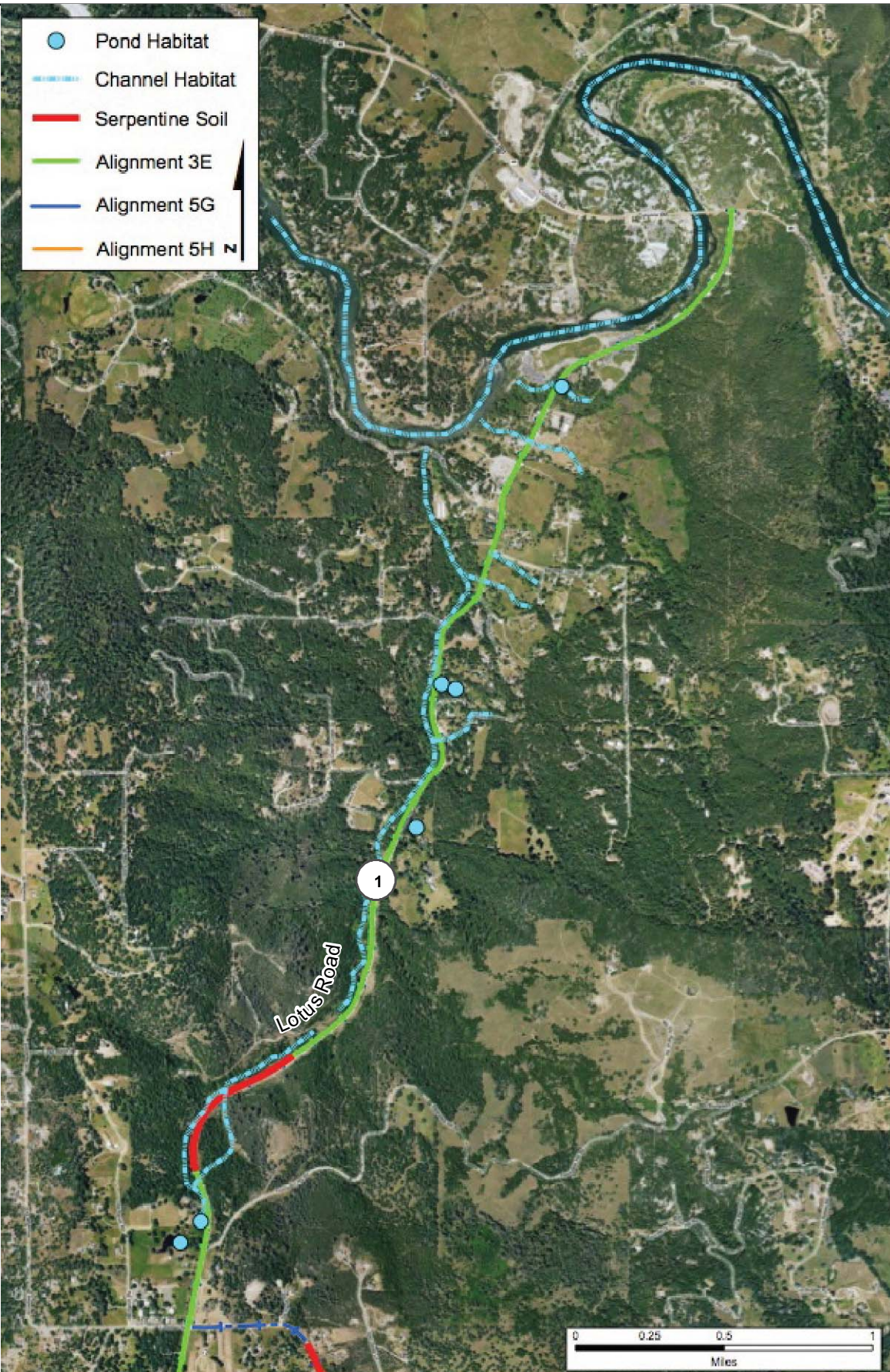
During surveys, wetland habitat was categorized by channel, swale, and/or pond habitat. For a list of acreage estimates for the proposed alignments, see Table 1. Potential regulated waters and wetlands (in the form of channel/swale habitat and pond habitat) is depicted in Figure 3A-G. Wetland acreage and locations are estimates based on windshield surveys and a review of topographic and NWI maps.

Vegetated roadside ditches, swales, ponds and creeks may be considered jurisdictional Waters of the United States or wetlands regulated by the Corps and California Department of Fish and Game (CDFG). A preliminary jurisdictional delineation is recommended to determine whether the features mapped within the proposed alignments are subject to jurisdiction of the Corps and CDFG.

Soils

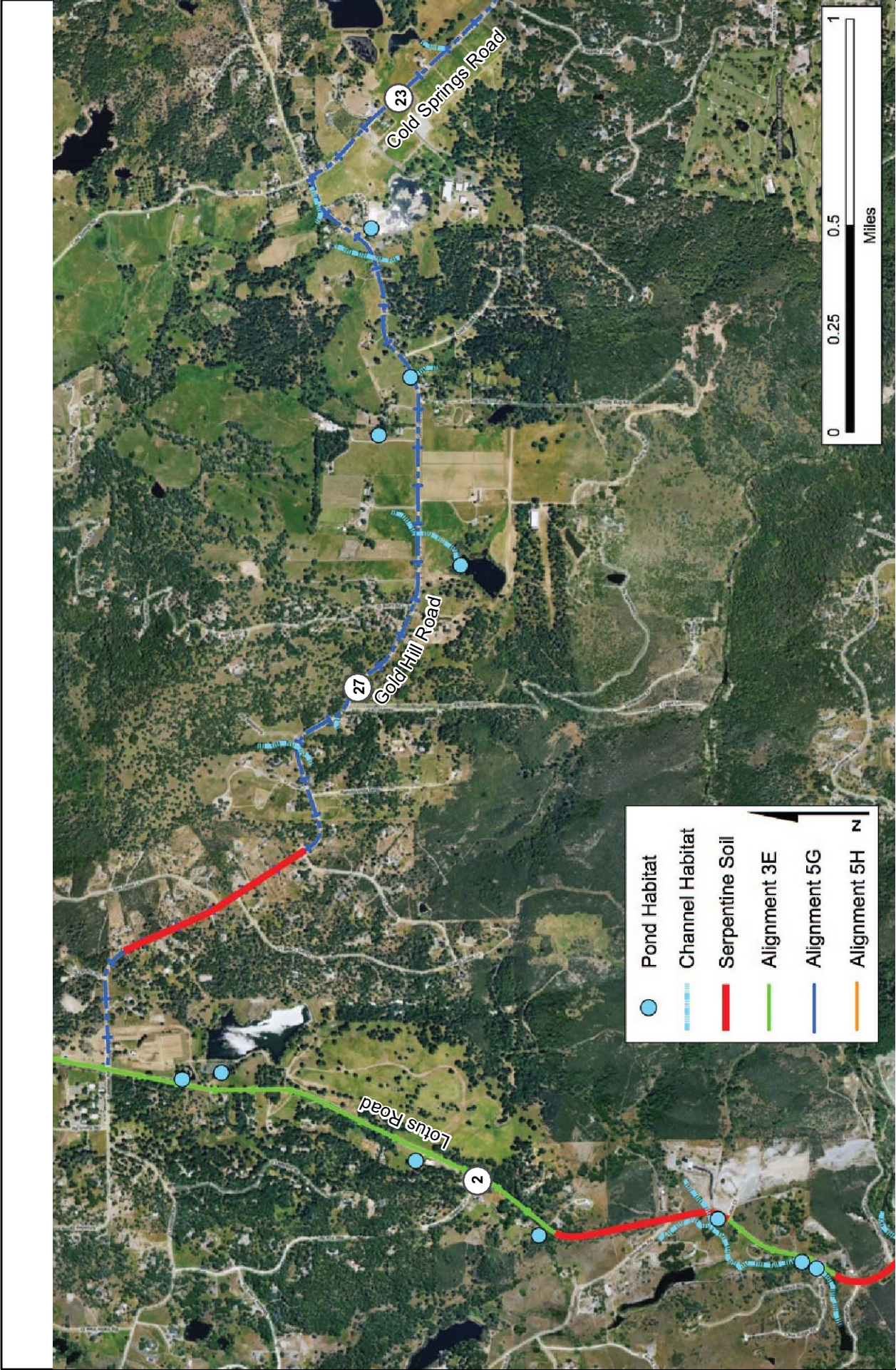
El Dorado County soil survey maps were investigated for known locations of gabbro and serpentine soils (Rogers, 1974). A group of eight plant species, collectively known as the “Pine Hill endemics,” are found almost exclusively on gabbro soils. Of the eight species, four species have been known to occur on non-gabbro soils, particularly on serpentine soils. There is some evidence that these plants have an affinity for colonizing open, disturbed areas after a fire. Gabbro rock forms from liquid magma rich in iron and magnesium. The gabbro intrusion on Pine Hill was formed approximately 175 million years ago when volcanic activity forced liquid magma through layers of rock and then cooled while still underground. This layer was not exposed at the earth's surface for millions of years, but is now exposed due to many years of erosion and weathering. The gabbro soils are red weathered from dark gabbro rock. Gabbro soils in El Dorado County occur within the Rescue soil series as identified in the Soil Survey of El Dorado Area (Rogers, 1974). There are no Rescue Series soils found along the proposed Alternative Alignments.

Several rare plants, including four of the Pine Hill Endemics, occasionally occur on serpentine soils, which are formed through a process similar to the formation of the gabbro soils. Serpentine soils are commonly alkaline soils containing high concentrations of heavy metals and low calcium-to-magnesium ratios. Typically, these characteristics limit the suitability of this soil for plant growth. Some plants have adapted well to these conditions and often times occur exclusively on serpentine soils (Kruckeberg, 1984). Species found on serpentine soils are described below. There are approximately 17.21 acres of serpentine soils on Alternative Alignment 3E and 14.35 acres on Alternative Alignments 5G and 5H. The majority of the serpentine soils are in the vicinity of Lotus Road between Gold Hill and Green Valley Roads as shown on Figure 4. Serpentine rock and soils contain naturally occurring asbestos, a hazardous



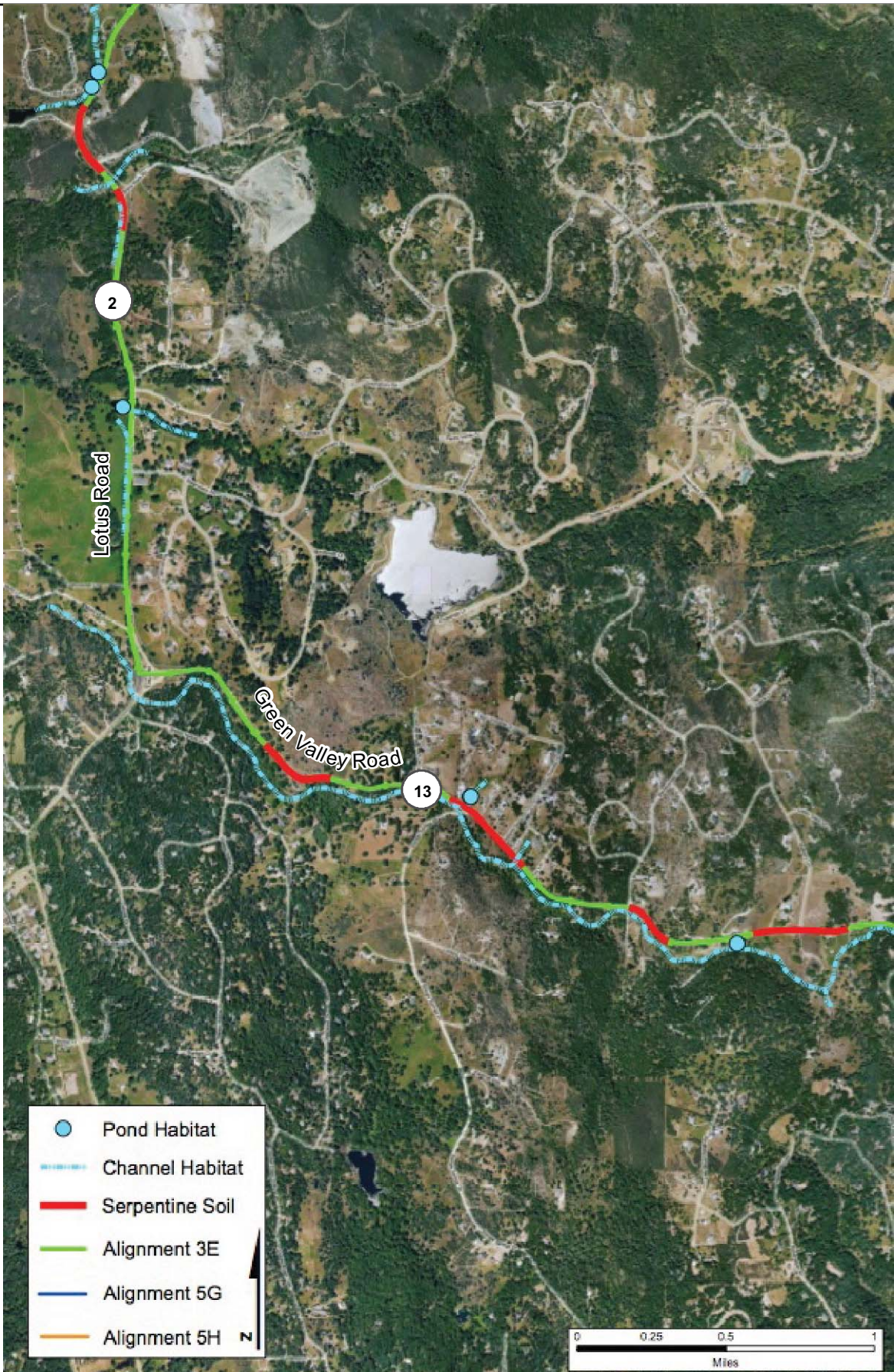
State Route 49 Realignment - Constraints and Opportunities Analysis
Figure 3A: Sensitive and Regulated Habitats in Project Area

Source: Padre Associates 2009.



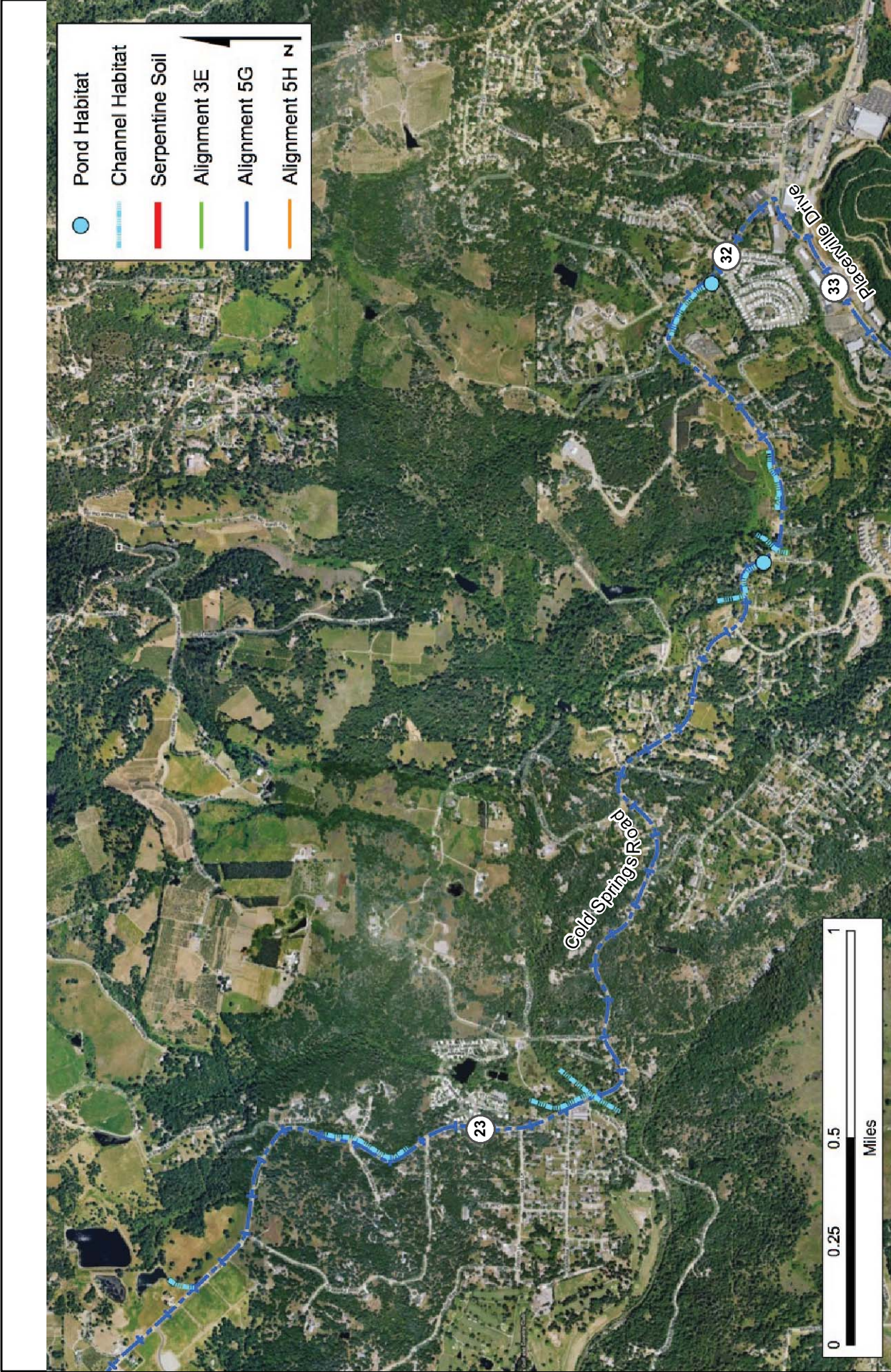
State Route 49 Realignment - Constraints and Opportunities Analysis
 Figure 3B: Sensitive and Regulated Habitats in Project Area

Source: Padre Associates 2009.

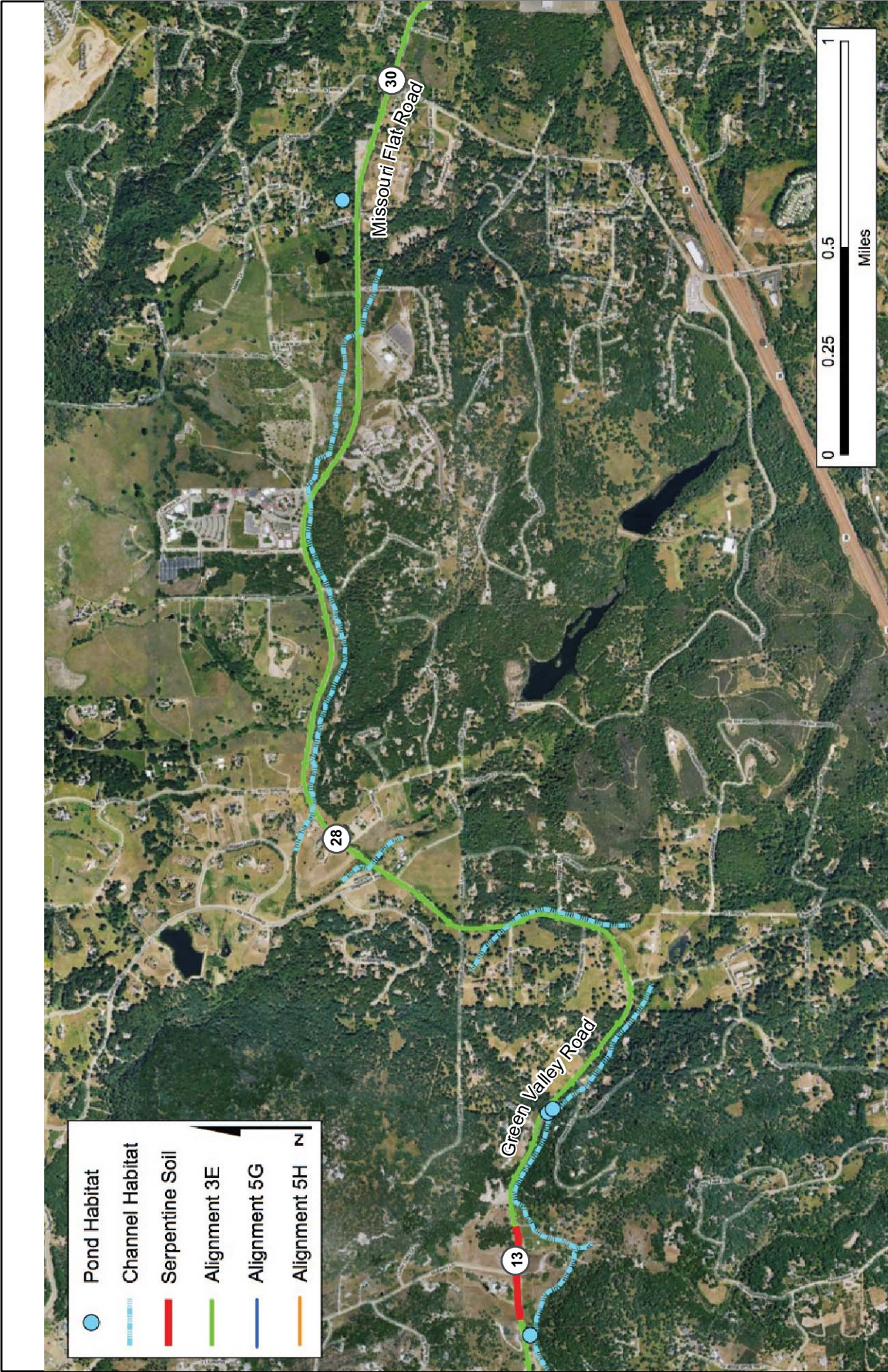


State Route 49 Realignment - Constraints and Opportunities Analysis
Figure 3C: Sensitive and Regulated Habitats in Project Area

Source: Padre Associates 2009.



State Route 49 Realignment - Constraints and Opportunities Analysis
 Figure 3D: Sensitive and Regulated Habitats in Project Area

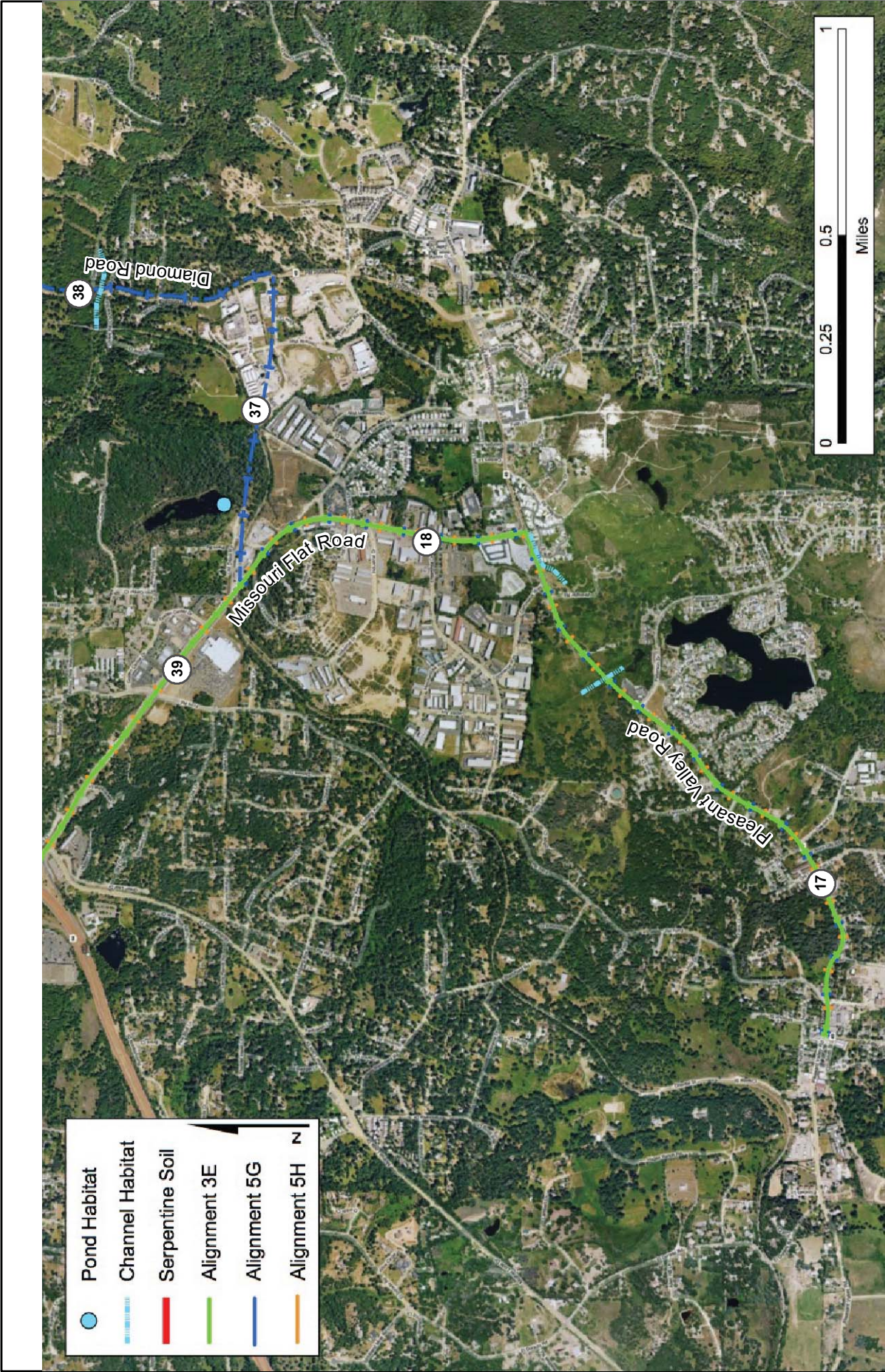


State Route 49 Realignment - Constraints and Opportunities Analysis
 Figure 3E: Sensitive and Regulated Habitats in Project Area

Source: Padre Associates 2009.



State Route 49 Realignment - Constraints and Opportunities Analysis
Figure 3F: Sensitive and Regulated Habitats in Project Area



State Route 49 Realignment - Constraints and Opportunities Analysis
 Figure 3G: Sensitive and Regulated Habitats in Project Area

Source: Padre Associates 2009.

material that is regulated by the County of El Dorado and the State of California (see the Geology and Soils section of this technical memorandum, below).

Special-Status Species

The results of the CNDDDB query indicate that there were six special-status species recorded within one-mile of the proposed alignments (CNDDDB, 2009). These species include: Layne's ragwort (*Senecio layneae*), Jepson's onion (*Allium jepsonii*), Red Hill soaproot (*Chlorogalum grandiflorum*), foothill yellow-legged frog (*Rana boylei*), Northern Pacific pond turtle (*Actinemys m. marmorata*), and tri-colored blackbird (*Agelaius tricolor*). See Figure 5 for a map of special-status species in the vicinity of the proposed alignments.

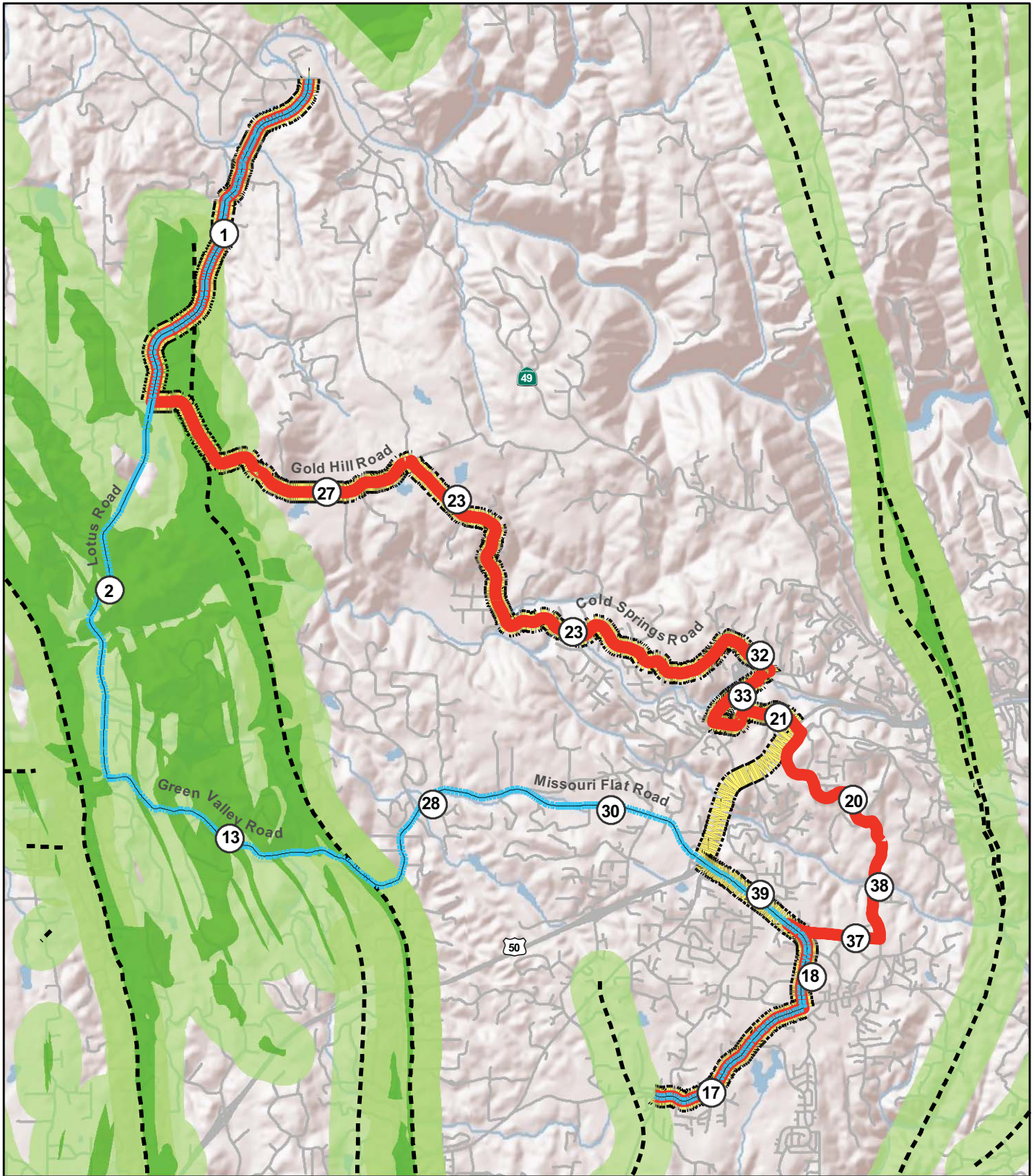
Plants

Known occurrences of Layne's ragwort, Jepson's onion, and Red Hill soaproot were found within one mile of the proposed alignments. In addition to these three plants, Brandegee's clarkia (*Clarkia biloba* ssp. *brandegeae*) and Stebbins' morning glory (*Calystegia stebbinsii*) have the potential to occur along the proposed alignments based on their soil and/or habitat preferences. All five species are described below.

Layne's ragwort is a federally listed Threatened and California-listed Rare species. It is a perennial, non-woody member of the sunflower family that grows from a basal rosette of lance-shaped gray-green leaves that are typically two to four inches in length and half inch wide. There are a few teeth along the leaf margins and stems are slender, erect, with few leaves, and are about 10 to 18 inches in height. The flowers are yellow and occur at the ends of the stems. This species is found in open, rocky areas within the chaparral and woodland habitats on gabbro and serpentine soils in western El Dorado County and the Red Hills in Tuolumne County. This species blooms from January through April and typically occurs at elevations from 50 to 2,400 feet mean sea level (msl). This species has the potential to occur along roadsides within the proposed alignments on serpentine soils. Two known occurrences of Layne's ragwort have been recorded along proposed Alignment 3E, and one known occurrence has been recorded along all three proposed alignments.

Jepson's onion is a CNPS List 1B plant species. It is a perennial herb that stands approximately 10-16 inches. The inflorescence consists of 20-60 flowers, 1/4-to-3/8 inch in length. The flowers are white with deep pink midveins. This species occurs in cismontane woodland, lower montane coniferous forest within serpentine or volcanic soils. Jepson's onion typically occurs at elevations within 900 to 3,300 feet, msl. This species blooms from May through August. This species has the potential to occur along roadsides within the proposed alignments on serpentine soils. The nearest recorded occurrence to the project site is within a quarter mile south of Alignment 3E.

Red Hills soaproot is a CNPS List 1B plant species. It is a perennial herbaceous member of the lily family. This species has a short flowering period, blooming from May through June. The basal leaves are usually 4 to 12 inches long, linear shaped with wavy margins. The flowers bloom along the upper portion of slender stalks one to two feet in height. This species occurs within chaparral, cismontane woodland, and lower montane coniferous forest within serpentine



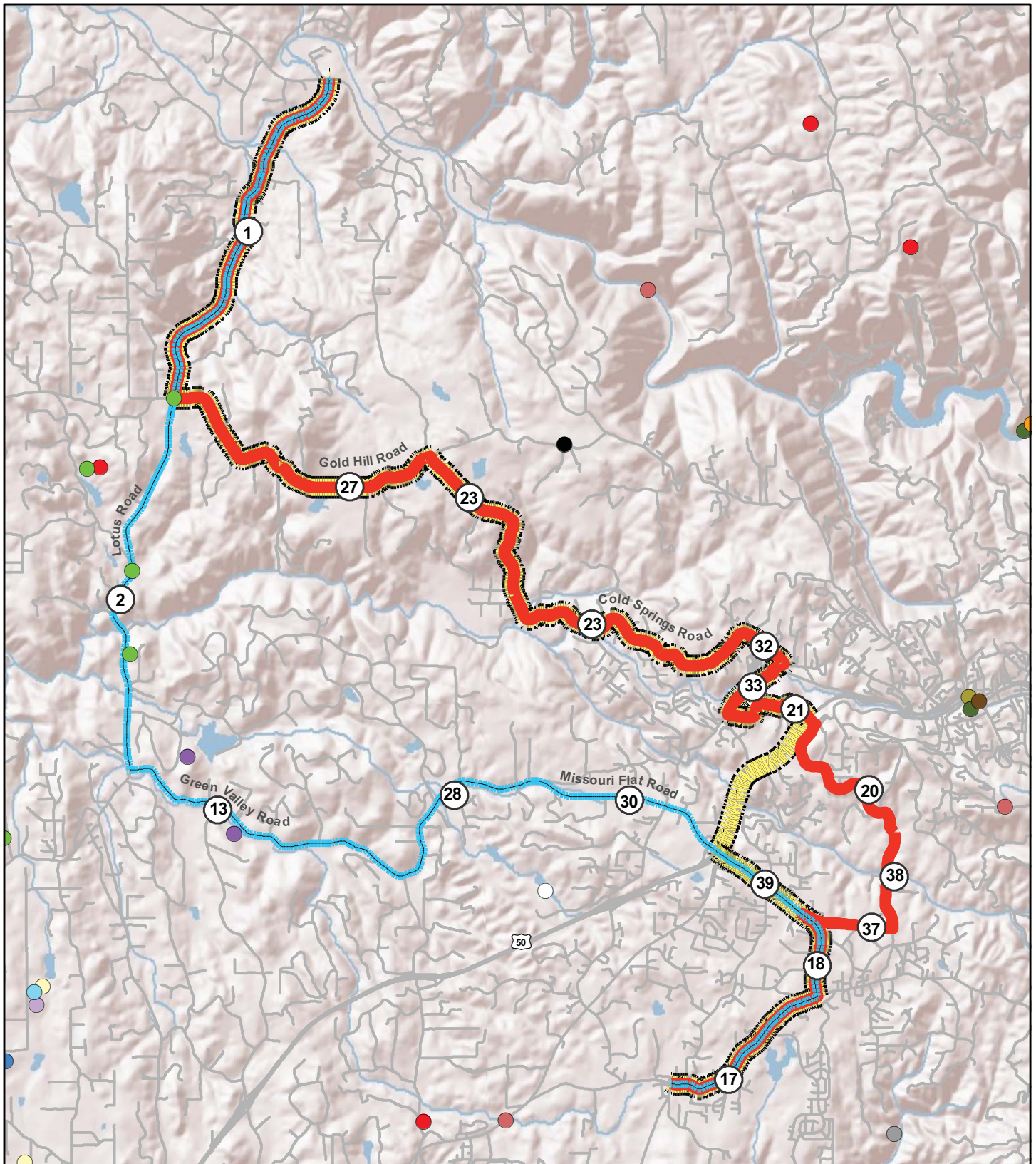
State Route 49 Realignment - Constraints and Opportunities Analysis
Figure 4: Naturally Occurring Asbestos in the Project Area

- Alternative 3E
- Alternative 5G
- Alternative 5H
- Faults
- Likely Asbestos Areas
- 1/4-Mile Buffer
- Roads
- 17 Segments

N

0 0.5 1 Miles

Source: El Dorado County 2005, ESRI 2009, TYLin 2009.



State Route 49 Realignment - Constraints and Opportunities Analysis
Figure 5: Sensitive Species Occurrences in Project Vicinity

- | | | | | |
|----------------|----------------------------|---------------------|--------------------------|----------------------|
| Alternative 3E | El Dorado County mule ears | Nissenan manzanita | Stebbins' morning-glory | Oval-leaved viburnum |
| Alternative 5G | El Dorado bedstraw | Parry's horkelia | Yuma myotis | Silver-haired bat |
| Alternative 5H | Jepson's onion | Pine Hill ceanothus | Great egret | Tricolored blackbird |
| Segments | Layne's ragwort | Red Hills soaproot | Northwestern pond turtle | |



0 0.5 1 Miles

Source: CNDDB 2009, ESRI 2009, TYLin 2009.

or gabbroic soils. Red Hill soaproot typically occurs at elevations within 750 to 3,100 feet, msl. This species has the potential to occur near the proposed alignments on serpentine soils. The nearest recorded occurrence to the project site is approximately 0.75-mile west of Alignment 3E.

Stebbins' morning glory is a federal- and state-listed Endangered plant species. It is a perennial, non-woody vine that grows from a main taproot and roots at the nodes where touching soil. It is distinctive because its' leaves are divided into 5 to 7 very narrow, linear lobes that radiate outwards from the base. Numerous large, showy white flowers adorn the vine during spring. This species typically occurs at elevations within 550 to 2,100 feet, msl. Stebbins' morning glory has a short flowering period, blooming from May through June. This plant is found in the chaparral in both the northern and southern portions of the gabbro soil formation, but appears to absent from the central area on and around Pine Hill. Two populations are known to exist on serpentine soils near Grass Valley, Nevada County. This species has the potential to occur near the proposed alignments on serpentine soils. The nearest recorded occurrence to the project site is approximately 3.75 miles west of all the proposed alignments.

Brandege's clarkia is a CNPS List 1B species. It is an annual herbaceous species occurring in chaparral and cismontane woodland cover types, often on roadcuts. It blooms from May to July and occurs between 967 and 2,900 feet, msl. There are no occurrences in the Placerville quadrangle; however, there are 10 occurrences in El Dorado County. This species has the potential to occur along roadsides within the proposed alignments. The nearest recorded occurrence to the project site is approximately two miles east of Alignment 5H along the current Highway 49 alignment.

Recommended Rare Plant Surveys

A reconnaissance-level habitat survey was conducted by vehicle for the proposed alignments. An estimate of habitat acreage was calculated. El Dorado County soil survey maps were investigated to evaluate the possible occurrence of special-status plant species along the proposed alignments (Rogers, 1974). No gabbro or Rescue soil series are located on the proposed alignments. Serpentine soil that could support special-status plant species is depicted on Figure 3A-G.

Based on the proximity of rare plant species to the proposed alignments, surveys should be conducted along the selected alignments, and in particularly areas with serpentine soil. Surveys should be conducted within the blooming periods of the species of interest.

Wildlife

Known occurrences of Northern Pacific pond turtle, foothill yellow-legged frog and tri-colored blackbird were found within one mile of proposed alignments. In addition to these two species, California red-legged frog (*Rana aurora draytonii*), California tiger salamander (*Ambystoma tigrinum*), and valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) have the potential to occur along the proposed alignments based on their historical range and/or habitat preferences. All six species are described below.

California red-legged frog (CRLF) is a federally listed Threatened species and a California Species of Special Concern. A final recovery plan was approved in 2002 (USFWS, 2002). CRLF formerly ranged from northern California south along the Pacific Coast, west of the Cascade and Sierra Nevada mountains to northern Baja California at elevations from near sea level to 8,000 feet, msl. Populations remain in the San Francisco Bay Area, along the California coast, and the western edge of the Central Valley. The CRLF occurs in different habitats depending on their life stage and season. All stages are most likely to be encountered in and around breeding sites, which include coast lagoons, marshes, springs, permanent and semi-permanent natural ponds, ponded and backwater portions of streams, as well as artificial impoundments, such as stock ponds, irrigation ponds, and siltation ponds with dense and extensive vegetative cover of emergent and bank vegetation including willow, cattail, and bulrush. The historic range of the CLRf encompassed the foothills of the Sierra Nevada Range including El Dorado County (USFWS, 2002).

The closest occurrence of a CRLF to the project site is one single juvenile frog seen in May of 2005 on the eastern edge of Folsom Lake (Occurrence # 812), approximately eight miles from the project site. However, this occurrence is unverified (Barry, 2008). The closest critical habitat is (ELD-1) located near Spivey Pond approximately eight miles from the easternmost road segment alignment. Spivey Pond is the closest verified CRLF occurrence to the proposed alignments approximately 12 miles east of the proposed alignments. ELD-1 is situated outside the town of Camino, at approximately 3,200 feet, msl. There are many ponds and creeks in the vicinity of the proposed alignments that could provide habitat for the CRLF.

Based on a review of aerial photography and topographic maps of the area surrounding the proposed alignment, there are many small farm ponds and channels in the vicinity of the proposed alignments that could provide habitat for the CRLF. To properly assess the habitat within a one-mile radius of the project site, a CRLF Site Assessment is recommended.

Valley elderberry longhorn beetle (VELB), a moderate-sized, brightly colored, and sexually dichromatic beetle, was listed as a Threatened species by the USFWS on August 10, 1980. The range of the VELB extends throughout California's Central Valley and associated foothills from about 3,000 feet, msl on the east and the watershed of the Central Valley on the west. All or portions of the following 31 counties are included: Alameda, Amador, Butte, Calaveras, Colusa, Contra Costa, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Madera, Mariposa, Merced, Napa, Nevada, Placer, Sacramento, San Benito, San Joaquin, San Luis Obispo, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, and Yuba. Blue elderberry (*Sambucus mexicana*,) the obligate host plant of the VELB, is often found along roads in a disturbed landscape. Therefore, the likelihood of habitat for the VELB along the proposed alignments is high. The closest reported occurrence of the VELB to the project site is a cluster of blue elderberry shrubs containing VELB exit holes on the eastern edge of Folsom Lake (Occurrence # 82), approximately seven miles from the project site. Critical habitat for the VELB occurs along the American River Parkway in Sacramento, approximately 20 miles from the project site.

To properly identify blue elderberry shrubs, the obligate host plant of the VELB, a spring survey, conducted during the blooming season (March through July), is recommended.

Northern Pacific pond turtle (NPPT) is a California Species of Special Concern. The NPPT occurs primarily in foothills west of the Cascade-Sierra crest throughout California. The Northern Pacific subspecies ranges north of the San Francisco Bay area and intergrades with the Southern Pacific subspecies in the southern portion of the Central Valley (Holland, 1985). NPPT are a semi-aquatic species inhabiting streams, marshes, ponds, and irrigation ditches within woodland, grassland, and open forest communities, but require upland sites for nesting and over-wintering. This species inhabits stream as well as pond habitats. Stream habitat must contain large, deep pool areas (six feet) with moderate-to-good plant and debris cover, and rock and cobble substrates for escape retreats (Bury, 1986). Preferred depth in pond habitat is between three and five with mud substrate. Dense inshore vegetation is especially critical for hatchlings where they spend their first few years of life. Turtles from riverine systems over-winter in upland areas, while pond dwellers may remain as permanent residents with only nesting forays performed annually by gravid females (Rathbun et al., 1993). This species could occur within ponds or creeks along the proposed alignments. There is one known occurrence one mile east of Alternative Alignment 5G.

Foothill yellow-legged frog (FYLF) is a California Species of Special Concern. FYLF occurs in the foothills of the Coast, Cascade, and Sierra ranges from sea level to 6,000 feet, msl. It is an inhabitant of streams and rivers in a variety of habits including foothill woodland, chaparral, and forest. It is generally found within a few feet of stream banks where it can bask on warm rocks, but escape quickly into the stream for protection. When frightened, it dives to the stream bottom and hides amid rocks, vegetation, and silt. They are active year round in warm climates, but become inactive or hibernate in colder climates. This species has the potential to occur within streams along the proposed alignments. There is a known population of FYLF on Indian Creek within 0.75 mile from the northern portion of the proposed alignments.

California tiger salamander (CTS) is a Federal Threatened species and California Species of Special Concern. The CTS typically inhabits grassland and oak woodland habitats below 1,500 feet, msl that have scattered ponds, intermittent streams, and/or vernal pools. CTS aestivate in rodent burrows throughout the summer and emerge after the first few sustained rainstorms in November. Adults will migrate up to 3,300 feet from aestivation sites to breeding ponds. The breeding season extends from December through February. Adults remain in breeding ponds for several days before exiting to forage in terrestrial habitat. Portions of the project site are at the upper limits of the species elevational range; however, CTS has the potential to occur within stockponds or vernal pools near the proposed alignments. The nearest known occurrence of this species is approximately 21 miles southwest of the project site.

Tricolored blackbird is a California Species of Special Concern. The tricolored blackbird is a nomadic resident of the Sacramento and San Joaquin valleys and lower foothills of the Sierra Nevada. This species nests near freshwater in dense aggregations of cattails and bulrush, and also in thickets of willow, blackberry, wild rose, and tall herbs (Zeiner et al., 1990a). Estimates for colony size range from 15 to 47,000 birds. Flooded lands, pond margins, grass fields, and agricultural fields constitute typical foraging habitat. This species has the potential to occur within riparian habitat along the proposed alignments. The nearest known occurrence of this species is approximately one mile east of proposed Alternative Alignments 5G and 5H.

Cultural Resources

Analytical Environmental Services conducted a Constraints Analysis under the direction of ESP to compile spatial and descriptive information concerning previously identified historic and prehistoric cultural resources from a variety of sources; developed a set of expectations for the range and character of historic properties within the study area; provided a qualitative evaluation of the sensitivity (in the context of cultural resources) of all alternative segments; and provided recommendations for further study during subsequent phases of the alternatives analysis.

As a discretionary action, the Proposed Project is subject to compliance with the California Environmental Quality Act (CEQA). Depending on the need for federal permitting for the project (i.e., Section 404) or federal funding, the project may also be subject Section 106 of the National Historic Preservation Act (NHPA). There are three steps in both CEQA and Section 106 processes: (1) identification of significant resources; (2) assess effects/impacts; and (3) resolution/mitigation of adverse effects/impacts.

A records search of the study area was conducted by staff of the North Central Information Center (NCIC) of the California Historical Resources Information System, in October 2009. The records search indicates that limited portions of the project area have been previously surveyed for cultural resources. At least 27 past cultural resource surveys have covered a portion of one of the alternatives, bisected one of them, or were completed immediately adjacent to the proposed roadway alignment. The records search found that 40 prehistoric and historic-period cultural resources have been recorded within one-eighth mile of one of the alternative routes. The sites include prehistoric bedrock milling sites, lithic scatters, and habitation locales as well as historic-period mining features, ditches, roads, refuse scatters, standing structures, cemeteries, water towers, roads, and a ranch complex.

As expected, previously recorded prehistoric resources tend to occur in proximity to water sources and in areas of gentle topography. Based on the distribution of other regional archaeological sites, it will be expected that unidentified prehistoric sites might be encountered along alluvial flats, drainages, midslope terraces, and near springs. The spatial distribution of historic features is much less predictable. Mining related features, such as ditches, adits, shafts, tailings, etc., may be found in areas with steep topography where no reliable water source is naturally present. It is likely that additional historic resources such as mining features, ditches, rock walls, roads/trails, home sites, etc. are located within the study area.

Review of the above referenced historic maps and ethnographic sources did not identify any named Nisenan settlements along the three alternative alignments, although several are located nearby. Such village sites include *Pul Pull Mul* along Webber Creek, *In Dak* near Placerville, and *On Cho Ma* near Diamond Springs. The presence of numerous archaeological sites with bedrock mortars, and some with midden, indicate that small, seasonal villages were most likely situated within the study area. In addition to suggesting the location of historic features across the landscape, the historic references consulted help to define a range of expectations. It is anticipated that other features, related to gold mining, homesteading, agriculture, and infrastructure, are present within the study area.

Based on the observations made in the course of the literature review and records search, relevant cultural features which may have archaeological expressions were compiled in tabular form. Because of the sensitive nature of cultural resources, maps indicating recorded sites are not included in this report. Individual artifact and feature classes that have been documented or are likely to be present within the study area are listed in **Table 2**.

Table 2 Artifact and Feature Types Documented or Expected in Study Area		
adit	depression	petroglyph
agricultural landscape	ditch	pipe
artifact	fence line	pond
artifact deposit	flaked stone artifact	privy
bedrock milling station	flume	prospect
barn	foundation	reservoir
berm	gate	road
bridge	groundstone artifact	rock wall / alignment
burial	hearth	shaft
cabin	lithic scatter	shed
canal	machinery	Single family dwelling
cellar	midden	sluice
cemetery	mill	tailings
channel	mining landscape	trail
chimney	monitor	utility
cistern	monument	wall
corral	orchard / vineyard	waste dump
cut	outbuilding	water tank
ditch	penstock	well
dam		
Source: adapted from Selverston, 2008		

A total of 58 classes are listed, yet the list is not exhaustive. Artifacts and features listed in **Table 2** may occur in isolation, or may be a constituent of a larger historic property. Artifacts that occur in isolation are likely to be considered insignificant resources unless they possess certain qualities such as being the oldest, best preserved, or will otherwise contribute substantively to the study of history or prehistory.

The range of artifact and feature types located in the study area correspond to approximately 27 types of historic properties. **Table 3** lists 27 historic property types documented or expected within the study area.

Table 3 Documented and Expected Historic Properties Types		
Artifact deposit (historic)	Homestead	Processing site (prehistoric)
Archaeological deposit (prehistoric)	Lithic scatter	Prospect
Bridge	Lode mine	Ranch
Camp site (prehistoric)	Mill	Ranch element
Cemetery	Mine	Rural road
Corral	Mining landscape	Unknown
Dam / Reservoir	Monument	Utility line
Ditch	Orchard / Vineyard	Village (prehistoric)
Dwelling	Placer mine	Wagon road
Fence line		
Source: AES, 2009		

In order to characterize the likelihood of encountering prehistoric archaeological resources across the study area, AES utilized ArcGIS (GIS) to perform a simple spatial analysis. The analysis considered two variables related to archaeological site locations: slope and distance to water. Generally speaking, a large portion of archaeological sites in the region are located within 100 meters of a water source and on relatively flat ground. The resulting map, which classifies the sensitivity of the study area, is presented in Figure 6.

It is expected that the vast majority of undocumented prehistoric resources, such as bedrock milling stations, midden deposits, villages, etc., are located in areas depicted as *high sensitivity* in Figure 6. It is also likely some archaeological resources, such as flake scatters, isolates, procurement areas, etc., are located outside of areas deemed *high sensitivity*. While the sensitivity map is useful for prehistoric resources, historic resources in the area cannot be modeled in a similar way. For historic resources, examination of maps such as GLO plats and historic documents provide the best means of identifying the location of potential historic resources.

The relatively few cultural resource surveys conducted within the study area produced a relatively large number of resources. The records search results indicate that portions of the potential realignment routes have been previously surveyed (26 percent). A total of 40 cultural resources have been documented immediately adjacent or within one eighth of a mile of one of the alternative routes. Documented resources include prehistoric bedrock milling sites, lithic scatters, and habitation locales as well as historic-period mining features, ditches, roads, refuse scatters, standing structures, cemeteries, water towers, roads, and a ranch complex. Of the 40 cultural resource sites in the study area, approximately six lie within or adjacent to a potential alignment. The segment of Lotus Road, which follows the original Sacramento to Coloma Road, is a state historical landmark. While the significance of a few of the resources within the study area has been evaluated (per the National Register of Historic Places [NRHP] and California Register Historic Resources [CRHR] criteria), most have not. There is a high probability of

encountering additional cultural resource sites that reflect the range of prehistoric and historic land uses documented herein.

The result of the constraints analysis is a characterization of the cultural landscape of the study area and a set of expectations for the eventual inventory of a preferred alternative. The findings presented herein are limited by the fact that this was undertaken without conducting any systematic archaeological survey within the study area. In order to fully characterize the presence of cultural resources that could be impacted by the proposed project, an intensive pedestrian survey of all components of the preferred alternative is recommended. As such, areas to be used for equipment staging or material lay-down should be identified early in the planning process so that they may be included in the cultural inventory. Areas that have been previously surveyed using current professional standards do not merit re-survey.

In the event that prehistoric or historic-period resources are identified within a portion of the project site, complete avoidance may be the preferable strategy. If complete avoidance is not feasible, an evaluation of the resources' significance and integrity will be required. For archaeological resources, evaluation generally entails limited subsurface excavations, analysis of the constituents recovered, and application of the significance criteria. The evaluation of significance will be based on a given site's ability to address one or more of the established research domains in the region, or otherwise demonstrate qualities indicative of a unique archaeological resource. As such, the purpose of the archaeological work at such a site will not be to fully answer specific research questions. Rather, the intent will be to characterize the data potential of the site in question. The field and analytical methods used in the evaluation will be dependent upon the nature of the resource being evaluated.

In contrast, for historic resources to be considered significant under CEQA or Section 106 of the National Historic Preservation Act, they must demonstrate a strong connection to an important person or past event, or otherwise represent an important design or engineering innovation, embody the distinctive characteristics of a type, period, region, or method of construction, represent the work of an important creative individual, or possesses high artistic values. Evaluation of historic resources is generally achieved by conducting archival research and fully documenting the characteristics of the resource.

Once a full accounting of significant cultural resources (relative to the CRHR and/or NRHP) is available, an impact assessment should be undertaken. The proposed project would have an adverse impact if it resulted in a substantial adverse change in the significance of a historical resource as defined in §15064.5; if it caused a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5; or if it would disturb any human remains, including those interred outside of formal cemeteries.

Significant impacts to archaeological resources may be mitigated by implementing a comprehensive data recovery program that seeks to collect a scientifically consequential sample of the portion of deposit to be impacted, if avoidance is not feasible. Such a program would involve a full suite of analytical techniques, as appropriate given the character of the resource under consideration. As a general rule, it is much more difficult to fully mitigate the impacts of disturbing human burials. Archaeological recovery of the remains and respectful re-interment

under the guidance of Native American monitors will alleviate the intensity of the impact, but will likely not fully mitigate the impact. In such cases, a statement of overriding considerations will likely be necessary.

Impacts to historic resources to historic sites may be mitigated in a number of ways, including exhaustive documentation, re-location, etc. Yet, depending on the nature of the resource and type of impact, such measures may not fully mitigate the impact. In such cases, a statement of overriding considerations will likely be necessary.

As noted above, should the project require federal permitting, Section 106 of the National Historic Preservation Act will apply. In such a case additional consultation with the lead federal agency and the California State Historic Preservation Officer will be required. Any resource that may be impacted should be evaluated relative to the criteria for listing on the National Register of Historic Places. The lead federal agency will be responsible for recommending whether specific resources are significant, and will play a leading role, in cooperation with the local lead agency for CEQA, in a finding of effect on the resources and the appropriate means of resolving adverse effects.

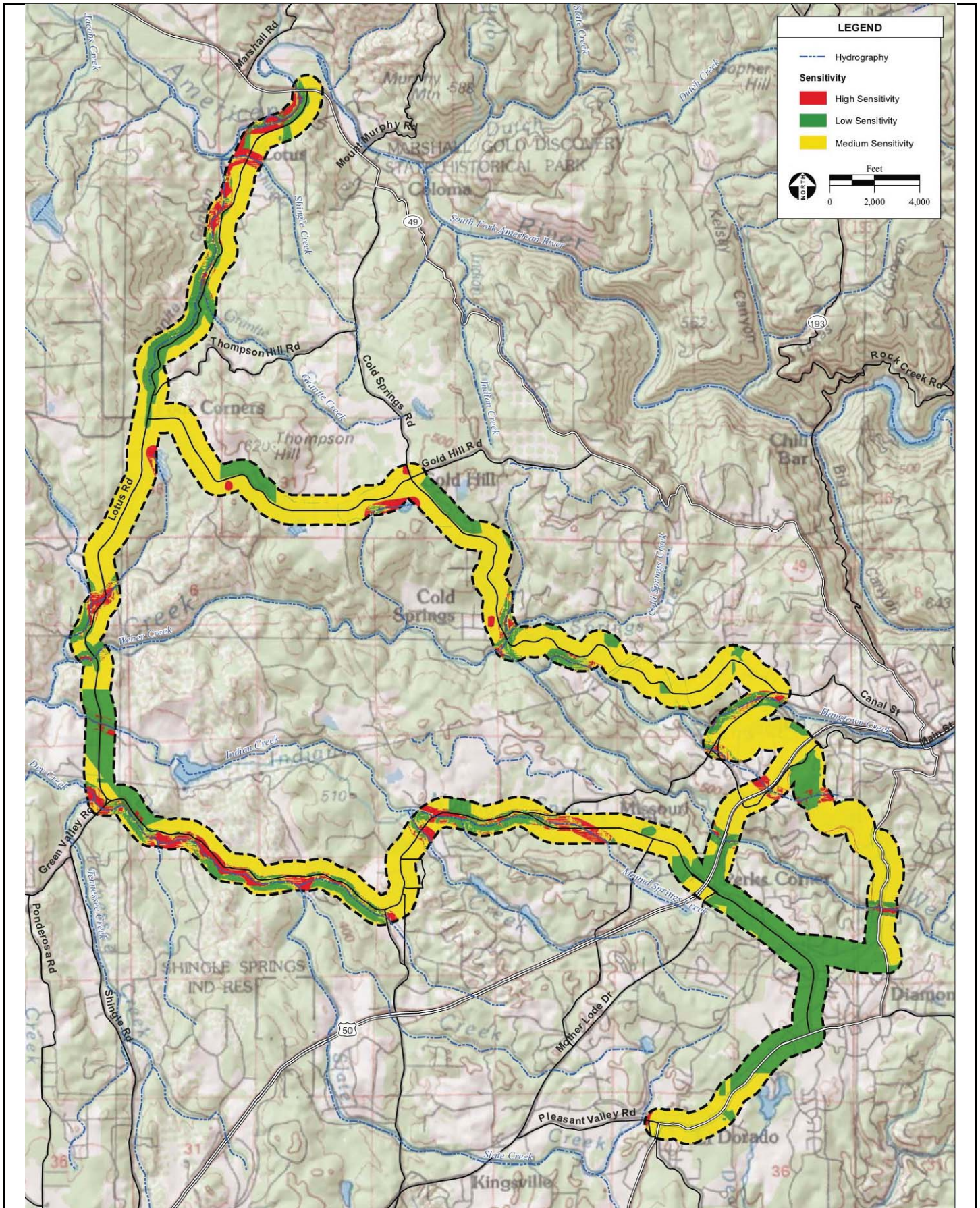
Finally, continued consultation with local Native American groups with knowledge of cultural resources in the project area (including but not limited to the Shingle Springs Band of Miwok Indians, the El Dorado Miwok Tribe, the El Dorado County Indian Council, and the Nashville-El Dorado Miwok) and the El Dorado Historical Society is recommended in order to identify potential undocumented resources.

Geology and Soils

Naturally Occurring Asbestos

ESP conducted an evaluation of the potential for naturally occurring asbestos (NOA) occurring within the project area. Asbestos is the common term for a group of naturally occurring silicate minerals that may be found in serpentine rock, the California State rock, other ultramafic rock, and volcanic rock. When rock or soil containing NOA is broken or crushed, asbestos may become airborne, potentially causing a health hazard. The El Dorado County Air Quality Management District (EDCAQMD) has adopted an El Dorado County Naturally Occurring Asbestos Review Area Map which identifies those areas more likely to contain NOA. Ground disturbance activities within areas identified as likely to contain NOA are subject to additional County regulatory requirements to minimize human exposure potential. Based on the El Dorado County Naturally Occurring Asbestos Review Area Map (July 22, 2005), all three proposed Alternative Alignments have road segments that are located within areas "More Likely to Contain Asbestos". As shown on Figure 4, Road Segments 1, 2, 13 and 27 are located within areas "More Likely to Contain Asbestos" and within "Quarter Mile Buffer for More Likely to Contain Asbestos or Fault Line". Although it is unknown whether NOA occurs in these areas, there is the potential for NOA occurrence and disturbance. Based on this review, development of the three Alternative Alignments have the potential to disturb NOA.

In order to minimize potential exposure of workers and the public to NOA, construction activities will require compliance with EDCAQMD Rules 223, 223-1, and 223-2 to minimize



State Route 49 Realignment - Constraints and Opportunities Analysis
Figure 6: Prehistoric Resource Sensitivity in Project Area

Source: AES, 2009.

fugitive dust emissions and the potential for risk of disturbance to NOA. It is recommended that a California-registered professional (Professional Engineer or Professional Geologist) with expertise in NOA is onsite during excavation and/or grading activities that come in contact with rock outcrops to identify geologic units that could potentially contain NOA.

There are also restrictions on the sale and use of serpentine material or rock containing asbestos materials for surfacing in El Dorado County. For specifics see County Ordinance No. 4548 “Naturally Occurring Asbestos and Dust Protection Ordinance” at http://co.eldorado.ca.us/emd/reports/asbestos_ordinance.html.

Seismic Activity

Fault systems mapped in western El Dorado County include the West Bear Mountains Fault; the East Bear Mountains Fault; the Maidu Fault Zone; the El Dorado Fault; the Melones Fault Zone of the Clark, Gillis Hill Fault; and the Calaveras–Shoo Fly Thrust. The fault system on the western slope of El Dorado County in the vicinity of the project area is shown on Figure 4. No active faults have been identified in El Dorado County. One fault, part of the Rescue Lineament–Bear Mountains fault zone, is classified as a well-located late-Quaternary fault; therefore, it represents the only potentially active fault in the County. It is part of the Foothill Fault Suture Zone system, which was considered inactive until a Richter scale magnitude 5.7 earthquake occurred near Oroville on August 1, 1975. This fault is located near road Segment 2 (Lotus Road), which is part of Alternative Alignment 3E. All other faults located in El Dorado County are classified as pre-Quaternary (inactive) (El Dorado County General Plan Draft EIR, 2003). All construction activities would comply with the Uniform Building Code, and would therefore, the project would be required to construct facilities that are designed and constructed to California regulations and specifications.

Erosion

All construction will be consistent with the requirements of the County’s Grading Ordinance and Storm Water Management Plan for Western El Dorado County. A construction-related Storm Water Pollution Prevention Plan (SWPPP) will be prepared for the proposed project, and will be consistent with Section 402 of the Clean Water Act and construction activities will include implementation of stormwater runoff Best Management Practices (BMPs) identified with the SWPPP. Application of these requirements and measures will prevent substantial erosion or topsoil loss. Following construction, all disturbed areas not paved will be revegetated consistent with measures to be identified within the SWPPP to ensure the long-term minimization of erosion and topsoil loss potential.

Unstable Soils

According to the United States Department of Agriculture, Soil Conservation Service’s Soil Survey of El Dorado Area, California, dated April 1974, there are five soil associations in the western part of El Dorado County. The soils in these associations formed in material from weathered slates, schist’s, metabasic igneous rocks, acid igneous rocks, basic igneous rocks, and serpentine rocks. The five soil associations are:

- Auburn-Argonaut association – Well-drained silt loams and gravelly loams formed in material weathered from basic rocks and metasedimentary rocks. This soil association has a low shrink-swell potential;
- Boomer-Auburn association – Well-drained silt loams and gravelly loams formed in material weathered from basic igneous rocks or metasedimentary rocks. This soil association has a low to moderate shrink-swell potential;
- Rescue association – Well-drained sandy loams formed in material weathered from basic rocks. This soil association has a low to moderate shrink-swell potential;
- Serpentine rock land – Delpiedra association – Excessively drained to somewhat excessively drained rock land and loams formed in material weathered from ultrabasic rocks. This soil association has a variable shrink-swell potential; and
- Auberry-Ahwahnee-Sierra association – Well-drained coarse sandy loams and sandy loams formed in material weathered from granitic rocks. This soil association has a low to moderate shrink-swell potential.

If roadway modifications are proposed in areas where soils are likely to have moderate shrink-swell potential, the geotechnical characteristics of the soil should be described through field and laboratory tests prior to roadway design.

Hazards and Hazardous Materials

Padre Associates, Inc. (Padre) prepared an Environmental Screening Survey to identify properties along the proposed Alternative Alignments that may potentially pose environmental concern based on past and current use of the property that may have involved, or resulted in the use, storage, disposal, treatment and/or release of hazardous substances to the environment. Additionally, the potential presence of natural environmental hazards such as potential flooding; naturally occurring asbestos (NOA); and earthquake fault zones were also identified based on a review of readily available geologic and hydrogeologic literature.

Padre conducted the site reconnaissance activities and then searched government databases for addresses for which Padre flagged as properties of potential environmental concern along the project alignment. The results of the site reconnaissance and the database search is summarized in **Table 4**.

Table 4 Database Review of Properties of Potential Environmental Concern Adjacent to the Project Alignment					
Segment	Alternative Alignment	Facility Name and Address	Facility Address	Case Type	Site Status
30	3E	El Dorado County Bus Yard	2441 Headington Road, Placerville	LUST Site	Case-closed, March 19, 1996
18	3E, 5G, and	Sierra Door &	4415 Missouri Flat	LUST Site; gasoline;	Open – site assessment

Table 4 Database Review of Properties of Potential Environmental Concern Adjacent to the Project Alignment					
	5H	Supply	Road, Placerville	aquifer used for drinking water	complete; eligible for closure per EMD (9-30-09)
18	3E, 5G, and 5H	Former Pacific Bell	281 Industrial Boulevard, Placerville	LUST Site; gasoline; aquifer used for drinking water	Open – verification monitoring (semi-annual).
18	3E, 5G, and 5H	Former Celebrity Plating	4502 Missouri Flat Road, Placerville	DTSC – Hazardous Waste Management Program	Active – soil and groundwater affected by metal plating (chrome)
18	3E, 5G, and 5H	Former Teters Auto Wreckers	4487 Missouri Flat Road, Placerville	Rural County Survey Program	Site Screening for potential contamination from lead, PCBs, waste oil and mixed oil
17	3E, 5G, and 5H	Steve's Cheaper (Tower No. 182)	130 Pleasant Valley Road, Diamond Springs	LUST Site; gasoline; aquifer used for drinking water	Open – remediation: groundwater extraction and soil vapor extraction
17	3E, 5G, and 5H	Poor Red's	6221 Pleasant Valley Road, El Dorado	LUST Site	Case-closed; September 11, 1996
23	5G and 5H	Cold Springs Store	1628 Cold Springs Road, Placerville	LUST Site; gasoline; aquifer used for drinking water	Open – remediation; vapor intrusion and water wells impacted
33	5G and 5H	Shell Service Station	150 Placerville Drive (at Armory Drive), Placerville	LUST Site; gasoline; aquifer used for drinking water	Open – verification monitoring
37	5G	Western El Dorado Recovery Systems MRF	4100 Throwita Way, Placerville	(continued) Solid Waste Facility – Transfer/Processing Facility	CIWMB Permit No. 09-AA-004. No violations reported
37	5G	WEDRS – Green Waste Recycling Center	4100 Throwita Way, Placerville	Solid Waste Facility – Composting	CIWMB Permit No. 09-AA-006. No violations reported
37	5G	WEDRS – CDI Recovery Operation (MVCDI)	4100 Throwita Way, Placerville	Solid Waste Facility – Transfer/Processing Facility	CIWMB Permit No. 09-AA-007. No violations reported
Notes: CDI = Construction Debris and inert material CIWMB = California Integrated Waste Management Board DTSC = Department of Toxic Substances Control LUST = Leaking Underground Storage Tank MRF = Material Recovery Facility Source: Padre Associates, 2009b					

Historically, the maintenance of railroad easements typically included the application of arsenic and/or petroleum products for weed control. The former Southern Pacific Railroad (SPRR) easement, which is now part of the El Dorado Trail, crosses Missouri Flat Road approximately 0.87 miles southeast of U.S. Highway 50 (Alternative Alignment 3E, Segment 39). Previous grading and construction activities at this location appear to have removed any potential environmental concerns associated with past activities within the former SPRR easement. The

northern portion of Segment 20 runs adjacent to the former SPRR easement. If planned grading and/or excavation activities encroach within the former SPRR easement, then soil testing for these contaminants prior construction activities may be warranted.

Several active LUST sites have been identified along the proposed alignments. Road improvement activities at these locations are not anticipated to come in contact with contaminated soil and/or groundwater. However, depending on road improvement activities at these locations, existing groundwater monitoring wells located in the subject roads and/or adjacent to the subject roads may be required to be abandoned prior to implementation of road improvement activities, and then replaced upon completion of those activities.

Hydrology and Water Quality

Drainage Patterns

The proposed project is located primarily within the South Fork American River watershed. The South Fork American River watershed encompasses the central region of El Dorado County, extending from the headwaters at Echo Summit, west to the terminus at Folsom Reservoir. The major tributaries contributing flow directly into the South Fork American River are Silver Fork 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.

The southern portion of the project area (along Pleasant Valley Road) is located within the Cosumnes River Watershed.

Potential flooding may occur where the alternative alignments cross over and/or run adjacent to rivers, streams and creeks. Based on the site reconnaissance completed by Padre and a review of USGS topographic maps, Alternative Alignment 3E runs adjacent to and/or crosses the American River, Granite Canyon Creek, Granite Creek, Weber Creek and Indian Creek, Dry Creek and Mound Springs Creek. Alternative Alignments 5G and 5H also run adjacent to and/or cross the American River, Granite Canyon Creek, and Granite Creek. Starting at Four Corners, Alternative Alignments 5G and 5H run adjacent to and/or cross Cold Springs Creek, Hangtown Creek, and Weber Creek.

According to the Federal Emergency Management Agency (FEMA) Maps, (Community Panel Numbers: 06017C0475E, 06017C0750E, and 06017C0800E Effective Date September 26, 2008), a majority of the project area is located in an area determined to be outside of the 0.2 percent annual chance floodplain (Zone X). However, road Segment 13 (Green Valley Road) parallels Dry Creek and is located in Zone A, which is a special flood hazard area subject to inundation by the one percent annual chance flood. Segment 1 (Lotus Road) is in the vicinity of areas designated as Zone A; however, the roadway does not appear to be located immediately adjacent to Zone A. Segment 2 (Lotus Road) crosses Weber Creek, and at the creek crossing, the area is designated Zone A. Drainage studies of the selected alignment will be required to ensure that drainage conditions are at a level consistent with pre-project conditions (Attachment A).

Water Quality

Construction activities will be subject to the National Pollutant Discharge Elimination System (NPDES) permit, which requires the use of Best Management Practices (BMPs), as outlined in the *Storm Water Management Plan for Western El Dorado County (SWMP)*, to minimize water quality impacts from construction projects. Coverage for the project under the Statewide General Permit for Discharges of Storm Water Associated with Construction Activity, Order No. 99-08 DWQ will be required prior to the beginning of construction. In accordance with the provisions of the General Permit and the SWMP, preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) will be required to reduce or minimize discharge of pollutants from construction activities.

Implementation of BMPs and the NPDES permit will minimize water quality impacts resulting from construction activities.

Land Use and Planning

The primary applicable land use plans within the project area are the 2004 El Dorado County General Plan, the 1989 City of Placerville General Plan, and the 1978 Marshall Gold Discovery State Historic Park General Plan. The El Dorado County General Plan policies are applicable to the Proposed project area.

All of the proposed roadway segments (with the exception of proposed overland Segments 20 [Ray Lawyer Drive Extension] and 37 [Diamond Springs Parkway Extension]) are existing roadways. As discussed, the proposed realignment project will require acquisition of up to 46 feet of right-of-way in order to accommodate modifications to existing road segments; however, widening of the existing roadways will likely not result in inconsistencies with the County General Plan, the City General Plan, or the Marshall Gold Discovery State Historic Park General Plan. A detailed review of the existing land use and zoning designations adjacent to the affected roadways will be required during the CEQA review of the SR 49 Realignment Project.

Segments 20 and 37 are proposed new roadway extensions. Segment 20 is the Ray Lawyer Drive Extension south of U.S. 50. The proposed roadway will connect with Forni Road and will be located east of and parallel to the Sacramento-Placerville Transportation Corridor (SPTC) west of the El Dorado County Jail. The proposed roadway will then connect with existing SR 49 near the SR 49/Longhrut Road intersection. The Ray Lawyer Drive Extension has been conceptually approved by the City of Placerville and El Dorado County; however, a CEQA review for the proposed extension will be required. It is anticipated that the CEQA review for the Ray Lawyer Drive Extension Project will evaluate the project's consistency with applicable planning documents.

Segment 37 is the Diamond Springs Parkway Project. The El Dorado County Department of Transportation (DOT) is in the process of preparing an Environmental Impact Report (EIR) for the Diamond Springs Parkway Project. The preliminary roadway design depicts a new Parkway from Missouri Flat Road near its intersection with the SPTC, north of China Garden Road eastward to SR 49. The Project is identified in the County General Plan (2004) Circulation Map as a planned four-lane divided road and is part of DOT's 5-year Capital Improvement Plan (CIP).

Because the El Dorado County DOT is in the process of conducting the CEQA review for the Diamond Springs Parkway Project, it is anticipated that the evaluation of the project's consistency with the applicable planning documents will be conducted for the project EIR.

The 2005 El Dorado County Bicycle Transportation Plan identifies bicycle improvements along a number of the roadway segments proposed for realignment. Class II bicycle lanes are proposed along Lotus Road (Segments 1 and 2), Green Valley Road (Segments 13 and 28), and Pleasant Valley Road (Segment 17). Class III bicycle routes are proposed along Gold Hill Road (Segment 27). It is anticipated that realignment of SR 49 along any of the proposed alignments will result in the development of Class I bicycle paths, Class II bicycle lanes, and Class III bicycle routes consistent with the 2005 Bicycle Transportation Plan.

A detailed review of the project's consistency with the goals, objectives, and policies of the El Dorado County General Plan, the City of Placerville General Plan, and the Marshall Gold Discovery State Historic Park General Plan will be required during the CEQA review of the project.

Noise

Noise is often described as unwanted sound. Sound is defined as any pressure variation in air that the human ear can detect. If the pressure variations occur frequently enough (at least 20 times per second), they can be heard and are called sound. The decibel scale uses the hearing threshold (20 micropascals), as a point of reference, defined as 0 dB. Other sound pressures are then compared to the reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB, and changes in sound levels correspond closely to human perception of relative loudness.

Noise can be generated from mobile sources, such as automobiles, trucks, and airplanes, and stationary sources, such as construction sites, industrial sites, and machinery/equipment. For the purposes of noise analyses, noise levels are measured based on their effect to noise-sensitive receptors, such as residences, schools, places of worship, and recreational areas, all of which are located within or adjacent to the project alignments. Because the proposed design for the SR 49 Realignment Project is not known at this time, it cannot be determined whether the project will result in exceedances of established noise levels as defined by the applicable General Plan Noise Elements (e.g., El Dorado County General Plan Health, Safety and Noise Element and the City of Placerville Health and Safety Element). In order to determine the project's effect on the noise environment (both construction-related and operational), a project-specific acoustic evaluation will be required during the CEQA review of the SR 49 Realignment Project.

Population and Housing

The roadways considered for realignment in this Environmental Constraints and Opportunities Analysis are immediately adjacent to residential land uses (with the exception of Segments 18, 33, and 37). In some cases, existing residences are situated near the existing roadway. Because the proposed design for the SR 49 Realignment Project is not known at this time, it cannot be determined whether the project will require removal of residential structures and displacement of residents. It is anticipated, because of the narrow roadway corridors and close proximity of

existing residences to the roadways that residences may require demolition, therefore displacing residents. A project-specific evaluation of the project's impact on housing and potential displacement of residents will be required during the CEQA review of the SR 49 Realignment Project.

Public Services

The El Dorado County Sheriff's Office provides service to the unincorporated areas of the County, while the City of Placerville Police Department provides service to the City of Placerville.

The project area is serviced by three fire protection districts: El Dorado County Fire Protection District (FPD), the Rescue FPD, and the Diamond Springs-El Dorado FPD. Fire stations 27 (6051 Gold Hill Road, Placerville), 73 (4302 Highway 49, Pilot Hill) and 74 (5122 Firehouse Road, Lotus) are located within the project area.

Nine schools have been identified adjacent to the three Alternative Alignments: Sutter's Mill Elementary School (adjacent to Segment 1); El Dorado Adult School, Charles F. Brown Elementary School, and Union Mine High School (adjacent to Segment 17); Placerville Christian School (adjacent to Segment 18); El Dorado Parent Participation Preschool (adjacent to Segment 21); Indian Creek School and the El Dorado County Office of Education: Charter Community School (adjacent to Segment 28); and Herbert Green School (adjacent to Segment 39).

Two education facility offices are located adjacent to the three Alternative Alignments: El Dorado Union High School District (adjacent to Segment 18) and the El Dorado County Office of Education (adjacent to Segment 28).

One park facility is located along Segment 1: Henningsen Lotus Park (950 Lotus Road). The park offers a variety of active and passive recreation opportunities. Located on the South Fork American River, the park provides a boat launch and beach area. The park provides two soccer fields and a lighted softball/little league complex that provides year round youth sports.

The Marshall Gold Discovery State Historic Park is located immediately adjacent to the northern portion of Segment 1 and along existing SR 49.

Development of the SR 49 Realignment Project will not result in the need for new police, fire, school or park facilities; however, roadway widening or realignment may require right-of-way acquisition of police, fire, school or park facilities adjacent to existing roadways. Additionally, development of the SR 49 Realignment Project may result in delayed emergency response times. It is anticipated that the construction contractor will be required to coordinate with the appropriate public services agencies to ensure delayed emergency response times will be minimized. Because the proposed design for the SR 49 Realignment Project is not known at this time, it cannot be determined whether the project will impact police, fire, school or park facilities or response times. A project-specific evaluation of the project's impact on public service facilities and response times will be required during the CEQA review of the SR 49 Realignment Project.

Recreation

As discussed in the Land Use and Planning section of this Constraints and Opportunities Analysis, the 2005 El Dorado County Bicycle Transportation Plan identifies bicycle improvements along a number of the roadway segments proposed for realignment. As illustrated on Figure 7, Class II bicycle lanes are proposed along Lotus Road (Segments 1 and 2), Green Valley Road (Segments 13 and 28), and Pleasant Valley Road (Segment 17). Class III bicycle routes are proposed along Gold Hill Road (Segment 27). It is anticipated that realignment of SR 49 along any of the proposed alignments will result in the development of Class I bicycle paths, Class II bicycle lanes, and Class III bicycle routes consistent with the 2005 Bicycle Transportation Plan. Development of proposed bicycle facilities consistent with the 2005 Bicycle Transportation Plan will be considered a beneficial impact of the SR 49 Realignment Project.

As discussed above, one park facility is located along Segment 1: Henningsen Lotus Park (950 Lotus Road; see Figure 7). The park offers a variety of active and passive recreation opportunities. Located on the South Fork American River, the park provides a boat launch and beach area. The park provides two soccer fields and a lighted softball/little league complex that provides year round youth sports.

The Marshall Gold Discovery State Historic Park is located immediately adjacent to the northern portion of Segment 1 and along existing SR 49 and provides educational and recreational facilities that serve visitors. SR 49 also crosses the South Fork American River, a popular whitewater recreation area that is heavily used by private boaters and commercial outfitters. This highway segment serves as a vehicle transportation link that is used to shuttle boaters and the equipment between the upper and lower river runs. Whitewater boating and rafting occurs throughout the year, with summertime being the most popular season. It is anticipated that construction activities associated with the selected alignment would have the potential to delay access to river put-ins and take-outs. Accordingly, plans developed for modification of this area of SR 49 would require close coordination between the Lead Agency, private boaters, commercial outfitters and adjacent residents to ensure adequate access to river access points and shuttle routes.

It is not anticipated that the development of the SR 49 Realignment Project will result in the need for new park facilities; however, it is possible that development of the SR 49 Realignment Project will result in the need of right-of-way acquisition of park property. Because the proposed design for the SR 49 Realignment Project is not known at this time, it cannot be determined whether the project will impact recreation facilities. A project-specific evaluation of the project's impact on recreation facilities and response times will be required during the CEQA review of the SR 49 Realignment Project.

Transportation/Traffic

El Dorado Transit provides transit service throughout the County, connecting the communities of Pollock Pines, Camino, Placerville, El Dorado, Diamond Springs, Cameron Park, Shingle Springs and Grizzly Flat. Approximately 10 transit timepoints are located adjacent to the three Alternative Alignments: Diamond Springs Timepoint 1 (Segment 39; Missouri Flat Transfer

Center); Diamond Springs Timepoint 3 (Segment 18; Diamond Springs Mobile Home Park); Diamond Springs Timepoint 8 (Segment 17; El Dorado Transit Offices); Diamond Springs Timepoint 9 (Segment 17; Lake Oaks Drive and Patterson Drive); Diamond Springs Timepoint 10 (Segment 17; Union Mine High School Circle); Diamond Springs Timepoint 11 (Segment 17; Pleasant Valley Road and Oro Lane); Placerville – Eastbound Timepoint 9 (Segment 33; Big 5, Placerville Drive); Placerville – Eastbound Timepoint 10 (Segment 33; M.O.R.E. Workshop); Placerville – Eastbound Timepoint 13 (Segment 32; Hidden Springs Circle); and Placerville – Eastbound Timepoint 14 (Segment 32; Cold Springs Dental) (Attachment B). Because a number of transit stations are located adjacent to the three Alternative Alignments, it is anticipated that transit service could be disrupted during construction activities. Because the proposed design for the SR 49 Realignment Project is not known at this time, it cannot be determined whether the project will impact transit operations. It is anticipated that the Lead Agency will coordinate with El Dorado Transit prior to construction to minimize delays in transit operations; however, a project-specific evaluation of the project's impact on transit facilities and operations will be required during the CEQA review of the SR 49 Realignment Project.

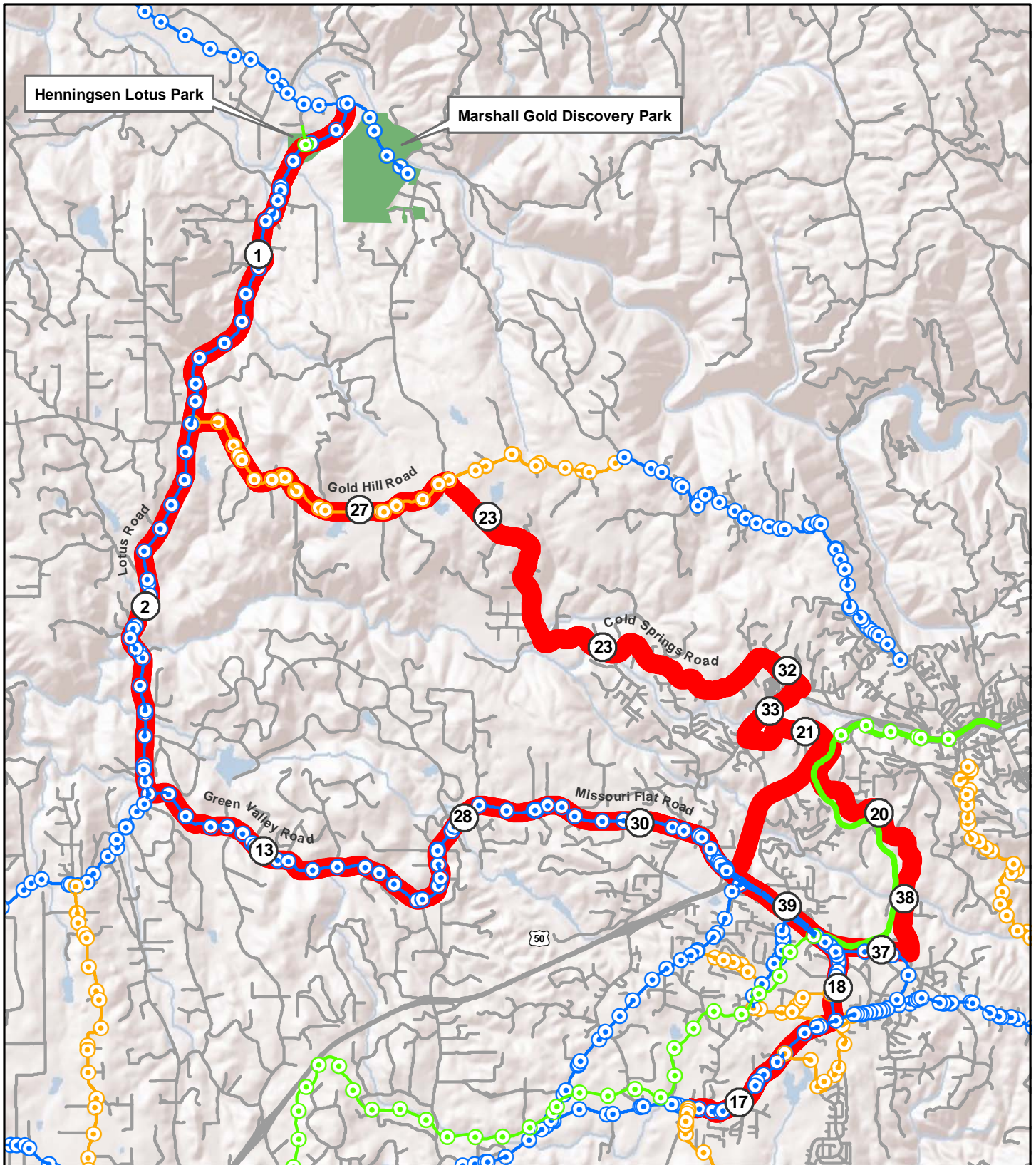
Because the proposed design for the SR 49 Realignment Project is not known at this time, it cannot be determined whether the project will result in worsened levels of service along the project area roadways. Once the proposed design has been developed, a project-specific traffic study should be prepared, which will be incorporated into the CEQA document for the SR 49 Realignment Project.

Utilities and Service Systems

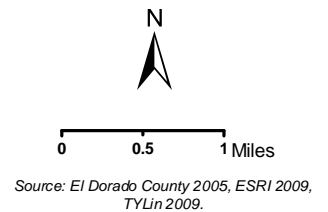
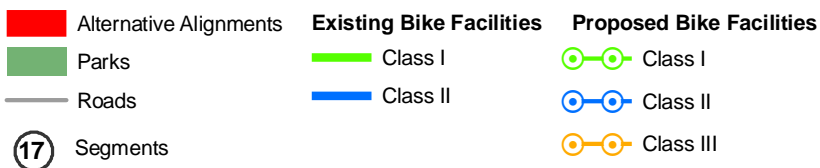
Electricity and natural gas within the project area is supplied by Pacific Gas & Electric (PG&E). Water service within the project area is provided by the El Dorado Irrigation District. Telephone service within the County is provided by AT&T.

Because the proposed design for the SR 49 Realignment Project is not known at this time, it cannot be determined whether the project will require utility relocation; however, it is anticipated that realignment of existing roadways will require some overhead and underground utility relocation. In the event that utility relocation is required, it is anticipated that the Lead Agency will coordinate with local utility providers early in the planning process to ensure that existing infrastructure in the project area is not damaged during construction activities and that planned improvements to the underground utilities in the project area are coordinated with the roadway improvements. It is also anticipated that the Lead Agency will coordinate utility relocations with construction contractors and the various utility companies to ensure that the relocations are consistent with the project schedule and project design and that the potential for interruption to service is minimized.

It is anticipated that any solid waste generated by the project will be limited to construction debris, including asphalt generated by the excavation of existing roadway and construction of the proposed improvements. Solid waste disposal will occur in accordance with federal, state and local regulations and will occur at permitted landfills.



State Route 49 Realignment - Constraints and Opportunities Analysis
Figure 7: Parks & Recreation Facilities in the Project Area



Conclusions

Based on a review of the available data, site visits, and consultation with interested parties, the three alternative alignments evaluated in this technical memorandum will likely result in similar level of impact if selected as the Proposed Project for the SR 49 Realignment Project. Because the three alternatives have several roadway segments in common and because most of the roadway segments will require modification/improvement to existing local roads, the resultant impacts will be similar. No environmental constraints were identified that will impede development of any of the three alternative alignments; however, wetland, endangered species and cultural resources permits will likely be required for project development, as well as the development of detailed CEQA and National Environmental Policy (NEPA) analyses in subsequent project development phases.

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Attachment A

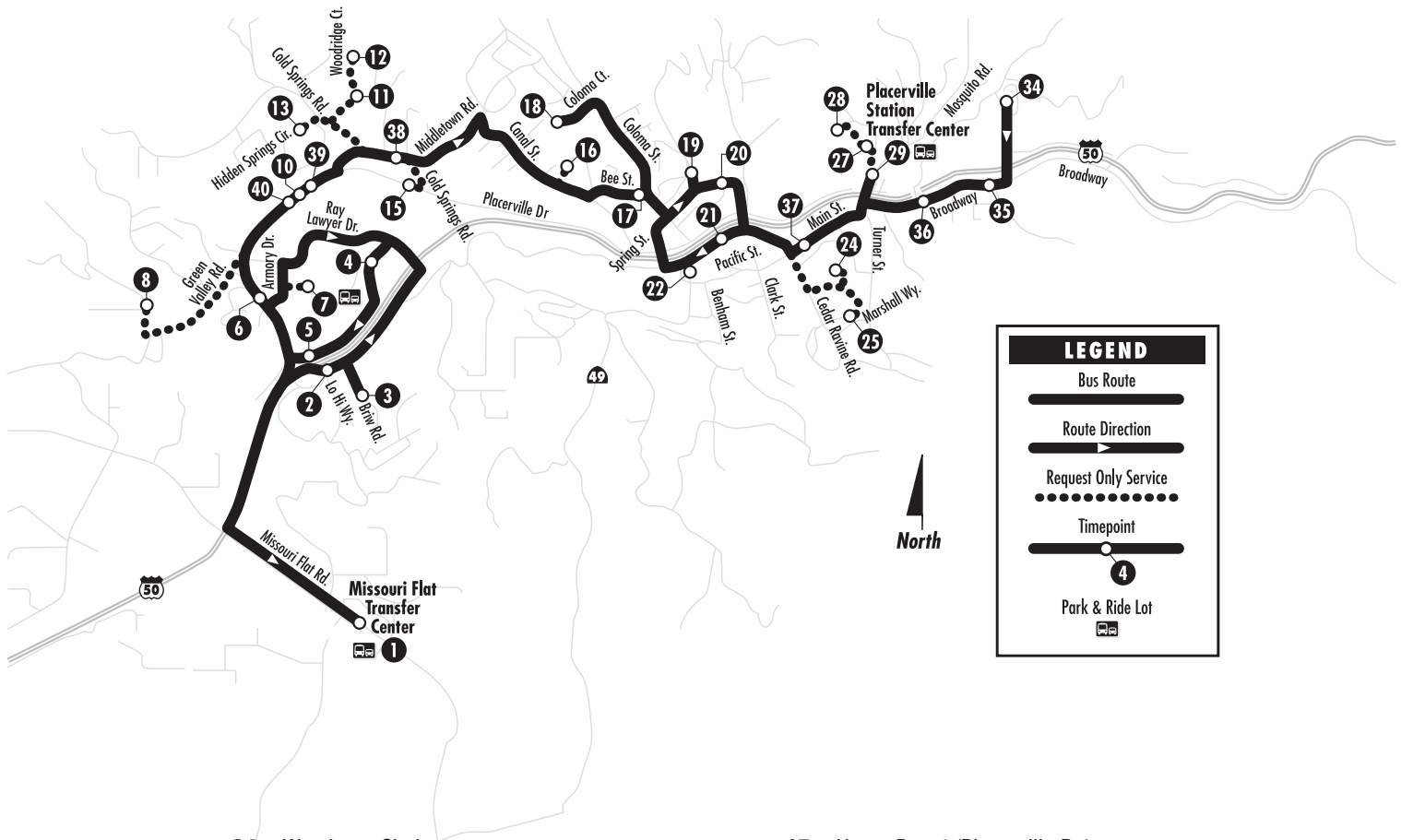
El Dorado Transit Routes Within the Project Vicinity

PLACERVILLE – WESTBOUND

FROM: Woodman Circle TO: Missouri Flat Transfer Center



Monday through Saturday



LEGEND

- Bus Route
- Route Direction
- Request Only Service
- Timepoint
- Park & Ride Lot

- | | |
|--|--|
| <ul style="list-style-type: none"> 34 Woodman Circle 35 Broadway and Schnell School Rd. 36 Broadway and Carson Rd. 29 Placerville Station Transfer Center 27 Clay St. and New Jersey Way 28 Cottonwood Senior Apartments 37 Midtown Mall 25 Marshall Hospital 24 Fowler Way 21 Old Placerville City Hall 22 Placerville Post Office 19 Tunnel St. Apartments 20 Placerville Senior Center 18 Coloma Court 17 Bee St. and Coloma St. 16 El Dorado High School | <ul style="list-style-type: none"> 15 Home Depot (Placerville Dr.) 38 DMV (Placerville Office) 11 Woodridge Court 12 Ridgecrest Apartments 13 Hidden Springs Circle 39 Placerville Snowline Hospice 10 M.O.R.E. Workshop 40 Regal Theaters 8 Phoenix Center (Mallard Lane) 7 El Dorado County Fairgrounds Park & Ride 6 Raley's (Placerville Dr.) 2 Forni Rd. and Lo-Hi Way 3 Human Services (Briw Rd.) 4 Placerville Library 5 Big Lots (Fair Lane) 1 Missouri Flat Transfer Center |
|--|--|

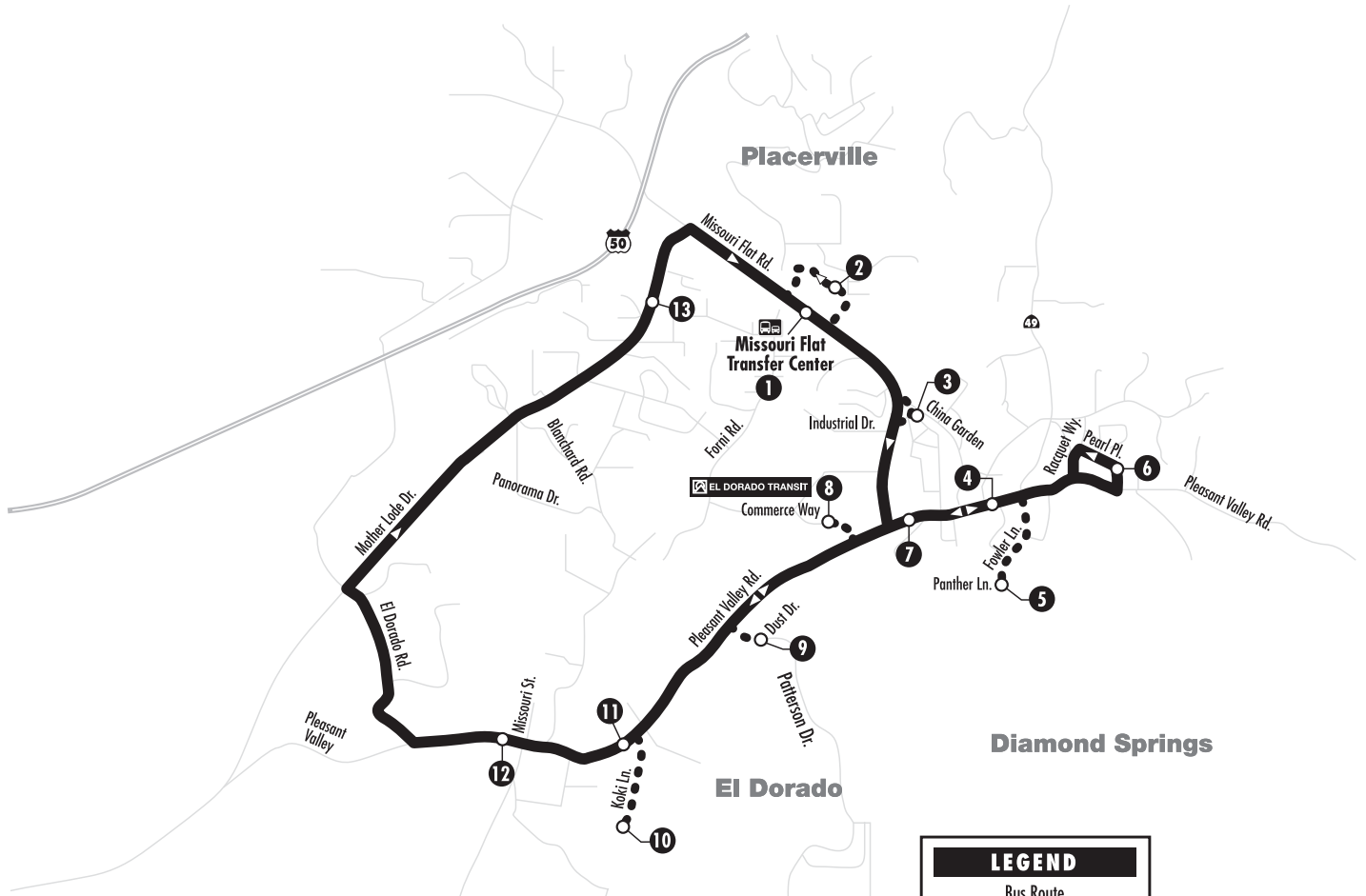
EFFECTIVE 4/6/09

DIAMOND SPRINGS

FROM: Missouri Flat Transfer Center TO: Missouri Flat Transfer Center



Monday through Saturday



- 1 Missouri Flat Transfer Center
- 2 Golden Center Court (Building #1)
- 3 Diamond Springs Mobile Home Park
- 4 Pleasant Valley Rd. and Diamond Meadows Way
- 5 Panther Lane
- 6 Pearl Place and Courtyard Dr.
- 7 Independence High School
- 8 El Dorado Transit Offices
- 9 Lake Oaks Drive and Patterson Dr.
- 10 Union Mine High School Circle
- 11 Pleasant Valley Road and Oro Lane
- 12 Pleasant Valley Road and Church St.
- 13 Eskaton Lincoln Manor

LEGEND

- Bus Route
- Route Direction
- Request Only Service
- Timepoint
- Park & Ride Lot



EFFECTIVE 4/6/09

Attachment B

Federal Emergency Management Agency (FEMA) Maps Comprising the Project Area

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The community map preparator should be consulted for possible omissions or additions to flood hazard information.

To obtain more detailed information in areas where Base Flood Elevations (BFEs) and/or Floodways have been determined, users are encouraged to consult the Floodway and Floodway Data and/or Summary of Shingle Springs Floodway Areas contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIS report for purposes of construction and floodplain management.

Coastal Area Flood Elevations shown on this map apply only to landward of 0.2 North American Vertical Datum of 1988 (NAVD 88). Users of the FIRM should be aware that coastal flood elevations are also provided in the Summary of Shingle Springs Floodway Areas in the Flood Insurance Study Report for this jurisdiction. Elevations shown in the Summary of Shingle Springs Floodway Areas should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the Floodways were computed at cross sections and interpolated between cross sections. The Floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by flood control structures. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures in this jurisdiction.

The projection used in the preparation of this map was California State Plane, Zone 8. The horizontal datum was NAD83, GRS80 spheroid. Differences in datum, projection or State Plane zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in the features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at <http://www.ngs.noaa.gov> or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, NGS0212
National Geodetic Survey, SSCM-C-4, #6202
1315 East-West Highway
Silver Spring, Maryland 20910-3282
(301) 753-3642

To obtain current elevation, description, and/or location information for bench marks shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242, or visit their website at <http://www.ngs.noaa.gov>.

Base map information shown on this FIRM was derived from multiple sources. The information was compiled from the U.S. Geological Survey, 1983 and 1989; El Dorado County Survey Office, 2000; National Geodetic Survey, 2000; California Department of Forestry, 2004, and U.S. Bureau of Reclamation, 2003. Additional information was photogrammetrically compiled at a scale of 1:12,000 from U.S. Geological Survey aerial photography dated 1997 to 2001.

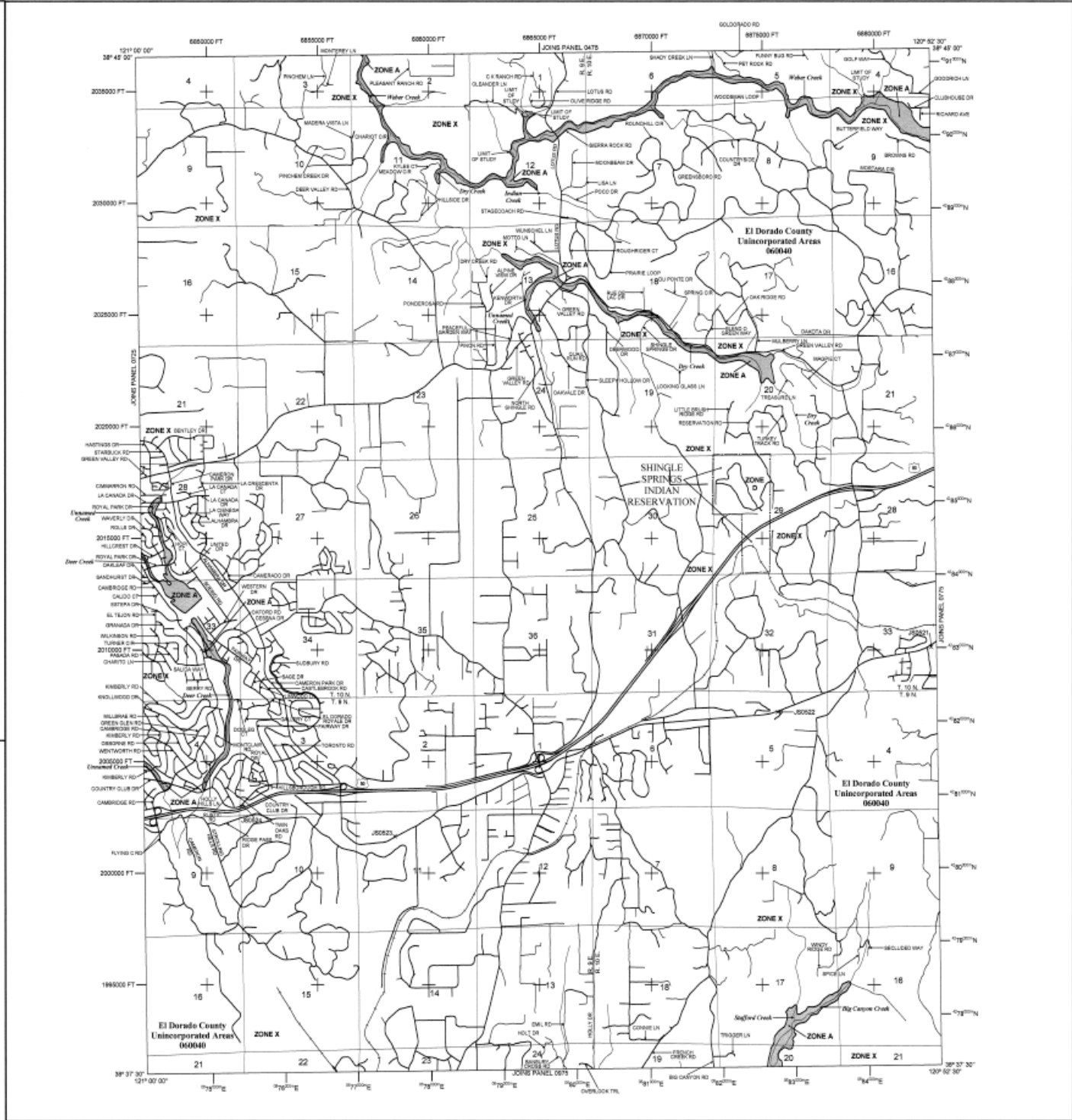
This map reflects more detailed and up-to-date stream channel configurations than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study report (which contain authoritative hydraulic data) may reflect stream channel changes that differ from what is shown on this map.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed Map Index for an overview map of the county showing the layout of map panels, community map repository addresses, and a listing of Communities table containing National Flood Insurance Program data for each community as well as a listing of the panels on which each community is located.

Contact the FEMA Map Service Center at 1-800-368-5848 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, a Flood Insurance Study report, and/or digital versions of the map. The FEMA Map Service Center may also be reached by Fax at 1-800-368-5820 and their website at <http://www.fema.gov>.

If you have questions about this map or questions concerning the National Flood Insurance Program in general, please call 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA website at <http://www.fema.gov>.



LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHA) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% annual chance of being equaled or exceeded at any point. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard are shown on this map as follows: The Base Flood Elevation is the water surface elevation of the 1% annual chance flood.

ZONE A No Sea Level Elevations determined. Base Flood Elevations determined.

ZONE AR Flood depths of 1 to 3 feet (locality areas of ponding). Base Flood Elevation determined. For areas of shallow flow, including wetlands and riparian areas.

ZONE AD Flood depths of 1 to 3 feet (locality areas of ponding). Base Flood Elevation determined. For areas of shallow flow, including wetlands and riparian areas.

ZONE AK Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system. Area with no flood protection. Zone AK indicates that the former flood control system is being removed to provide protection from the 1% annual chance flood.

ZONE AW Area to be protected from 1% annual chance flood by a flood control protection system under construction. No Sea Flood Elevations determined.

ZONE AV Coastal flood zone with velocity hazard (wave action). No Sea Flood Elevations determined.

ZONE VE Coastal flood zone with velocity hazard (wave action). No Sea Flood Elevations determined.

FLOODWAY AREAS IN ZONE A

The Floodway is the channel of a stream (or any adjacent floodplain) area that must be kept free of encroachment to ensure the 1% annual chance flood can be carried without substantial increases in flood height.

OTHER FLOOD AREAS

ZONE X Area of 0.2% annual chance flood. Area of 1% annual chance flood with average depth of less than 1 foot and with average area less than 1 square foot. Area was protected by levees from 1% annual chance flood.

ZONE D Area designated to be subject to the 0.2% annual chance flood. Areas in which flood heights are uncontrolled. See profile.

COASTAL DEFENSE RESOURCES SYSTEM (CDRS) AREAS

OTHERWISE PROTECTED AREAS (OPA)

CDRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

BOUNDARIES

Shingle Springs boundary
Floodway boundary
Zone D boundary
CDRS and OPA boundary
Boundary of Existing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities. Base Flood Elevation, flood depth and velocity values are shown on the map. Base Flood Elevation values are uniform within zone elevation in feet.

OTHER SYMBOLS

1:10 N.T.S. (North American Vertical Datum of 1988)
1:25 N.T.S. (North American Vertical Datum of 1988)
1:50 N.T.S. (North American Vertical Datum of 1988)
1:100 N.T.S. (North American Vertical Datum of 1988)
1:200 N.T.S. (North American Vertical Datum of 1988)
1:500 N.T.S. (North American Vertical Datum of 1988)
1:1,000 N.T.S. (North American Vertical Datum of 1988)
1:2,000 N.T.S. (North American Vertical Datum of 1988)
1:5,000 N.T.S. (North American Vertical Datum of 1988)
1:10,000 N.T.S. (North American Vertical Datum of 1988)
1:25,000 N.T.S. (North American Vertical Datum of 1988)
1:50,000 N.T.S. (North American Vertical Datum of 1988)
1:100,000 N.T.S. (North American Vertical Datum of 1988)
1:250,000 N.T.S. (North American Vertical Datum of 1988)
1:500,000 N.T.S. (North American Vertical Datum of 1988)
1:1,000,000 N.T.S. (North American Vertical Datum of 1988)

MAP NOTICES

Refer to Map Repository for map index.

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE PANEL

SEPTEMBER 26, 2008

EFFECTIVE DATE OF REVISIONS TO THIS PANEL

For community map revision history prior to community mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in the community, contact your insurance agent or call the National Flood Insurance Program at 1-800-368-5848.

MAP SCALE 1" = 3000'

0 200 400 FEET
0 200 400 METERS

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0750E

FIRM

FLOOD INSURANCE RATE MAP

EL DORADO COUNTY, CALIFORNIA AND INCORPORATED AREAS

PANEL 750 OF 1125

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS	COMMUNITY	NUMBER	PANEL	SHEET
	EL DORADO COUNTY	06940	0750	1

Notes to Users: The Map Number shown should be used when placing any order. The Community Number shown above should be used for insurance quotations. For the entire FIRM, see the Flood Insurance Study report for this jurisdiction.

MAP NUMBER
96017C0750E

EFFECTIVE DATE
SEPTEMBER 26, 2008

Federal Emergency Management Agency

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The community map reviewer should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations (BFEs)** and/or **roadways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Elevation Elevations located within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only to landward of 0.7 North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Elevation Elevations table in the Flood Insurance Study Report for the jurisdiction. Elevations shown in the Summary of Elevation Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the floodways were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic computations with regard to requirements of the National Flood Insurance Program. Floodway width and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by flood control structures. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures in this jurisdiction.

The projection used in the preparation of this map was California State Plane, Zone 11. The horizontal datum was NAD83 (1983) spheroid. Differences in datum, spheroid, projection or State Plane zone used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at <http://www.ngs.noaa.gov> or contact the National Geodetic Survey at the following address:

NGS Information Services
NDA, NAD83
National Geodetic Survey, Bldg. 3, Room 3
1515 East-West Highway
Silver Spring, Maryland 20910-3282
(301) 717-3282

To obtain current elevation, description, and/or location information for bench marks shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (301) 717-3282, or visit their website at <http://www.ngs.noaa.gov>.

Base map information shown on this FIRM was derived from multiple sources. This information was compiled from the U.S. Geological Survey, 1989 and 1993, El Dorado County Surveyor Office, 2004 National Geodetic Survey, 2004, California Department of Forestry, 2004, and U.S. Bureau of Reclamation, 2003. Additional information was photogrammetrically compiled at a scale of 1:12,000 from U.S. Geological Survey aerial photography dated 1993 to 2001.

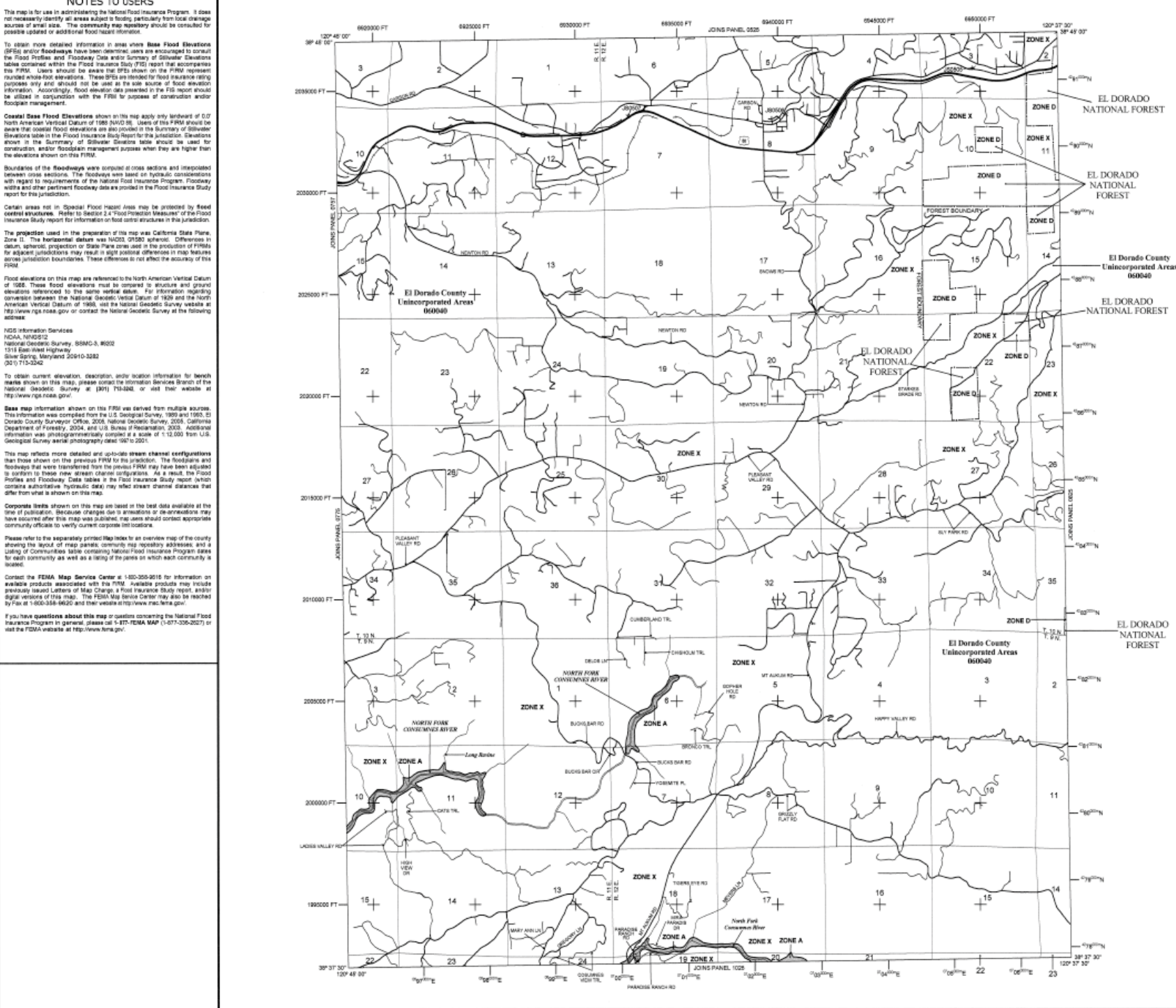
This map reflects more detailed and up-to-date stream channel configurations than those shown on the previous FIRM for this jurisdiction. The floodways and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study report (which contain authoritative hydrologic data) may reflect stream channel distances that differ from what is shown on this map.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed Map Index to an overview map of the county showing the layout of map panels, community map reviewer addresses, and a listing of communities with participating National Flood Insurance Program rates for each community as well as a listing of the panels on which each community is located.

Contact the FEMA Map Service Center at 1-800-358-9216 for information on available products associated with the FIRM. Available products may include previously issued Letters of Map Change, a Flood Insurance Study report, and/or digital versions of this map. The FEMA Map Service Center may also be reached by Fax at 1-800-358-9620 and their website at <http://www.msc.fema.gov>.

If you have questions about this map or questions concerning the National Flood Insurance Program in general, please call 1-877-FEMA-MAP (1-877-358-2627) or visit the FEMA website at <http://www.fema.gov>.



LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 2% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood) area shown on the base flood is the flood that has a 1% chance of being equal or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 2% annual chance flood. Areas of Special Flood Hazard include Zones A, X, D, V, E, H, I, O, S, U, W, Z. The Base Flood Elevation is the elevation above the 2% annual chance flood.

ZONE A No Base Flood Elevations determined.

ZONE X Base Flood Elevation determined.

ZONE D Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevation determined.

ZONE V Flood depths of 1 to 3 feet (usually areas of ponding); Average depths determined. For areas of unusual flood loading, velocities, and debris.

ZONE H Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently determined. Zone H indicates that the former flood control system is being removed or major protection from the 1% annual chance or greater flood.

ZONE I Zone I is protected from 1% annual chance flood by a holding flood protection system under construction to Base Flood Elevation determined.

ZONE E Coastal flood zone with velocity hazard (wave action); no Base Flood Elevation determined.

ZONE V Coastal flood zone with velocity hazard (wave action); Base Flood Elevation determined.

FLOODWAY AREAS (FLOODWAYS)

The Floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X Areas of 0.2% annual chance flood areas of 1% annual chance flood with average depths of less than 1 foot (usually areas of ponding).

OTHER AREAS

ZONE B Areas determined to be within the 2% annual chance floodplain. Areas in which flood heights are undetermined, but limited.

ZONE D Areas in which flood heights are undetermined, but limited.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

BOUNDARY LINES

— Jurisdiction boundary
— Floodway boundary
— Zone D boundary
— Zone V boundary
— Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood hazard return periods.
— Boundary dividing Special Flood Hazard Areas of different Base Flood Elevation and return elevation in feet.
— Base Flood Elevation value shown within zone identification in feet.

SYMBOLS

— Transverse line
— 100-year Unincorporated Threshold Measured gage values, zone 1
— 100-year gage value California State Plane coordinate system, zone 2 (FIPS/USACE SPCS), United States National Coordinate Projection system (see explanation in notes to users section of the FIS report).

MAP REFERENCES

Refer to Map Reference list on Map Index.

SPECTRUM OF COUNTYWIDE FLOOD INSURANCE RATE MAP PANELS

SEPTEMBER 26, 2008

EFFECTIVE DATES OF REVISIONS TO THIS PANEL

For community map reviewer history prior to community mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or visit the National Flood Insurance Program at 1-800-685-8882.

MAP SCALE 1" = 2000'

MAP NUMBER 06010800E

EFFECTIVE DATE SEPTEMBER 26, 2008

Federal Emergency Management Agency

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0800E

FIRM

FLOOD INSURANCE RATE MAP

EL DORADO COUNTY, CALIFORNIA AND INCORPORATED AREAS

PANEL 800 OF 1125

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

COMMUNITY NUMBER PANEL BUFFER

EL DORADO COUNTY 0800E 800 5

MAP NUMBER 06010800E

EFFECTIVE DATE SEPTEMBER 26, 2008

Federal Emergency Management Agency

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The community map preparator should be consulted for possible updates or additional flood hazard information.

To obtain more detailed information in areas where Base Flood Elevations (BFEs) and/or Floodways have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Determined Elevations tables contained within the Flood Insurance Study (FIS) report that accompanied the FIRM. Users should be aware that BFEs shown on the FIRM represent rounded unweighted elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only landward of 0.0 North American Vertical Datum of 1988 (NAVD 88). Users of the FIRM should be aware that coastal flood elevations are also provided in the Summary of Determined Elevations table in the Flood Insurance Study Report for this jurisdiction. Elevations shown in the Summary of Determined Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the floodways were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic computations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by flood control structures. Refer to Section 2 of "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures in this jurisdiction.

The projection used in the preparation of this map was California State Plane, Zone II. The horizontal datum was NAD83, GRS80 spheroid. Differences in datum, spheroid projection or State Plane zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding conversion between the National Geodetic Vertical Datum of 1955 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at <http://www.nga.noaa.gov> or contact the National Geodetic Survey at the following address:

NGS Information Services
 NGA, NVD512
 National Geodetic Survey, OSMC-2 #902
 1315 East-West Highway
 Silver Spring, Maryland 20910-3282
 201-713-3242

To obtain current elevation, description, and/or location information for beach markers shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (201) 713-3242, or visit their website at <http://www.nga.noaa.gov>.

Base map information shown on this FIRM was derived from multiple sources. This information was compiled from the U.S. Geological Survey, 1989 and 1990, El Dorado County Survey Office, 2000; National Geodetic Survey, 2000; California Department of Forestry, 2004; and U.S. Bureau of Reclamation, 2003. Additional information was photogrammetrically compiled at a scale of 1:12,000 from U.S. Geological Survey aerial photography dated 1987 to 2001.

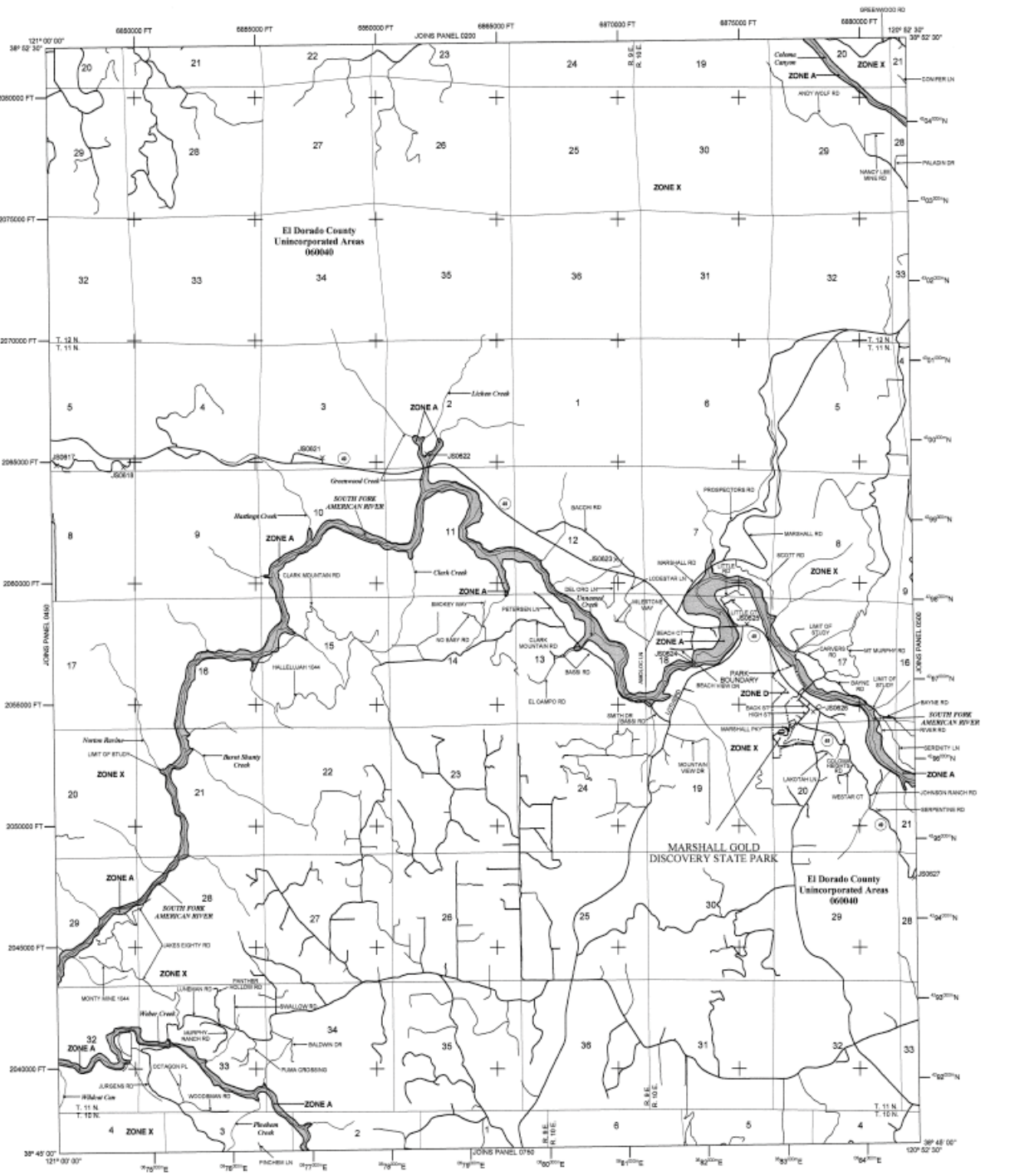
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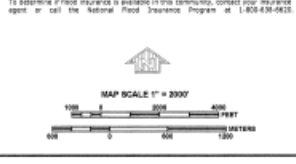
LEGEND

- SPECIAL FLOOD HAZARD AREAS (SFHA) SUBJECT TO SUSCEPTIBILITY TO THE 1% ANNUAL CHANCE FLOOD**
- Zone A** - 1% Annual Chance Flood (1% ACF)
 - Zone X** - Special Flood Hazard Areas (SFHA) subject to the 1% Annual Chance Flood (1% ACF)
 - Zone D** - Coastal Flood Hazard Areas (CFHA) subject to the 1% Annual Chance Flood (1% ACF)
 - Zone I** - Special Flood Hazard Areas (SFHA) subject to the 1% Annual Chance Flood (1% ACF)
- Other Flood Hazard Areas**
- Zone B** - Areas determined to be within the 0.2% Annual Chance Floodplain
 - Zone C** - Areas in which flood hazard and/or conditions are possible
 - Zone V** - Coastal Flood Hazard Areas (CFHA) subject to the 1% Annual Chance Flood (1% ACF)
 - Zone Y** - Areas in which flood hazard and/or conditions are possible
- Coastal Barrier Resources System (CBRS) Areas**
- Other Flood Hazard Areas (SFHA)**
- Zone A** - 1% Annual Chance Flood (1% ACF)
 - Zone X** - Special Flood Hazard Areas (SFHA) subject to the 1% Annual Chance Flood (1% ACF)
 - Zone D** - Coastal Flood Hazard Areas (CFHA) subject to the 1% Annual Chance Flood (1% ACF)
 - Zone I** - Special Flood Hazard Areas (SFHA) subject to the 1% Annual Chance Flood (1% ACF)

MAP REPRODUCERS
 Refer to Map Reproduction Fee on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
 SEPTEMBER 30, 2008

EFFECTIVE DATE OF THIS PANEL



PANEL 0475E

FIRM

FLOOD INSURANCE RATE MAP

EL DORADO COUNTY, CALIFORNIA AND INCORPORATED AREAS

PANEL 475 OF 1125

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS COMMUNITY: EL DORADO COUNTY MEMBER: 98885 SYMBOL: 98885

MAP NUMBER 08017C0475E

EFFECTIVE DATE SEPTEMBER 26, 2008

Notes to Users: This Map Number shown below should be used to obtain authoritative Member products. Other products shown above should be used on insurance applications for the subject community.

MEMBER OF FEDERAL EMERGENCY MANAGEMENT AGENCY



TRAFFIC ANALYSIS MEMORANDUM

ATTACHMENT I

MEMORANDUM

Date: February 22, 2010
To: Keith Rhodes, T.Y. Lin International
From: David B. Robinson and Bill Penney, Fehr & Peers

Subject: *Analysis Methodologies for the State Route 49 Realignment Study*

RS09-2661

Fehr & Peers has completed the alternative route analysis of the State Route 49 (SR 49) Realignment Study. This memorandum includes a discussion of the existing conditions, the travel demand forecasting procedure for future conditions, and the methodologies used in the analysis of alternatives through the multiple levels of screening.

EXISTING CONDITIONS

To understand the existing traffic flow patterns along the study alternatives, existing traffic counts were collected during the PM peak hour (between 4 and 6 PM) of an average weekday from available County sources. Figure 1 shows existing PM peak hour traffic volumes along the study roadway segments. Also shown in this figure are photographs at various locations in the study area that document existing conditions. Key traffic flow characteristics in the study area are described below:

- Travel is focused along the U.S. 50 corridor.
- The dominant work trip flows are to and from the west with most county-to-county trips occurring on U.S. 50.
- About one percent of travel on SR 49 (north or south of the study area) is through travel. Consequently, most trips in the study area have a local origin and/or destination.
- Lotus Road, which has an improved cross-section, between Green Valley Road and Gold Hill Road, serves the highest traffic volumes of the north/south roadways between U.S. 50 and SR 49 near Lotus and Coloma.

Based on the traffic counts and capacity thresholds along the study routes, the operating performance of each roadway segment was described in terms of level of service (LOS). LOS ranges from A through F, which represents driving conditions from the least congested to most congested, respectively. In general, LOS A represents free-flow conditions and LOS F represents severe delay caused by stop-and-go conditions. Table 1 summarizes volume capacity thresholds that were used to calculate LOS during the PM peak hour. For roadway segments, the LOS capacity thresholds given are the combined two-way total volume. For freeway segments, the LOS is calculated separately by direction, and those thresholds given below are one-way directional totals. Figure 2 shows the existing LOS during the PM peak hour for all study roadway segments and provides a graphical representation of LOS for roadway segments.

**TABLE 1:
 PEAK HOUR VOLUME THRESHOLDS AND LEVEL OF SERVICE FOR STUDY ROADWAYS**

Facility Type	Maximum Peak Hour Volume				
	LOS A	LOS B	LOS C	LOS D	LOS E
2-Lane Minor Highway	90	200	680	1,410	1,740
4-Lane Major Highway	120	290	790	1,600	2,050
2-Lane Arterial	--	--	970	1,760	1,870
4-Lane Arterial – Divided	--	--	1,920	3,540	3,740
2-Lane Freeway (by direction)	1,110	2,010	2,880	3,570	4,010

Source: Fehr & Peers, 2009

As shown on Figure 2, most of the study roadways operate at LOS C or better, except for segments of Lotus Road and Green Valley Road (north of U.S. 50) and Missouri Flat Road, Pleasant Valley Road, and SR 49 (south of U.S. 50). Missouri Flat Road operates at LOS D along the 4-lane section just south of U.S. 50 and at LOS F along the 2-lane portion just north of Pleasant Valley Road.

Traffic operations on U.S. 50 and SR 49 in Placerville are shown as LOS C or better on Figure 2, which is generally appropriate for the roadway segments leading into Placerville. However, traffic operations in Placerville are controlled by the at-grade traffic signal controlled intersection on U.S. 50 at Spring Street and SR 49 and adjacent closely spaced intersections (south of U.S. 50), which the roadway segment analysis methodology cannot account for. Field observations indicate congested conditions during the PM peak hour.

FUTURE CONDITIONS

The El Dorado County Travel Demand Forecasting (TDF) Model was used to forecast traffic flow patterns during the PM peak hour in the future year 2025. Figure 3 shows the 2025 PM peak hour forecasted volumes from the El Dorado County TDF Model. Travel characteristics under year 2025 conditions are expected to be similar to those described above under existing conditions. However, traffic volumes generally increase. In addition, PM peak hour flow on U.S. 50 is more balanced, which is consistent with increased employment in the study area.

Figure 4 describes the operating performance of each study roadway segment during the PM peak hour in terms of LOS, which is based on 2025 forecasted volumes and roadway volume capacity thresholds. Compared to existing conditions, most of the study facilities will operate at LOS D or worse consistent with planned development. Residential and non-residential development growth in the study area is summarized below:

- The number of households within the study area is forecast to increase by about 2,900 to a total of about 11,100 households by 2025.
- The number of jobs within the study area is forecast to increase by about 6,700 to a total of 18,900 jobs by 2025.

The El Dorado County TDF Model was also used to calculate approximate travel times between the cities of Coloma and El Dorado along each of the proposed alternatives.

ANALYSIS METHODOLOGY

The following describes the methodology used to evaluate each transportation-related criterion (Goals 2, 3, and 4) under the Intermediate Level 1 Screening. Under each criterion, scores ranging from 1 to 4 points were given to each alternative. A score of 4 points was given to alternatives that had the most desirable results under each screening criterion, while 1 point was given to the alternatives that had the least desirable results. The number of alternatives given a certain point value was determined based on similarities in the results of each alternative under each screening criterion.

Goal 2: Efficient transport of goods and people (i.e., commercial, regional, and local) regionally and interregional for vehicle, bicycle, and pedestrian travel.

- Travel Time Reduction (Regional) – the El Dorado County TDF Model was used to determine the average bi-directional travel times along the entire length of each of the 11 proposed alternative routes during the PM peak hour.
- Travel Time Reduction (Local) – the methodologies were the same for this criterion as was for the regional travel times; however, the local results were obtained by calculating the average bi-directional travel times within an approximate 2-mile buffer of the US 50 / Missouri Flat Road interchange for each of the proposed alternative routes. This area was selected based on its centralized location within the study area.

Goal 3: Improve accessibility for commercial, regional, and local traffic between residential areas and business districts of the City of Placerville, Diamond Springs, and El Dorado.

- Population (within a half-mile buffer of alternative) divided by route distance – GIS-based software and information from the 2000 US Census for El Dorado County was used to determine the total number of people within a half-mile buffer of each alternative. This was used in combination with the total route distance for each alternative to calculate persons per mile over the entire length of each alternative route.
- Employment (within a half-mile buffer of alternative) divided by route distance – this criterion was determined in the same manner as was described for the population divided by route distance; however, employment totals were used instead of population totals to determine the accessibility of each route to jobs.
- Population and employment (within a half-mile buffer of alternative) divided by route distance – this criterion is a combined total of the population and employment within a half-mile buffer of each alternative.

Goal 4: Improve accessibility for commercial, regional, and local traffic between residential areas, communities, and business districts along SR 49 from El Dorado to Coloma.

- Population within a half-mile buffer of alternative – similar to the description above for the population per route mile, this criterion was analyzed to compare the accessibility for the

greatest number of people regardless of the length of each route. As compared to the population per route distance, this criterion does not account for the circuitous nature that some of the alternative routes have. The directness of each route has a large effect on the total population within a half mile buffer.

- Employment within a half-mile buffer of alternative – as described before, employment totals were used instead of population totals to determine the route offering accessibility to the greatest number of jobs.

Based on the performance of each alternative under each of the above described screening criterion, three alternatives – Alternative 3E, Alternative 5G, and Alternative 5H – were selected to be further analyzed under the Level 2 Screening. Under this level of analysis, a third study criterion under Goal 2 was added to understand the operating performance in terms of LOS of each alternative route. The same scoring that was applied during the Intermediate Level 1 Analysis was also used under the Level 2 Screening. The following point describes the analysis criterion used to further analyze the three alternatives under the Level 2 Screening:

- Roadway segment performance (Regional). Miles of alignment operating at acceptable LOS – the minimum operating performance for roadway segments under the jurisdiction of El Dorado County has been determined to be LOS C. Based on capacity thresholds and forecasted PM peak hour volumes for future year 2025, the number of road miles of each alternative operating at or better than LOS C was calculated. Points were distributed based on the percentage of each route that operated acceptably under El Dorado County's LOS C threshold.

Figure 5 shows the analysis matrix comparing the performance of each of the three alternatives after the Level 2 Screening.

RECOMMENDATIONS FOR FUTURE ANALYSIS

As stated on the first page of this memorandum, about one percent of travel on SR 49 (north or south of the study area) is through travel. Consequently, most trips in the study area have a local origin and/or destination. This information is based on a review of the existing conditions data collected for the study and a review of the base year El Dorado County TDF model. While this information is useful in describing the general characteristics of travel in the study area, it does not provide detail about who is using the facilities, like the percentage of travelers that are tourists and what percentage of tourist traffic is occurring in the peak hours. This data will be important for determining if the proposed improvements are addressing the needs of travelers. Therefore, depending on available resources, we recommend that future traffic analysis include some or all of the following to answer these questions:

- A vehicle license plate survey
- A vehicle intercept survey
- Detailed origin/destination analysis

STATE ROUTE 49 REALIGNMENT STUDY

LEGEND

PM Peak Hour Traffic Volume

Note: No Realignment Assumptions Assumed



NOT TO SCALE



Typical Cross-Section of Lotus Rd.



Improved Cross-Section on Lotus Rd.



Typical Cross-Section of Cold Springs Rd.



Pedestrians Crossing SR 49 in Marshall Gold Discovery State Park



Tight Curve on Existing SR 49 Alignment



SR 49 in Placerville Business District



SR 49 at US 50 in Placerville



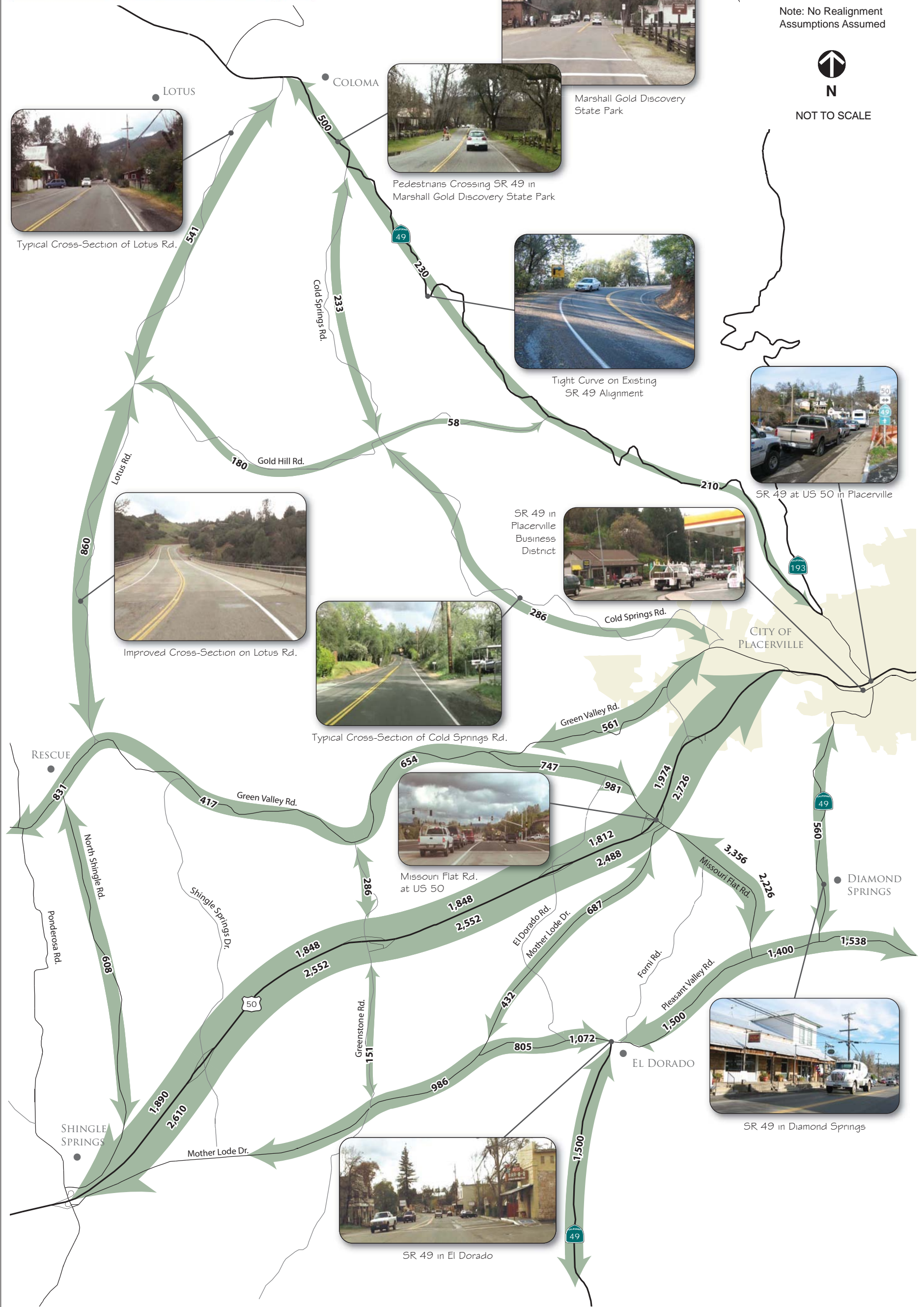
Missouri Flat Rd. at US 50



SR 49 in Diamond Springs



SR 49 in El Dorado



FEHR & PEERS
TRANSPORTATION CONSULTANTS

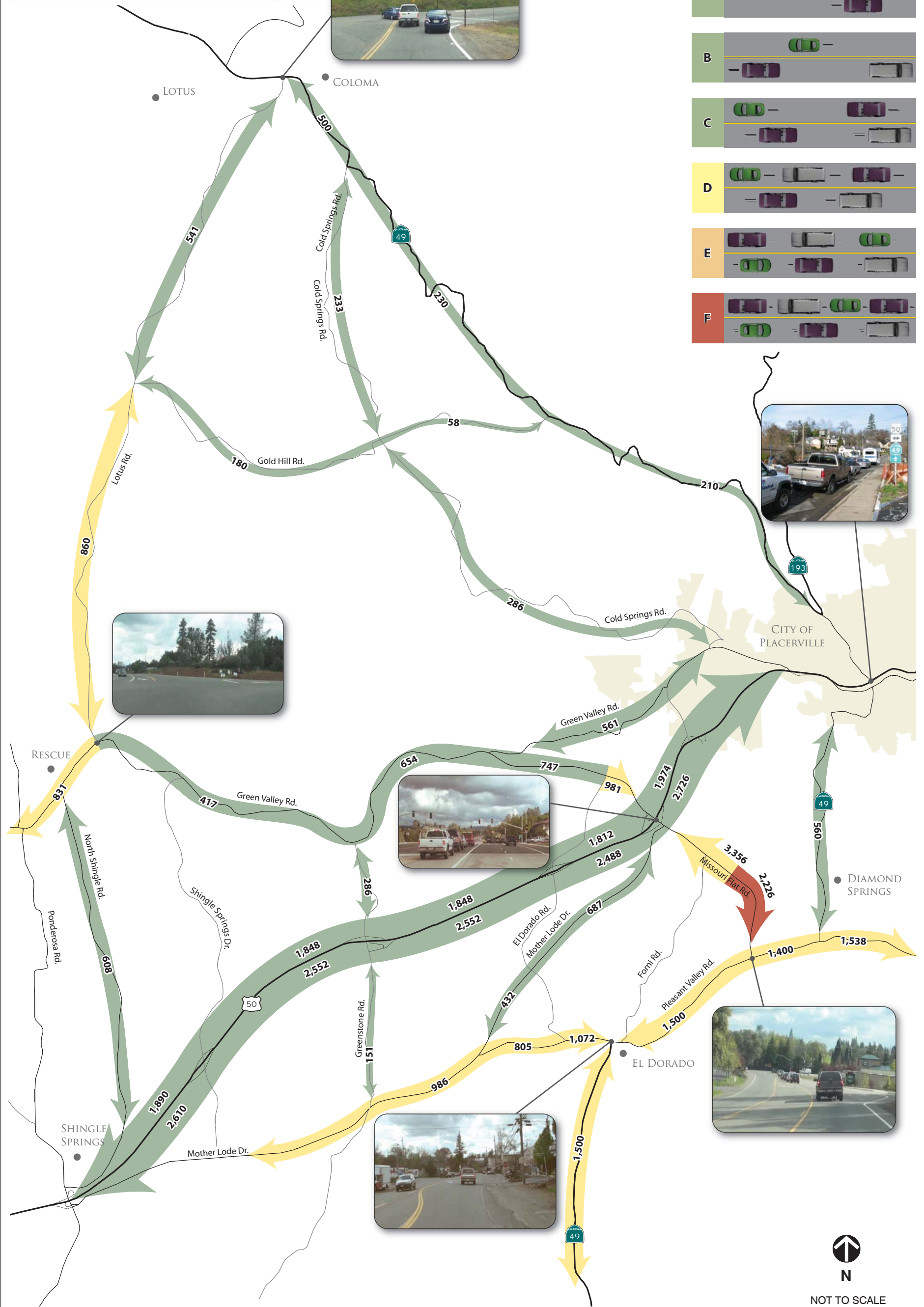
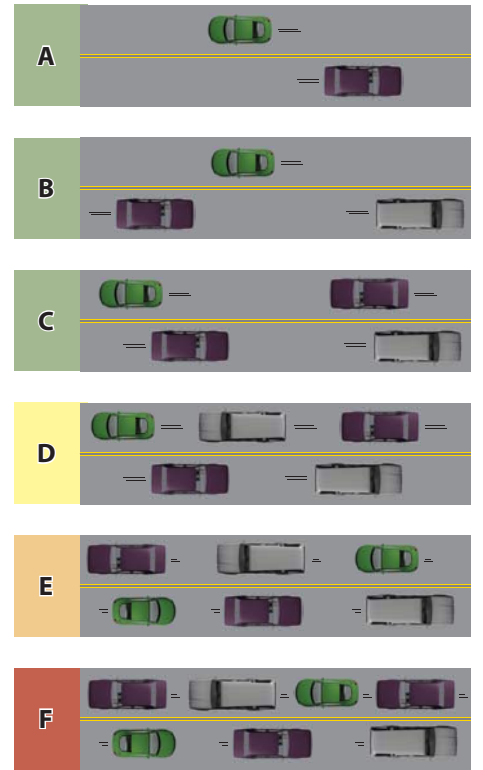
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**PM PEAK HOUR TRAFFIC VOLUMES
EXISTING CONDITIONS**

FIGURE 1



Level of Service



NOT TO SCALE

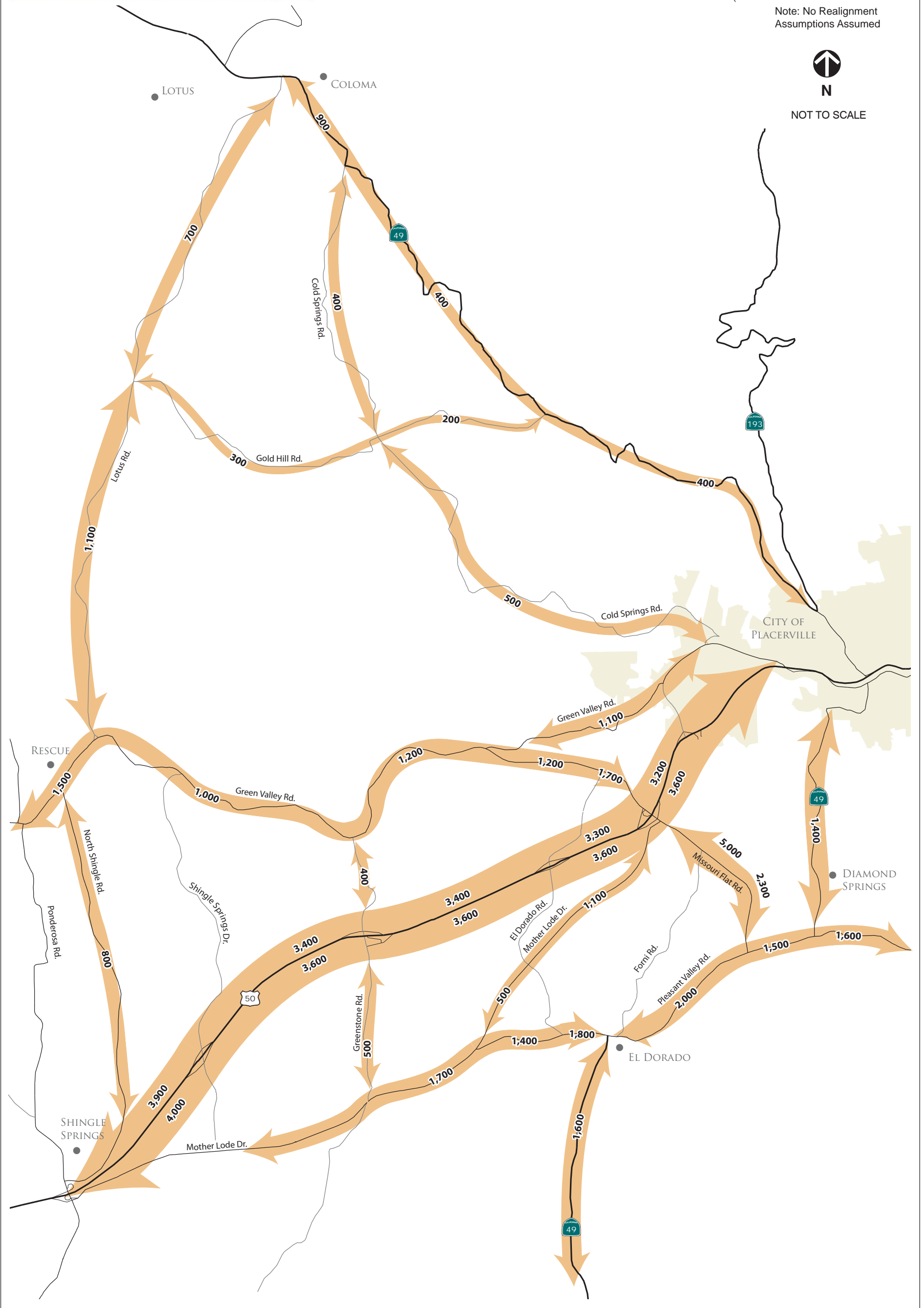
LEGEND

 PM Peak Hour Traffic Volume

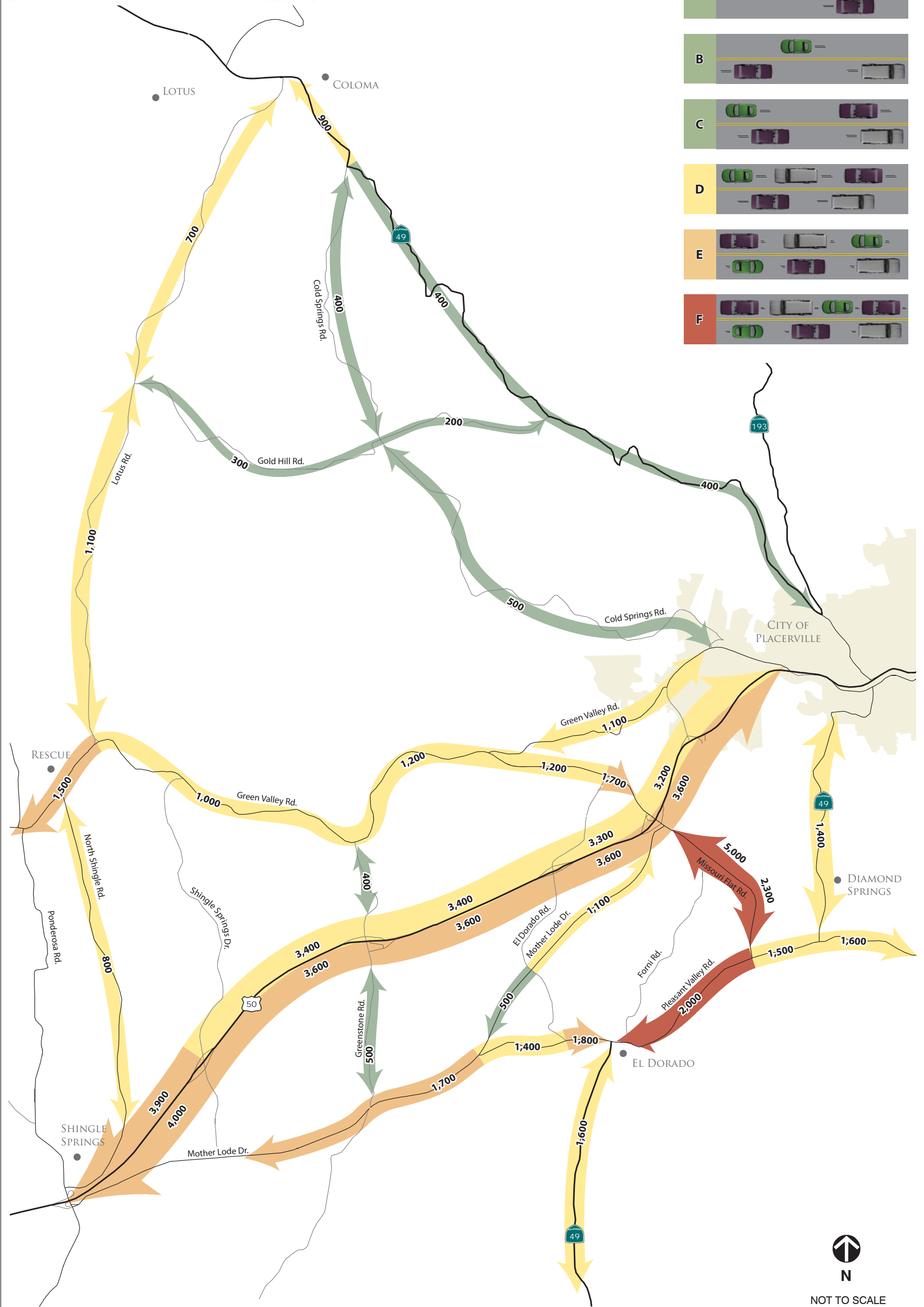
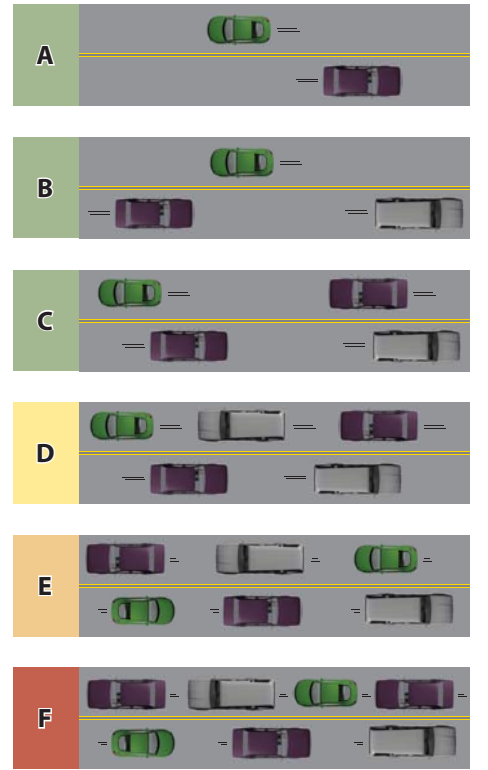
Note: No Realignment Assumptions Assumed



NOT TO SCALE



Level of Service



NOT TO SCALE

Scoring definitions are as follows:
 1 = No improvement or unacceptable impact
 2 = Marginal improvement or high impact
 3 = Acceptable improvement or moderate impact
 4 = Substantial improvement or low impact

TYLIN INTERNATIONAL
 3301 C Street, Bldg 100-M
 Sacramento, CA 95816
 o: 916.366.6331 f: 916.366.6536

LEVEL 2 SCREENING CRITERIA			ALTERNATIVE ROUTE			
Criterion 2A: Transportation Benefits	Objective	Criteria ⁽¹⁾	No Build	3E	5G	5H
Transportation Goal 1: Safe transport of goods and people (i.e. commercial, regional, and local) regionally and interregionally for vehicle, bicycle, and pedestrian travel (i.e. improve sharp curves, steep grades, and traveled way of SR 49 for modern transportation demands)	Increase safety	# of curves with advisory speed limits per mile				
		# of grades >7%				
		# of constraints that prevent widening (i.e. side-slopes >2:1, and right of way requiring removal of buildings)				
		# of school zones				
Transportation Goal 2: Efficient transport of goods and people (i.e. commercial, regional, and local) regionally and interregionally for vehicle, bicycle, and pedestrian travel	Increase vehicular mobility	Travel time reduction (Regional)	1	3	2	2
		Travel time reduction (Local)	1	2	3	3
		Roadway segment performance (Regional). Miles of Alignment operating at acceptable LOS.	1	1	3	3
		Vehicle-miles traveled reduction				
Transportation Goal 3: Improve accessibility for commercial, regional, and local traffic between residential areas and business districts of the City of Placerville, Diamond Springs, and El Dorado	Improve vehicular accessibility	Alignment within the City of Placerville city limits				
		Alignment within the Diamond Springs business district				
		Alignment within the El Dorado business district				
		Population (within 1/2 mile buffer of alternative) divided by route distance	1	2	4	3
		Employment (within 1/2 mile buffer of alternative) divided by route distance	1	2	3	3
		Population and employment (within 1/2 mile buffer of alternative) divided by route distance	1	2	4	4
Transportation Goal 4: Improve accessibility for commercial, regional, and local traffic between residential areas and business districts along SR 49 from Coloma to El Dorado	Improve vehicular accessibility	Population within 1/2 mile Buffer of Alternative	1	2	4	3
		Employment within 1/2 mile Buffer of Alternative	1	2	3	4
Transportation Goal 5: Maximize the use of existing roads to minimize resources required to achieve improved conditions in the SR 49 corridor and support the projected land uses of the adopted El Dorado County and City of Placerville General Plans	Utilize existing local roads for realignment	Use of existing local roads only				
		# of bridge widenings required				
		# of new bridges required				
Transportation Goal 6A: Relieve SR 49 traffic impacts to Downtown business district of City of Placerville.	Realign SR 49 from Downtown business district of City of Placerville	Alignment within the business district.				
Transportation Goal 6B: Relieve SR 49 traffic impacts to business districts of Diamond Springs.	Realign SR 49 from business district of Diamond Springs	Alignment within the business district.				
Transportation Goal 8: Maximize multi-modal opportunities locally and interregional (i.e. bicycle, pedestrian, and transit) as specified in the Caltrans Deputy Directive (DD) 64.	Identify increase in, or proximity to transit routes, park and ride lots, and pedestrian and bicycle trails and facilities	# of bicycle facility connections (existing or feasible future)				
		# of transit facility connections (existing or feasible future)				
		# of park-n-ride facility connections (existing or feasible future)				
Transportation Goal 10A: Relieve SR 49 traffic impacts to densely populated residential areas of the City of Placerville.	Realign SR 49 from densely populated residential areas of City of Placerville	# of residential streets connections				
		# of residential areas directly impacted				
Transportation Goal 10B: Relieve SR 49 traffic impacts to densely populated residential areas of the Diamond Springs.	Realign SR 49 from densely populated residential areas of Diamond Springs	# of residential streets connections				
		# of residential areas directly impacted				
TOTAL LEVEL 2 ANALYSIS SCREENING			8	16	26	25

(1) The goals of eliminating SR 49 through the Marshall Gold Discovery State Historic Park (MGDSHP) and the at-grade intersection of SR 49/US 50 are critical to the success of the project that they are common to all alternatives; therefore, are not used in the screening.



PUBLIC COMMENTS

ATTACHMENT J



PUBLIC COMMENTS

PUBLIC COMMENTS MATRIX



**State Route 49 Realignment Study
Hotline/Website Comments Matrix**

DATE	NAME	COMMENTS	RESPONSE/ACTION
4/24/09	Suzanne Frey	How wide will the bike lane be that goes along HWY 49 north of The Old Toll Road where my property frontage is?	<p>From: Dan Bolster Sent: Monday, April 27, 2009 10:50 AM</p> <p>Suzanne,</p> <p>The State Route (SR) 49 Realignment Study is just beginning and has not yet begun to identify or evaluate the feasibility of potential alternative alignments for SR 49 between El Dorado and Coloma. That process will begin in May and will continue through the summer and into the fall when the three potential alternative alignments identified by the SR 49 Realignment Study will be presented to the El Dorado County Transportation Commission Board of Directors in October or November. At this time it is not known whether or not the segment of SR 49 adjacent to your property will be included as part of one of the three potential alternative alignments. Where feasible, any alternative alignment that is constructed will be constructed to Caltrans standards for a 2-lane state highway, which means that there will be two 12 foot travel lanes with two 8 foot shoulders on the outside of each of the travel lanes. The 8-foot shoulders will accommodate the Class II bike lanes. Please let me know if you have any other questions.</p> <p>Thanks, Dan</p>



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4/26/09	Homer Rail	<ol style="list-style-type: none"> 1. Does Highway 49 have any Historic Highway designation that would preclude a realignment? 2. Does the realignment study anticipate that the route would skirt the town of El Dorado as well as Coloma and Placerville? 3. Does the Department of Parks and Recreation plan to close the road through Marshall Gold Discovery Park if the Hwy 49 is realigned to by-pass the park? 4. Does the realignment plan anticipate funds will be available for new acquisition and construction and/or improvements to existing roadway upgrading? 5. Does the criteria for selecting a new route allow for signaling intersections with existing arterials? 6. Has a traffic count been done on Highway 49 south of El Dorado and north of Coloma along with a survey to see what the origin and destination is for the cars counted? 7. My experience on Highway 49 is frequent and my observation is that most of the traffic is local and not just passing through the area in question. The above traffic study should resolve that issue. 8. If the realignment happens, how many of the present cars will actually be removed from Highway 49? 	<p>From: Keith Rhodes Sent: Tuesday, April 28, 2009 3:35 PM</p> <p>Does Highway 49 have any Historic Highway designation that would preclude a realignment? No. Caltrans has not formally classified SR 49 with a Historic Highway designation and such a designation would not preclude a realignment even if the current alignment was designated as an historic route.</p> <p>Does the realignment study anticipate that the route would skirt the town of El Dorado as well as Coloma and Placerville? The SR 49 Realignment Study is just beginning and has not yet begun to identify or evaluate the feasibility of potential alternative alignments for SR 49 between El Dorado and Coloma. That process will begin in May and will continue through the summer and into the fall when the three potential alternative alignments identified by the SR 49 Realignment Study will be presented to the El Dorado County Transportation Commission Board of Directors in October or November 2009. At this time it is not known whether or not any of the potential alternative alignments will skirt the towns of El Dorado, Coloma, and/or Placerville. However, it is the desire of the study to identify alternatives that will improve traffic operations within these towns.</p> <p>Does the Department of Parks and Recreation plan to close the road through Marshall Gold Discovery Park if the Hwy 49 is realigned to by-pass the park? Please refer to the California Department of Parks and Recreation’s General Plan for Marshall Gold Discovery State Historic Park. It can be viewed online at www.parks.ca.gov/pages/21299/files/304.pdf. However, the SR 49 Realignment Study will consider the project area’s general plans (i.e. El Dorado County General Plan, City of Placerville General plan, Marshall Gold Discovery State Historic Park General Plan, etc) to ensure that the study is consistent with those plans.</p> <p>Does the realignment plan anticipate funds will be available for new acquisition and construction and/or improvements to existing roadway upgrading? The SR 49 Realignment Study is a feasibility study that is intended to provide a cursory review of feasible alternative improvements to be considered for establishing funding for a project to be identified in a Project Study Report (PSR). A feasibility study precedes a PSR, which is the next phase of the project development process, and the PSR will begin the process for identifying funds for environmental documentation, design, right of way acquisitions, construction, and improvements for existing roadway upgrading.</p> <p>Does the criteria for selecting a new route allow for signaling intersections with existing arterials? Currently, the proposed criteria for selecting potential alternative alignments do not accommodate signaling intersections with existing arterials. However, the study will consider incorporating criteria that identify opportunities to signalize existing and new intersections that would meet traffic signal warrants. The</p>



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			<p>criteria would also consider the effects on traffic operations if signals are installed. Has a traffic count been done on Highway 49 south of El Dorado and north of Coloma along with a survey to see what the origin and destination is for the cars counted? A license plate survey that collects data of the origin and destination of vehicles will not be conducted for this study. However, the SR 49 Realignment Study will utilize the El Dorado County Travel Demand Forecasting Model that contains origin and destination data for vehicles traveling along SR 49 within the County's boundaries. My experience on Highway 49 is frequent and my observation is that most of the traffic is local and not just passing through the area in question. The above traffic study should resolve that issue. As mentioned previously, a license plate survey that collects data of the origin and destination of vehicles will not be conducted for this study. The SR 49 Realignment Study will utilize the El Dorado County Travel Demand Forecasting Model that contains origin and destination data for vehicles traveling along Highway 49 within the County's boundaries that will assist in forecasting traffic demands on the old alignment of Highway 49 if a new alignment is established.</p>
5/9/09	Richard Boylan, Ph.D., LLC	<p>Mr. Bolster,</p> <p>Although I attended the meeting, spoke up, and turned in an interest card, I did NOT receive this email. (I got a copy from a friend.) Please place me on your mailing list for HWY 49 Realignment updates.</p> <p>In the light,</p> <p>Richard Boylan, Ph.D. President, Star Kids Project, Ltd</p>	<p>Added to the database as an attendee to the meeting, complete with email address. A reminder must have gone out to the website distribution list, and did not include everyone. We need to sync list server.</p>
5/16/09	Patrice Hocking	<p>How quickly can El Dorado Country ruin the rural lifestyle? You won't be happy until we are a replica of Roseville and Rocklin - overcrowded, overpopulated and traffic running everywhere. The State Hwy 49 area through Coloma will be ruined and I for one will not stay living in California to see the horror that will be EDC. People move to EDC because of the slower pace, then they can't wait to make it a replica of wherever they came from. I came from Cupertino and I can tell you I would NEVER want to live in the Bay Area again, nor do I want Placerville area to become like it.</p>	



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5/19/09	Nancy Christenson	<p>Please add me to your email list for the 49 Highway realignment. I was not able to attend the meeting last month.</p> <p>Also, I found that the flyer that was distributed was "selective" with the pictures used. For example, pictures should be shown of areas that you are considering "realigning" to: the Missouri Flat intersection and corridor (and we want to move the dump to this area, too), Indian Creek School and the college, and Herbert Green. Many people already know of the "alternative" of taking Lotus Rd. to N. Shingle to 50 coming from Lotus/Coloma--or even via Cold Springs Rd if one wants to get closer into Placerville.</p> <p>Anyway, as you can see, I have some opinions about this and would like to be included in the dialogue.</p>	<p>From: Dan Bolster Sent: Thursday, May 21, 2009 8:40 AM</p> <p>Nancy,</p> <p>Thanks for your interest in the SR 49 Realignment Study. Your name has been added to the email distribution list and you will begin receiving project updates as they are sent out to the distribution list. Regarding the pictures used in the project newsletter that was distributed in April, at that time no alternatives had been identified or considered, which is why the newsletter did not contain pictures of potential alternatives.</p> <p>Thanks, Dan</p>
5/23/09	Gary Miles	<p>Why not re-route State Highway 49 on to Lotus Road to North Shingle Road to South Shingle Road to State 16 (Jackson Road) turn left to where 49 comes in now at the Y to the city of Jackson?</p> <p>That way its pretty much parallel with the current route of 49 and yet would take traffic out to mostly rural areas and away from Marshall Park and Placerville etc.</p>	<p>From: Dan Bolster Sent: Tuesday, May 26, 2009 9:43 AM</p> <p>Gary,</p> <p>Thanks for your interest in the SR 49 Realignment Study and for your suggestion of an alternate alignment. Your suggestion of an alignment along Lotus Road and North Shingle fits within the realignment study limits (Coloma to El Dorado) and will be considered in the current study, but the section you suggested that would take SR 49 along South Shingle to E 16 is outside of the scope of the current study and would have to be considered in a future study.</p> <p>Thanks, Dan</p>
5/26/09	Jamie Buetler	<p>Dear Dan:</p> <p>I just wanted to alert you to the following PDF that was forwarded to me by Jamie Beutler who attended the open house last month. Jamie is very concerned about the SR49 Realignment study and preserving history, rural character, basically a no growth person. She found this document from 2005 and was very concerned because she felt that we had misrepresented ourselves since this has been going on since 2005. I explained the process that EDCTC has gone through to get to the start of the Realignment study this year and then asked for her to forward the document that she was looking at to me. I read the first couple of pages of the document with her on the phone</p>	



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		<p>and explained that it was actually a different project that was examining a section of SR49, south of El Dorado (south of our project area). She is very concerned about that fact that in her mind, 4 or 5 of the Commission members are pro growth and asked that I help her understand how to plug into this project.</p> <p>I explained my role and responsibility in ensuring that we inform the public of their opportunities to weigh in as well as timing, etc. etc. She appreciated my help and I told her to feel free to call me anytime with further questions. Anyway, we will log this discussion in the matrix, I just wanted you to know that it occurred.</p>	



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6/26/09	Jim Michaels	<p>Dan and Keith –</p> <p>At the last SAC meeting we only reviewed one of the alternatives through all of the screening criteria. You all asked for input. Here is State Parks input on the application of the Level 1 Screening Criteria, scoring and alternatives that will move onto Level 2.</p> <p>Let me state at the outset – based on our understanding of the study thus far - State Parks is interested in seeing at least one of the Coloma Bypass alternatives moved forward and further evaluated as part of the study. We recognize that we may have our own limited interest in relation to the full scope of this study.</p> <p>All of the alternatives get the alignment of Hwy 49 out of Marshall Gold Discovery State Historic Park (MGDSHP), which we applaud and which could have benefits to the park to the extent that this reduces traffic. However, we are unclear regarding the extent to which the study will make proposals or evaluate the future disposition of the existing 49 route if a new alignment is adopted. The future disposition of the roadway through MGDSHP could have a greater effect (+ or -) on the park than re-aligning 49.</p> <p>Only the bypass alternatives meet the full intent of the General Plan for the park unit, which also expresses a desire to eliminate through vehicle traffic in the park. The General Plan is clear that the proposed bypass alignments are only potential routes – the key concept is to bypass the park in order to eliminate through traffic to reduce impacts and enhance visitor experience. The bypass may not wind up being a preferred or feasible route in the re-alignment study. Maybe it is an idea to which the local community would object and there are real problems with this concept – we don’t know. The current District Superintendent and I were not involved in the development of the 1989 MGDSHP General Plan, but we do clearly see potential benefits to greatly altering or eliminating through traffic in the park. Without more fully studying this concept – we will never know how the benefits of this option stack up against the impacts, costs or challenges.</p> <p>We understand that the re-alignment study is not necessarily trying to resolve or address all of the transportation issues or challenges in the County. However, it is not clear to State Parks that there will be a better or more appropriate venue to evaluate the Coloma Bypass concept than this study. EDCTC may have some thoughts on this and we are interested in hearing if there is some other project or plan that is a more appropriate vehicle.</p> <p>As I have mentioned at both the last PDT and SAC meetings the yes/no scoring for the screening criteria is a very coarse way to apply the screening criteria and the rationale behind the yes or no for each criteria and the manner in which the criteria are framed really affects the scoring and which alternatives move forward.</p>	



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		<p>I recognize you need to reduce the number of alternatives. I recognize there are limitations on the level of detail in the analysis possible in order to get from 52 to a more manageable number. However, the criteria and how they are scored should be as credible and meaningful as possible. I am wondering if a yes or no is the appropriate way to score these criteria or if some value system (1-3 or 1-5) would provide a more appropriate scoring system.</p> <p>It seems that any alternative that proposes a new section of roadway or a new bridge is fated to drop out, regardless of the distance of new roadway section and seemingly regardless of the ROW issues and cost considerations of alternatives that utilize existing roadways (segment 22 is the exception).</p> <p>The criteria, which stack the deck against any new roadway construction, are 1A-H, 1A-I, 1A-L, 1B-A 1B-B and 1B-C. That is 6 automatic “no” scores out of 16 possible. I am not sure that the yes/no scoring system or the rationale for the scoring these criteria are necessarily appropriate.</p> <p>Also - I disagree with the assertion that there is a clear separation in the scoring between those alternatives that move on and those that fall out and that changing a few yes or no scores is not going to alter the results. It only looks like a clear separation due to the ranking, which artificially creates gaps. The actual scoring is relatively close. The range in the actual scoring is very narrow – from 8 to 16. There are many alternatives for which a change in several yes or no scores could change whether or not they move forward. Here are my specific concerns with the way the level 1 screening criteria are applied.</p> <p>1A–A. Improve Traffic Operations: Is giving a yes for all of the alternatives for this criteria appropriate or meaningful? Is the assumption correct that any alternative would move people, goods and services more efficiently than the existing route? Many of the alternatives are longer and/or take more time. What is the real measure of improved traffic operations in this criteria? What should determine a yes or a no? How is this criteria different than 1A-F or 1A-K? I think further explanation is needed regarding the rationale for giving all of the alternatives a yes – even those that are greater in time or distance. This also brings up the question of the no action alternative – is there any requirement to bring the existing alignment up to current standards (to the extent feasible) if a new alignment is not developed? If so, wouldn’t that be part of the no action alternative?</p> <p>1A-C. Ensure Compatibility with Planned Zoning and Land Uses in City, County and MGDSHP General Plans. Are all of these plans consistent with one another? I imagine some alternatives better meet the intent of one or more of the GP’s than others. Some may meet the intent of on Plan and violate the intent of another. Would a range of values better capture this criteria versus</p>	



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		<p>the yes/no?</p> <p>1A-D. Only group 6 and group 11 alternatives meet the full intent of the MGDSHP. All of the other alternatives get the alignment out of the park, but there is a meaningful difference between the group 6 and 11 alternatives and the remainder of the alternatives which is not captured by merely giving all of the alternatives a “yes”.</p> <p>1A-H. Minimize environmental impacts (jobs, cultural resources, pop growth). I disagree with the rationale for the scoring of this criteria. There are too many different variables in this criteria, many of which could be contradictory, for a yes or no scoring to have any real meaning. If you broke out the major environmental resources/issues (jobs, pop, biological res, cult res, etc) and scored them individually – this might be a credible approach. Why is the construction of a new bridge (segments 25 and 26) more of an environmental impact that having to acquire miles and miles of additional ROW in order to improve an existing route? It seems difficult to make this assertion without more information. How do you balance the long-term benefits and reduction in cumulative impacts to significant historic resources at MGDSHP in the Coloma Bypass alternatives to the impacts of the new roadway section and bridges?</p> <p>1A-I. Reduce the Amount of Resources. How is this criteria different than cost considerations in 1B-F? Aren’t we double rewarding or punishing alternatives by including this same consideration twice? I also disagree with the rationale for a yes or no in this criteria. I don’t know if it is accurate to say that any alternative that includes new construction, regardless of the length, will take more resources than other alternatives. Do you know the amount of ROW and the type of conflicts, costs or challenges that may be encountered in acquiring additional ROW along existing routes? The number of properties, land use and zoning of properties involved would have a big impact on ROW acquisition for existing routes as well as new construction.</p> <p>1A-J. Maximize multi-modal opportunities. The way this criteria is scored – all alternatives getting a yes - renders it rather meaningless. The County bike plan is only one multi-modal consideration. Are some alternatives more compatible with the bike plan or provide better opportunities for multi-modal transportation? Do some alternatives provide more pedestrian friendly environments than others? Case in point – the Coloma bypass alternative would really improve the pedestrian environment in MGDSHP. How do the different alternatives affect or facilitate transit?</p> <p>1A-K. Remedy current and future transportation deficiencies. Again this seems rather meaningless to score them all yes. How is this criteria really any different than criteria 1A-A? Also – is the presumption for the no action that</p>	



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		<p>improvements to the current Hwy 49 alignment are not possible and would not be considered or required?</p> <p>1A – L. Context Sensitive Solutions: Context sensitive solutions “use innovative and inclusive approaches that integrate and balance community, aesthetic, historic, and environmental values with transportation safety, maintenance and performance goals.” This is a broad all encompassing type of goal. I contend that if you dug into the specifics of any of the alternatives you could likely develop the rationale for a yes or a no with regards to this goal. Just selecting new construction or a bridge as the basis for a yes or no to this criteria seems arbitrary.</p> <p>The group 6 and 11 alternatives are the only alternatives which not only get the Hwy 49 alignment out of the park but which also provide the opportunity to eliminate vehicle traffic in the park through the bypass. Why don’t these options get a yes for context sensitive solutions since they provide the greatest sensitivity and consideration to the California gold discovery site – one of the iconic features and locations in the State Park system.</p> <p>1B-A. Cost of Construction. At this point - do you know enough about the costs in order to automatically give a no to any alternative that involves new construction and a yes to all others? As I have indicated above – isn’t this the same as criteria 1A-I and aren’t you doubling up on a yes or no with this redundancy which skews the scoring?</p> <p>1B-B. Not likely to Result in Community Disruption. Again – I disagree with the automatic no for any project involving new construction and a yes for those that may require miles of additional ROW acquisition. How much acquisition is really involved in the group 11 alternatives? How many properties of what type are involved in ROW acquisition in each of the alternatives?</p> <p>1A-C. Not likely to cause adverse, social, environmental, economic or cultural resource impacts. As with 1A-H this criteria includes too many potentially conflicting sub-elements that a yes or no answer is not particularly accurate or meaningful. How do you balance the benefits and reduction in cumulative impacts to the significant cultural resources at MGDSHP in the bypass alternatives with the impacts of the bypass itself? As it is framed, this isn’t a criteria for which you can credibly give a yes or no. Also - how does this criteria differ from 1A-H? They use the same rationale and including this redundancy magnifies the scores – both yes and no – for these two criteria.</p>	



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		<p>Finally, since this is a very preliminary type of study and not an EIR/EIS - I am wondering about the purpose of the study and the screening. Should a study of this type look at alternatives, which maximize the key goals or focus on those that are likely to meet the least resistance or are least costly? With the current screening will you wind up looking at a few fairly similar alternatives? Is that the purpose or value of this type of study?</p> <p>From State Parks perspective (which we acknowledge may be narrow) what would be most valuable to us in this study is an evaluation of a at least one alternative which met both of the key circulation goals in the MGDSHP: re-aligning Hwy 49 out of the park and the Coloma bypass which would allow for elimination of through traffic in the park.</p> <p>I appreciate the opportunity to provide further input and we welcome additional discussion. Thanks, JM.</p> <p>Jim Michaels, Senior Park & Recreation Specialist Gold Fields District</p>	
6/29/09	Scott Chadd	<p>Good morning Dan, I am going to keep my comments very brief and some may be redundant to earlier e-mails.</p> <ol style="list-style-type: none"> 1. There is a major proportion of the Tax Payers who do not think that this study should be proceeding. They are concerned about the "feasibility" of doing a large enough project to actually improve the situation, the fact that study area begins at the intersection of Lotus Road and Hwy. 49 and ends in the town of El Dorado, there are already 2 or 3 of these studies (some of the work is actually quite good), and cost. 2. As I have said, be ready for a large and raucous meeting the next time you offer the public a chance to share with you. I guess this next public meeting will be after our August committee meeting? 3. As Randy said at our meeting this project looks a lot like a staff driven effort. The taxpayer were curious about who among the great number of citizens that will be affected, should this go forward, have been applying pressure to get "something" done. There is a sentiment that this is a pretty timid approach to a major transportation problem in the region; and if we are going to do something why don't we do it boldly. 4. Jack Sweeney shared his perspective that the State has told us they will not let us construct, or plan, "spot improvements" until there is an adopted alignment. This makes sense to me but are there not existing "adopted 	



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		<p>alignments" for Hwy. 49 all the way through El Dorado County? 5. Last, but not least, when we met on 6-24-09 I recall Mr. Keith Rhodes of TYLI consultants suggesting that this project could go forward with "some minor widening and partial re-alignments" as a way to reduce the social, cultural, environmental, and economic impacts. As a member of the guild with lots of arrows in my hat, I speak from experience. Without an outspoken, articulate and powerful "public" (meaning private citizens) coalition pushing really hard for your agenda this baby is DOA.</p> <p>PS: what is next with the RTIP?</p>	
7/7/09	Martha Skye	<p>Why is your comment sign on Mother Lode at Greenstone? Why isn't it in EL DORADO??? I saw a bit of it on the way to Fair Oaks, turned off on Greenstone coming home and looped back west on that arterial and could not stop to write down your web address as it would have been illegal to do so. I got lucky in remembering it.</p> <p>I am 100% against what you're doing on 49 south of El Dorado. I didn't know about it until it was too late to comment. What are you going to do with the oak trees? Since they must go, are you going to trash them or give the wood to needy folks?</p> <p>After all, Obama's going to make heating our homes expensive!</p> <p>Pissed off,</p> <p>Martha Martin El Dorado, CA</p>	<p>Martha,</p> <p>Thanks for your interest in the SR 49 Realignment Study. The work taking place on SR 49 south of El Dorado is a Caltrans project (Logtown Project) and EDCTC is not involved. Regarding the placement of the project information sign, we placed 8 signs between Coloma and El Dorado with the intent of informing as many people as possible who travel within the project area. Please let me know if you have any other questions about the project.</p> <p>Thanks, Dan</p>



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7/11/09	Carl and Janet Brockman	<p>Please forward information regarding the State Route 49 Realignment project. We live in the Sleepy Hollow subdivision and we are very concerned that your Realignment of State Route 49 will bring much more traffic past our Sleep Hollow subdivision entrance. Our residents already have a safety problem when turning left to merge onto Green Valley Road from our subdivision entrance at Oakvale Drive.</p> <p>There is a DOT planned project that is close to our subdivision entrance that will put a stop light at North Shingle Road and Green Valley Rd. This project also widens a narrow bridge located just prior to our entrance. DOT says it will not widen Green Valley Rd. ...or put a left turn lane in front of our subdivision entrance. This area is where there is definitely a safety problem from fast traffic coming west along Green Valley Rd. ...because there is a very short line of sight for vehicles approaching Oakvale Drive (our entrance).</p> <p>If DOT decides to go forward with this Realignment project, we believe that widening Green Valley Rd.....and providing a two way left turn lane in front of our Sleepy Hollow subdivision entrance is imperative for the safe ingress and egress to our community. Also, without major improvements, North Shingle Rd is inadequate to handle heavy thru traffic. There are no usable shoulders, no left turn lanes, and it is a narrow two-lane roadway.</p> <p>Sincerely,</p> <p>Carl and Janet Brockman</p>	<p>From: Dan Bolster Sent: Tuesday, July 14, 2009 9:40 AM</p> <p>Carl and Janet, Thanks for your interest in the State Route (SR) 49 Realignment Study. The study, which is scheduled to be completed in December 2009, is a high level transportation planning study that will identify 3 potential alternative alignments of SR 49 between Coloma and El Dorado. Following the completion of the study there will be several more project phases over the next 6 to 10 years with opportunity for public input before construction of a new alignment would take place. Public outreach is a key component of the SR 49 Realignment Study and the study is using a combination of public meetings and a Stakeholder Advisory Committee (SAC) in an effort to directly involve the public in the process of identifying potential alternative routes. The first public meeting was noticed in the Sacramento Bee and Mountain Democrat, on the EDCTC website, and over 1000 flyers were distributed within the local community. The meeting was held on April 30th at the Marshall Room at the El Dorado County Fairgrounds and was attended by over 130 members of the public. A second public meeting will be held in September at a location, date, and time yet to be determined. The SR 49 Stakeholder Advisory Committee (SAC) is made up of representatives from the following 22 groups and organizations within the project area:</p> <ul style="list-style-type: none"> • Broadway Village Association • California Outdoors • California State Parks - Gold Fields District • California Trucking Association • Coloma Lotus Valley Community Association • El Dorado Citizens for Smart Growth • El Dorado County Office of Education • El Dorado Youth Commission • El Dorado County Parks and Recreation Commission • El Dorado County Chamber of Commerce • El Dorado County Historical Society • EDC Office of Emergency Services • El Dorado Union High School District • Farm Trails • Friends of the Diamond Springs-ED C • Greenstone Country Owners Association • No Gridlock Committee • Placerville Drive Business Association • Placerville Downtown Association • Sierra Club Maidu Group • Taxpayers Association of EDC • Trails Now <p>Each group / organization listed above has one representative that attends SAC meetings to represent their group's interests in the study and to relay information discussed at the SAC meeting to their constituents.</p>



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			<p>Currently there are 6 SAC meetings scheduled to be held during the course of the study, with 4 already having been held and the next 2 scheduled for July and August. The material discussed at SAC meetings can be found on the project website at: http://www.edctc.org/SR49Realignment.htm. Let me know if there is one of the SAC groups / organizations that you want to become involved with and I will put you in contact with their SAC representative.</p> <p>52 potential alternative alignments of SR 49 between Coloma and El Dorado have been identified based on input EDCTC received at the April 30th Public Meeting, SAC meetings, and from comments submitted directly to EDCTC. After the Level 1 Screening process conducted at SAC meeting #4, the list of 52 potential alternative alignments was reduced to 11 potential alternative alignments for evaluation during the Level 2 Screening process. The goal of the Level 2 Screening Process is to narrow the list of potential alternatives to no more than 3 potential alternative alignments to undergo preliminary environmental and engineering analysis during the remainder of the study. The final 3 alternatives will be discussed at a public meeting during September. The time, date, and location of that meeting have yet to be determined. If you would like to be added to the project email distribution list to automatically receive project updates, go to the project website and under "Public Involvement Opportunity" click "here" to go to a comment form that will give you the option of being added to the project email distribution list. By being on the distribution list you will receive updates to the project website, including information about any upcoming public meetings. Let me know if you have any other questions.</p> <p>Thanks, Dan</p>



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DATE	NAME	COMMENTS	RESPONSE/ACTION
7/11/09	Richard Boylan	<p>Dan,</p> <p>As I expressed at the first meeting of the realignment study, <u>all</u> members of El Dorado County are "stakeholders", not just the lobby groups. This is the first I have heard of the subsequent four meetings. Is the 49 Route "conclusion" preordained, or is there a real process that <i>average</i> citizens can have an input into?</p> <p>In the light,</p> <p>Richard Boylan, Ph.D.</p> <p>Richard Boylan, Ph.D., LLC Diamond Springs, CA</p>	<p>From: Dan Bolster Sent: Monday, July 13, 2009 11:14 AM</p> <p>Richard,</p> <p>Thanks for your interest in the State Route (SR) 49 Realignment Study. The purpose, composition, and number of meetings of the SR 49 Stakeholder Advisory Committee (SAC) was discussed at the April 30th Public Meeting (see the attached Project Org Chart that was displayed and discussed at the meeting). While all residents of El Dorado County are "stakeholders" in the project, it is not feasible to conduct stakeholder meetings for the county as a whole. Therefore, in an effort to directly involve the public in the process of identifying potential alternative routes, the SR 49 Realignment Study is using a combination of public open houses, such as the one held on April 30th, and SAC meetings to gather input from the public. Based on comments that you and others made at the public meeting on April 30th, the EDCTC Board expanded membership of the SR 49 SAC from the 19 groups and organizations shown on the attached org chart to the following 22 groups and organizations within the project area:</p> <ul style="list-style-type: none"> • Broadway Village Association • California Outdoors • California State Parks - Gold Fields District • California Trucking Association • Coloma Lotus Valley Community Association • El Dorado Citizens for Smart Growth • El Dorado County Office of Education • El Dorado Youth Commission • El Dorado County Parks and Recreation Commission • El Dorado County Chamber of Commerce • El Dorado County Historical Society • EDC Office of Emergency Services • El Dorado Union High School District • Farm Trails • Friends of the Diamond Springs-EDC • Greenstone Country Owners Association • No Gridlock Committee • Placerville Drive Business Association • Placerville Downtown Association • Sierra Club Maidu Group • Taxpayers Association of EDC • Trails Now <p>Each group / organization listed above has one representative that attends SAC meetings to represent their group's interests in the study and to relay information discussed at the SAC meeting to their constituents. To date, 4 of the scheduled 6 SAC meetings have been held with the remaining 2 meetings to be held in July and August. Let me know if there is one of the SAC groups / organizations that you want to become involved with and I will put you in contact with their SAC representative.</p>



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			<p>52 potential alternative alignments of SR 49 between Coloma and El Dorado have been identified based on input EDCTC received at the April 30th Public Meeting, SAC meetings, and from comments submitted directly to EDCTC. After the Level 1 Screening process conducted at SAC meeting #4, the list of 52 potential alternative alignments was reduced to 11 potential alternative alignments for evaluation during the Level 2 Screening process. The goal of the Level 2 Screening Process is to narrow the list of potential alternatives to no more than 3 potential alternative alignments to undergo preliminary environmental and engineering analysis during the remainder of the study. The 3 alternatives will be discussed at a public meeting during September. The time, date, and location of that meeting have yet to be determined. Please let me know if you have any other questions. Thanks, Dan</p>



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7/14/09	Doug Walker	<p>Dan:</p> <p>At the last meeting, I understood you to ask us to make revised recommendations as to our (and our constituents) recommendations for the realignment. Well, here goes, another alternative.</p> <p>First, most people I've spoken with (and myself) feel that our screening of routes is based on a somewhat false premise, that commuter traffic and commercial traffic is moving north/south on Hwy 49 between Coloma and El Dorado.</p> <p>We don't believe this to be the case. After 30 years with EDC DOT, years of patrolling 200 miles a day in the County, I (and others I've talked with) have noted that the commercial and commuter generally does not cross Hwy 50. Truck traffic and commuters from Coloma turn onto Hwy 50 and head for Sacramento, and Sacramento generated commuters and commercial traffic comes to Coloma via Hwy 50.</p> <p>The same is true for commercial and commuter traffic from El Dorado and points south. They follow Pleasant Valley Road to Highway 50, hence to Sacramento and back again. The traffic on Hwy 50 that crosses SR 50, at grade, in Placerville (as opposed to that which turns onto SR50) appears to consist primarily of locals accessing downtown Placerville, and tourist traffic following "Golden Chain 49". These folks aren't going to want to NOT be routed through Placerville, nor does Placerville want to lose them. All of the historical sites on Hwy 49 should remain linked by Hwy 49's "Golden Chain", Coloma, Placerville, Diamond Springs and El Dorado.</p> <p>Cold Springs Rd might be used as a realignment to a portion of the historical Hwy 49, as it was a more historical route and would add in the historical towns of Cold Springs and Gold (Granite) Hill, without impacting the historical connection of the current route. Any of the other suggested realignments would certainly damage the historical integrity of the route, and eliminate the current educational/recreational touring experience. To resolve the commuter/commercial traffic issues, two "Hwy 49 truck routes" could be created, which would NOT meet at SR 50:</p>	<p>From: Dan Bolster Sent: Tuesday, July 14, 2009 1:47 PM</p> <p>Doug,</p> <p>Thanks for taking the time to discuss the project with other people who are interested in it and have experience driving the corridor. We'll take a closer look at what you've suggested to see how the current segments and alternatives may address the issues you've described.</p> <p>Thanks, Dan</p>



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		<p>1- Widen and improve the Lotus Rd., Green Valley Rd, South Shingle Road route currently being used by many commuters and trucks, from the American River bridge to Shingle Springs overcrossing. It would be nice if a new road could be built around the south side of Lotus, and even a new bridge aligned with Bridge Street, with the Hennigsen Park relocated a bit.</p>	
7/22/09	Michael Scariot	<p>As a lifetime resident of Placerville and living on Highway 49 north of Placerville all of my life it is exciting to see realignment being considered to relieve the congestion. Many times we have had very close and some critical accidents occur in our neighborhood due to people traveling at high speeds. I would also look forward to less motorcycle traffic, which in turn would lead to less noise pollution. By my memory this is not the first time realignment has been considered. Wasn't there a time in the 1970's that there was some surveying performed to reroute in the Cold Springs area? I know the city business people will cry as they always do, but please look at the whole picture.</p> <p>Thank you MIKE SCARIOT</p>	
7/24/09	Carol Patton	<p>Hi Dan, Keith, et all,</p> <p>I have a question regarding the summary page. Will the various alignments be ranked with the cumulative total from each page? Or will the alignments just carry forward their placement from that page? Remember the discussion on the amount of traffic criteria (18 cells on page 1 alone)? If one alignment scores really good on peak travel time and peak corridor speed and if the cumulative total was carried forward to the summary, then no matter what the scoring from the other pages, they could never catch up. Do you understand my concern?</p> <p>And I still have an issue with splitting apart traffic-dependent businesses and not-traffic dependent businesses. Historic Main St is a mix of businesses that feed off of each other. If tourism traffic is re-routed away from Main St, ALL the businesses will be affected. You are making an assumption that a lawyer's office will not be affected and I would counter with, if Placerville Clothing Company goes out of business because of the lack of traffic, I would not be able to use Chris Shampo as my lawyer. Or people on vacation staying at the Cary House will still need a bank, a dry cleaner, a hair salon, maybe even a realtor. I would like those cells to be merged so the total of "non-tourist" businesses doesn't reduce the impact total...Perhaps my concern would be better addressed in the CEQA Documents? On the other hand, if the</p>	<p>From: Dan Bolster Sent: Monday, July 27, 2009 11:47 AM</p> <p>Carol,</p> <p>The alignments will be ranked based on the total score from each page. Notwithstanding the economic synergy and connection shared by Main Street businesses, for the purpose of analyzing the potential impact of a potential realignment alternative on downtown businesses, the SR 49 Realignment Study needs to determine if the effected downtown businesses serve primarily local customers or if they are dependent on through-highway traffic. It also needs to be seen whether or not a decrease in truck and auto congestion would enhance pedestrian safety and make local residents more willing to go downtown because of an environment made more conducive to shopping. As Keith and I said at the last SAC meeting, let's go through the Level 2 Screening process and see what the results look like and see what criteria, if any, that may need to be refined.</p> <p>Thanks, Dan</p>



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		<p>alignment is re-routed to Ray Lawyer Dr / Placerville Dr, where are you calculating the businesses that will benefit?</p> <p>Carol Patton, secretary PDA owner, Placerville Clothing Co</p> <p>Carol</p>	
7/28/09	Lauren Cockrell	<p>Dan-</p> <p>I will not be able to attend the last meeting due to a Farmer's Market I am a vendor for. I truly enjoyed the experience and want to thank you for including the youth. I will be attending UC Davis next year, but if planning/involvement with stakeholders continues please contact Carol Martin for a new representative.</p> <p>Thank you and I wish to no longer be on the e-mail list</p> <p>-Lauren Cockrell</p>	<p>From: Dan Bolster Sent: Tuesday, July 28, 2009 1:51 PM</p> <p>Lauren,</p> <p>Thanks for participating in the study, and it was our pleasure to have you as a member of the SR 49 SAC. I'll remove your name and email address from the SAC distribution list. Best wishes at UC Davis.</p> <p>Thanks, Dan</p>
8/17/09	Bob Casper	<p>Hello Dan,</p> <p>Several weeks ago when you sent me the Draft purpose and need of SR49 realignment, I have been studying it. I broke it down in to benefits and priorities in my mind. I looked for key deliverables to try to get my mind around what needed to be accomplished, based upon the draft statement. So here is what I came up with:</p> <p>Priorities (this is what I, pulled out as priorities, the order is not weighted):</p> <ul style="list-style-type: none"> • Safe and efficient transportation of people and goods • Maintain historical culture and natural resources <p>Goals:</p> <ul style="list-style-type: none"> • To eliminate the existing HWY 49 through Marshall Gold Discovery Park. • To eliminate at grade of intersection of HWY 49 and HWY 50 in Placerville. • To eliminate any alignment through densely populated residential areas, business districts, the City of Placerville, Diamond Springs and El Dorado. <p>Based upon the proposal it appears that the studies need to include and consider, sharp curves, steep grades, commercial traffic patterns for both regional and local businesses.</p> <p>Assumptions: The current road conditions are not adequate to handle our</p>	



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		<p>modern transportation requirements and are causing congestion and unsafe traffic conditions.</p> <p>Based upon my observation of the stated purpose and the goals listed in the draft of the purpose statement, the objective can be met by avoiding all of the described locations listed there in. If HWY is diverted to Lotus road, that would bypass Marshall Gold Discovery Park, utilizing North Shingle or Green Valley road and connecting to Motherlode or Pleasant Valley road would meet the needs of the above draft proposal, at least to 90% of the goal. However, at the meeting there were many other issues that we brought out as concerns, so I strongly recommend that the draft purpose and need be revisited, because it does not properly describe the true needs of the community based upon the stakeholders feedback.</p> <p>I believe that there are many hidden agendas in this proposal and for any proposal to fly they need to be brought to the forefront discussed and gain closure. Otherwise this committee is just going to spin its wheels.</p> <p>Some of the hidden agendas:</p> <p>Marshall Gold Discovery Park wants to reroute and upgrade the roadways in the park. If HWY49 is rerouted, then this program would not need to fund these improvements because HWY49 could completely by pass the park thus saving millions of dollars in this particular project. However the park does not have the funds to make the improvements needed so they somehow want this program to fund their needed improvements. So what are we going to do about this?</p> <p>Businesses in Coloma, Diamond Springs, El Dorado, and Placerville do not want the reroute to hurt or impede their businesses by losing potential customers. While the proposal states clearly to remove HWY from the above cities, the business owners want the HWY to be in very close proximity to draw business. There again is another contradictory statement. What are you doing about this?</p> <p>Some terms need to be clearly defined- densely populated areas (need ranges, what is considered a densely populated area)? Define not adequate (number of cars on the road, time to travel from a to b, number of accidents, etc).</p> <p>Dan, while I know that you have extensive charts, outlining all of the different realignment options and concerns, with weighted averages. I believe that you need to get back to some basic fundamentals before the team can move forward. I do not believe that the key stakeholders and the leaders of this community are on the same page. I know that you are attempting to get input and cooperation from the group at large, however, you are deeply involved with all of the details and are privy to many issues that none of us are. I think</p>	



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		<p>that it would be to your best interest to disclose some of the concerns that you are continually confronted with; and try to get an empathetic ear from the stakeholders.</p> <p>After all when you put this proposal up for approval, you do not want a lot of resistance. There are hundreds of conflicting goals that will never be met, so you need to figure out how you can marshal the group as a whole and get them moving toward a common goal.</p> <p>At the present time, I get the feeling that you believe that you are making progress with the group, but people are absorbing this information in a couple of hours; in which you have weeks to review and mull over. I do not believe that they are really on board. I think you need to spend more time explaining options and allowing individuals to give feedback.</p> <p>You went from 52 to 11 alternatives very quickly and I am not sure that this process was successful. While you are trying to get the best conclusion for everyone, and you are under time constraints to do this, everyone needs to feel that their options were considered and if discounted. This takes time and a lot of it. However in the end a happy panel will be well worth your efforts. Remember this panel will be your advocates or your adversaries in the public's eye. And as you know this project will go on for a very long time, ten plus years. You want the majority of the community to be behind you, not the minority, or it will be a uphill battle all the way. And every miscue will be highlighted in great detail to show the public how this was not well thought out. You nor I want this to happen.</p> <p>Just some thoughts from a very small voice in the community. Unfortunately I will not be able to attend the meeting on August 20, 2009. I have a personal matter that needs to be taken care of.</p> <p>I do think that you and the committee are doing a good job. I have many years of dealing with these types of large programs spanning over many diverse groups and having different agendas and goals. So I am giving you an observation from the many years of hard learned lessons throughout my work career. I worked at Intel Corporation for 30 years supporting worldwide programs, it is always a challenge to get everyone on the same page; I can feel the pain. But trust me it can be done.</p> <p>Sincerely and warm regards, Bob Casper</p>	



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9/12/09		<p>Everyone who lives and travels on these two routes is there by choice, has evaluated the conditions and made a decision. The status quo means that nothing is changed, no one gets any nasty surprises. Change the route and some people will be happier and some less happy. Leave it alone and no one can complain.</p> <p>The desire for county transportation to "tinker" with the road alignment is just that. Everyone is adjusted to 49 the way it is, so leave it alone and avoid upsetting a lot of people on both routes.</p>	
9/10/09 8:32 PM	Audrey Paye	Please add me to your e-mail list.	<p>From: edctc Sent: Friday, September 11, 2009 10:22 AM</p> <p>Audrey,</p> <p>I do have a list for that project, and we send notices meetings taking place or updates. You can also keep an eye on our web page for project information http://www.edctc.org/SR49Realignment.htm We try to keep it up to date.</p> <p>I will add your e-mail to that list for updates.</p> <p>Joni</p>
9/13/09	Bob Johnson	<p>Dan,</p> <p>I will be out of the country on Sept. 28th and will not be able to attend. I have spoken with Sierra Club people about the alternatives and at this time we feel that Alternative 2 would be the preferable alternative if Hwy 49 is to be re-aligned. This alignment is the shortest distance wise and requires the least amount of time to travel. It also keeps Hwy 49 relatively close to Placerville and would require less widening and straightening than many other alternatives. By using Greenstone Rd., rather than continuing on Green Valley Rd., the alternative avoids passing schools.</p> <p>Thank you for the opportunity to participate in this process. Please inform me if there are any meetings scheduled after Sept 28th.</p>	
9/23/09	Mark Hamlin	<p>Dan,</p> <p>I'll be honest, I only care about one thing regarding this realignment. That one thing is not in my backyard!</p>	<p>From: Dan Bolster Sent: Wednesday, September 23, 2009 5:00 PM</p> <p>Mark,</p>



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		<p>I live near Lotus Road, which is one of your proposed alternatives. From what I know of the area, Lotus Road is likely to become the chosen new route. I've lived here since 1985, and have listened to the traffic noise grow from minimal to substantial and nearly constant. You may have measurements on this.</p> <p>I have read the home page. Nowhere does it mention considering the impact on existing residents in rerouted areas. Someone else's relief now becomes a different person's annoyance. I look at your Home page picture of the logging truck and take it a little different than you probably intended: my neighbors and I will get to hear more jack brakes rolling down the grade from Gold Hill.</p> <p>This is not fair. I knew when I bought property near Lotus Road that it was a transportation corridor. I should have no complaints so long as it is not turned into something different such as a New State Highway. Similarly those on Hwy 49 bought property, knowing fully that it's a State Highway, and as far as I'm concerned they can live with it, curves and all.</p> <p>I am opposed to rerouting Hwy 49 to Lotus Road. I recommend that you revise your background statement to include consideration of the impact on neighborhoods in the rerouted areas. Rerouting is not all positives as the home page portends.</p> <p>Sincerely,</p> <p>Mark Hamlin</p>	<p>Thanks for your comments. The Purpose and Need Statement developed for the project includes consideration of the project's potential impacts to existing residents. The yellow highlighted section below references minimizing "cultural" impacts, which include impacts to communities and residents in the project area.</p> <p style="text-align: center;">DRAFT PURPOSE AND NEED</p> <p>State Route 49 (SR 49) provides a regional and interregional route for the movement of goods and people within El Dorado County. The purpose of the SR 49 Realignment Study is to evaluate potential alternative alignments for the safe and efficient transport of goods and people (i.e. tourists and local traffic) along SR 49 from Coloma to the community of El Dorado while minimizing impacts to historic, cultural, and natural resources.</p> <p>The study is needed to evaluate potential alignments that will eliminate the existing alignment of SR 49 through Marshall Gold Discovery State Historic Park and the at-grade intersection of SR 49 and Route 50 and will respond to current and projected regional and local traffic demand on the state and local road systems along SR 49 and U.S. Highway 50, especially through densely populated residential areas and the business districts of the City of Placerville and the communities of Coloma, Diamond Springs, and El Dorado. The sharp curves and steep grades of the existing alignment within the study area, in conjunction with the commercial traffic combined with regional and local traffic, are not adequate for modern transportation demands, resulting in congestion and reduce traffic safety for vehicle, bicycle, and pedestrian travel. The study will focus on the use of existing roads to reduce the amount of resources necessary to achieve improved conditions in the SR 49 corridor and support the adopted general plans of El Dorado County, City of Placerville, and the Marshall Gold Discovery State Historic Park.</p> <p>In addition to the consideration the Purpose and Need Statement gives to minimizing the project's potential impact on existing residents, the Level 2 Screening Criteria that will be used to evaluate the final three potential alternative alignments will evaluate an alternative's potential impact on noise levels for residents and its potential impact on existing housing. The Level 2 Screening Criteria is currently in draft form. Once it has been finalized it will be posted on the EDCTC website and will be available for you to view. EDCTC is holding an Open House on Wednesday, October 14 to discuss the SR 49 Realignment Study with the public. I've attached a flyer that provides details about the meeting. Please let me know if you have any questions.</p> <p>Thanks, Dan</p>



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9/26/09	Lee Bunyard	<p>Hello. I've been looking at your website info on the study underway on possible realignment of Highway 49. I notice that there is info indicating that the number of possible realignment routes has been reduced to three but I didn't find anything that indicates what the three routes are. Is that info available somewhere on your website or elsewhere online?? Thanks.</p> <p>Lee Bunyard Resident of Sleepy Hollow near Rescue</p>	<p>Sent: Monday, September 28, 2009 8:23 AM</p> <p>Lee,</p> <p>Thanks for your interest in the SR 49 Realignment Study. Information about the final 3 alternative alignments, including descriptions and maps, is still being developed for the October 14th Public Open House (see attached flyer). Once those materials have been finalized they will be posted to the project website no later than one week prior to the October 14th Public Open House.</p> <p>Thanks, Dan</p>
9/29/09	Don Jassowski	<p>Dear Mr. Bolster:</p> <p>What is the typical right-of-way width planned for the Route 49 realignment, in particular for Alternative Group 2, along Green Valley Road and Greenstone Road? Will the roadway be as massive as the recently finished Sutter Creek bypass?</p> <p>Thanks for your help.</p> <p>Don Jassowski</p>	<p>From: Dan Bolster Sent: Tuesday, September 29, 2009 12:25 PM</p> <p>Don,</p> <p>The standard configuration for a two-lane state highway facility is two 12-foot travel lanes with 8-foot shoulders. However, Caltrans provides for "design exceptions" where the standard two-lane configuration is not feasible. The SR 49 Realignment Study is the first step in gathering the information necessary to identify potential alternative alignments of SR 49 between El Dorado and Coloma. Part of that effort includes gathering information to identify potential design exceptions in specific locations along the three alternative alignments that are being analyzed during the remainder of the study and that will be further analyzed in future project phases.</p> <p>Thanks, Dan</p>



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9/30/09	Zach Blair	<p>To Whom It May Concern,</p> <p>Can you provide me with the 3 potential alternatives for review prior to the meeting?</p> <p>Thanks, Zach</p> <p>Zachary W. Blair, J.D.</p>	<p>Dear Mr. Blair:</p> <p>Thank you for your interest in the Realignment Study and the current 3 potential alternative alignments. You can locate the information that will be presented at the public meeting on the project web site at www.edctc.org. Click on Roadway and find the Realignment Study link to get to the project page. Once there, go the Stakeholders Advisory Committee link and click to get to the materials. The information you desire is listed under SAC #6.</p> <p>If you have further questions, please do not hesitate to ask. We look forward to seeing you at the Public Open House on October 14th.</p> <p>Kim Pallari Director Community Relations HDR The Hoyt Company</p>
10/9/09	Alice Rush	<p>Hi EDCTC,</p> <p>I am a resident of Placerville, and I was wondering if you've considered widening 49 and creating a bike and pedestrian path along highway 49 from Coloma to main street Placerville- as part of your Highway 49 Realignment Study? Did you know we are eligible to go after stimulus money for a bike/pedestrian path along 49 as a very real way to reduce carbon emissions by allowing people alternatives to driving our cars, allowing residents to bike and walk to school and to downtown Main street. Currently, it is unsafe for even our children to walk home from the bus stop along 49 -so we cannot even have our children take the bus safely (children that go to Gold Trail School, El Dorado High School AND Markham Middle School would all be positively impacted). I would be glad to donate my time to help in this process and going after these funds our community is in perfect alignment to be awarded. A bike path would not only be wonderful for our health, for the safety of our children and adults in our community, but also to protect our environment from unnecessary additional pollution- driving kids to and from school, or to downtown shopping. This would also be wonderful stimulus for downtown businesses and tourism (since Coloma to Placerville is a popular tourist route). I know other communities have accomplished this, creating bike and pedestrian paths. I know we can do this. What do you think?</p> <p>Alice Rush, MA, MCC</p>	<p>From: Dan Bolster Sent: Monday, October 12, 2009 10:28 AM</p> <p>Alice,</p> <p>Thanks for your interest in the State Route (SR) 49 Realignment Study and the availability of bicycle and pedestrian facilities on SR 49. The study has not specifically considered creating a bicycle and pedestrian path along SR 49 from Coloma to Main Street Placerville. However, any alternative alignment of SR 49 identified by the study will be consistent with the El Dorado County Bicycle Transportation Plan and will be analyzed for the feasibility of bringing it up to state standards for a two-lane state highway: two twelve-foot travel lanes with eight-foot shoulders on each side of the road. The eight-foot shoulders would provide room, where feasible, for Class II bike lanes. To see a map of the study area showing the potential alternative alignments and the existing and proposed bicycle facilities go to: http://www.edctc.org/SR49Realignment.htm</p> <p>EDCTC has been aggressively pursuing American Recovery and Reinvestment Act (ARRA) funds ("stimulus money") for bicycle and pedestrian facilities and other transportation projects in El Dorado County. EDCTC has been awarded \$5.175 million for the construction of a bicycle and pedestrian facility that will be constructed in the coming year on the eastbound Weber Creek Bridge on US 50. The facility will facilitate bicycle and pedestrian access between Placerville and Diamond Springs and</p>



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			<p>will provide students and commuters safe routes to school and work. EDCTC has also received approximately \$4.5 million in ARRA Rural Surface Transportation Program funds to overlay and repair several county roads and city streets. Additionally, EDCTC recently applied for \$20 million in ARRA TIGER funds to extend the east and westbound US 50 HOV lanes from Bass Lake Grade to Ponderosa Road.</p> <p>A request for ARRA funds to construct a bicycle and pedestrian path on SR 49 between Coloma and Placerville, while locally appealing, would not be a very competitive project at the federal level (ARRA funds are federal) due to the lack of significant population and activity centers at each end of the project and the relatively low reduction in carbon emissions that would result from the project.</p> <p>Thanks, Dan</p>
10/13/09	Deborah Kruse	<p>Please include me on email list. Although I currently live in Sacramento County, I own land within about 2 miles of highway 49 and plan to build on it within next 4-8 years.</p> <p>Thank you.</p>	
11/3/09	Forrest G. Lewallen	<p>I live on Quartz Creek Lane near the intersection of Lotus and Gold Hill Roads. I am familiar with the traffic conditions of both roads and the three proposed routes under consideration for the Hwy 49 realignment. Both Gold Hill and Cold Springs Roads are very busy with school related traffic for Sutter Mill and Gold Trail schools in the mornings and early afternoons. These two roads, also, have several curves and steep grades. Tour bus and large truck drivers, along with daily commuters, have already adopted Lotus and North Shingle Roads as a route to access Hwy 50 and avoid driving through the town of Coloma. The reason for this is primarily because Lotus and North Shingle Roads are wider, have fewer elevation changes, curves and the speed limits are higher.</p> <p>I believe that including Gold Hill and Cold Springs Roads in the new realignment should be avoided. A better choice for an alternate route would be to follow Lotus and North Shingle Roads, Mother Lode Drive and Pleasant Valley Road to Hwy 49 in El Dorado.</p> <p>Please notify me of any future public meetings regarding the propose</p>	<p>From: Pallari, Kim Sent: Tuesday, November 03, 2009 10:31 AM</p> <p>Dear Mr. Luwallen:</p> <p>Thank you very much for your email regarding the State Route 49 Realignment Study. We appreciate your comments and interest in staying involved in this process. I have copied Dan Bolster, Project Manager for the EDCTC for this project on this email so that he can respond to your comments.</p> <p>We will also include your comments into our summary of comments for the project and ensure that you are included in the database for future information dissemination.</p> <p>Thank you again for taking the time to email us your thoughts, it is important for us to hear from the local residents.</p> <p>Kim Pallari Director Community Relations</p>



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		<p>realignment.</p> <p>Thank you,</p> <p>Forrest G. Lewallen</p>	<p>HDR The Hoyt Company</p> <p>From: Dan Bolster Sent: Tuesday, November 03, 2009 10:38 AM</p> <p>Forrest,</p> <p>As Kim said, thanks for your interest in the State Route 49 Realignment Study and for providing us with your comments. The study is the first step in developing an alternative alignment for SR 49 between El Dorado and Coloma an important function of the study is to gather as much information about potential alignments as possible. Your comments will add to the information already gathered and will included in the study to help inform the further evaluation of alternatives during the next phase of the project. Please let me know if you have any questions.</p> <p>Thanks, Dan</p>
11/13/09	Karen	<p>Would like to have a presentation to her Home Owners Association. Scheduled presentation for Tuesday January 19th at 7:00 p.m. Dan Bolster coordinated presentation and responded to call.</p>	
11/22/09	Stanley Price	<p>From: Stanley Price Sent: Sunday, November 22, 2009 6:25 PM Subject: Re: SR 49 Realignment Study</p> <p>Dan,</p> <p>Here are my comments on the Highway 49 realignment study. There should be a provision for comments to be captured during the discussion after the presentation. Let that explain the delay.</p> <p>Highway 49</p> <ol style="list-style-type: none"> 1) Highway 49 is a North/South route. East/West travel should not have weight in the analysis. 2) A significant stake holder, the recreational road cyclist, was not included in the stake holders group. I have previously made this comment. 3) Utilize context sensitive design. 4) Roadway shoulders should not be constant width. Downhill, cyclists go fast, and need to take the lane on downhills and do not slow traffic, while on uphill, cyclists require wider shoulders. Cyclists have a need to pass other 	



**State Route 49 Realignment Study
Hotline/Website Comments Matrix**

DATE	NAME	COMMENTS	RESPONSE/ACTION
		<p>cyclists on hills.</p> <p>5) Overlay circulation patterns and paths for all modes, Transit, Pedestrian, Cyclists, Vehicles, and Commercial Vehicles.</p> <p>6) Do not build in quick access from the Sacramento region to Coloma. Safe, convenient, useful to all modes, but not to enhance development, and long commutes.</p> <p>7) The design speed of the road should be the anticipated speed limit. Do not encourage speeding by facilitating high speeds.</p> <p>8) Make existing SR 49 from Marshall to US 50 (and possibly further South), a historical highway. Part of the Golden Chain. Travel on historic Highway 49 should be at moderate speed allowing travelers to enjoy their surroundings</p> <p>9) Facilitate Stage Coach and Wagon rides on existing 49.</p> <p>10) A way to limit and slow traffic through the Marshall Park is to limit the speed of the traffic to the speed of a horse drawn vehicle.</p> <p>11) Facilitate transit stops (existing and future), with provision for road crossing to and from buses (school, public and private).</p> <p>12) The road that you are working on is not an interregional road. This road is for local access, that can be confirmed by looking to the north (American River Canyon), and the south (Crossing of the Consumnes River).</p> <p>13) Include collision congestion time. This is a current real factor that has been quantified.</p> <p>14) Peak traffic volumes are not a good measure of the roadway need and use unless you wish to facilitate long commutes.</p> <p>15) Higher speeds result in more collisions; higher speeds result in worse collisions. Favor lower speed designs over higher speed designs. As a result, a design with a lower maximum speeds, can have nearly the same trip times with greater safety.</p> <p>Comments by Stanley Price</p> <p>Stanley Price</p>	
7/24/09	Carol Patton	<p>From: Carol Patton Sent: Friday, July 24, 2009 9:45:33 AM Subject: Re: SAC Meeting #5 Meeting Materials</p> <p>Hi Dan, Keith, et all,</p>	



**State Route 49 Realignment Study
Hotline/Website Comments Matrix**

DATE	NAME	COMMENTS	RESPONSE/ACTION
		<p>I have a question re: the summary page. Will the various alignments be ranked with the cumulative total from each page? Or will the alignments just carry forward their placement from that page? Remember the discussion on the amount of traffic criteria (18 cells on page 1 alone)? If one alignment scores really good on peak travel time and peak corridor speed and if the cumulative total was carried forward to the summary, then no matter what the scoring from the other pages, they could never catch up. Do you understand my concern?</p> <p>And I still have an issue with splitting apart traffic-dependent businesses and not-traffic dependent businesses. Historic Main St is a mix of businesses that feed off of each other. If tourism traffic is re-routed away from Main St, ALL the businesses will be affected. You are making an assumption that a lawyer's office will not be affected and I would counter with, if Placerville Clothing Company goes out of business because of the lack of traffic, I would not be able to use Chris Shampo as my lawyer. Or people on vacation staying at the Cary House still need a bank, a dry cleaner, a hair salon, maybe even a realtor. I would like those cells to be merged so the total of "non-tourist" businesses doesn't reduce the impact total....Perhaps my concern would be better addressed in the CEQA Documents? On the other hand, if the alignment is re-routed to Ray Lawyer Dr / Placerville Dr, where are you calculating the businesses that will benefit?</p> <p>Carol Patton, secretary PDA owner, Placerville Clothing Co</p> <p>Carol</p>	
7/24/09	Bob Casper – SAC Member	<p>From: Bob Casper [Sent: Friday, July 24, 2009 10:55 AM Subject: Re: SAC Meeting #5 Meeting Materials</p> <p>Hi all,</p> <p>The more that I think about the re-alignment, and looking at our current road ways, I am not convinced that the re-alignment will significantly alter the traffic flow that goes through Placerville. The existing HWY 49 from Coloma to Placerville is used primarily by the locals. As the truck driver and commercial</p>	





**State Route 49 Realignment Study
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DATE	NAME	COMMENTS	RESPONSE/ACTION
		<p>vehicles that go to Placerville will use the route that impedes them the least in completing there routine routes. Where as the tourist or the travelers will take the route that meets their desires and the purpose of their journey. Unless we re-align through a route that already exists or create an entirely new route that makes the connection from Coloma to Placerville a direct path. Because without a direct path, the drivers will decide the path base upon their specific driving needs.</p> <p>The HWY 50 corridor brings the majority of traffic to and through Placerville, I believe we need to meter the traffic on route HWY 49 from Coloma to Placerville as it stands now. As the direct path between Coloma and Placerville is where most of the diverted traffic will occur. There for metering this path will provide us how much traffic may be lost due to the reroute. Which every re-alignment option is chosen it will need to eventually return to a main artery and once the driver gets to that artery the traveler will then determine the path that they will continue on. If we want the re-alignment to end up in Placerville, then this should be one of the underlying goals and it needs to be put at the top of the goal list.</p> <p>I believe that as one of the spokes person (stake holder) for our community, I need to really understand what our compelling goals are and what we ultimately are wanting to achieve. There might be 20 different objectives and goals that we are trying to meet, but when it comes down to it, at some point priorities will make the final determination. Money could be a decision maker or breaker and in that case many of the wants and desires might just go out the window. I know that this is a study, but I am not sure what is driving the study. Is this project a mandate or is this project a part of a wish list. Is this project a for gone conclusion and is HWY 49 eventually going to be rerouted, or can HWY 49 remain as is; indefinitely?</p> <p>Bob Casper</p>	
5/5/09	Bob Blase	<p>From: rab [mailto:bbikes@att.net] Sent: Tuesday, May 05, 2009 12:08 PM Subject: Coloma bypass road</p> <p>Hi Dan,</p>	<p>From: Dan Bolster Sent: Tuesday, May 05, 2009 3:54 PM Subject: RE: Coloma bypass road</p> <p>Bob,</p>



**State Route 49 Realignment Study
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DATE	NAME	COMMENTS	RESPONSE/ACTION
		<p>I talked to you on the phone last week prior to the public meeting regarding the SR 49 study. I have concerns regarding the impact realignment will have on my Mountain View Dr. home. Are the stake holder meetings open to the public? If so how do I get a information regarding where and when they are? Also where can I get a detailed map showing the 1964/1969 Coloma bypass road that runs along Mountain View ? I got the impression that this option or some form of it is very much on the table.</p> <p>Thanks,</p> <p>Bob Blase</p>	<p>Thanks again for your interest in the study. Attached are two pdf files that comprise Caltrans’s map of the 1964 SR 49 Route Adoption between Placerville and Coloma, also known as the “Coloma Bypass Route.” As you will see, the 1964 map only shows the roads that existed at that time so future roads such as Mountain View Drive are not shown on the map. Here is a brief history of the 1964 SR 49 Route Adoption:</p> <ul style="list-style-type: none"> • Route was adopted by the State Highway Commission (now called the California Transportation Commission or CTC) on March 19, 1964. • Design work began on the new alignment in 1970. • The final Environmental Impact Statement (EIS) was submitted to Caltrans on September 3, 1975. • Prior to EIS approval a prehistoric Native American site (El Dorado No. 58) was discovered within the adopted alignment north of Thompson Hill Road, delaying approval of the EIS. The project was then shelved due to funding constraints. • In 1988 the CTC denied a request by El Dorado County for a \$30,000 engineering study to set line and grade for the Coloma Bypass. Without environmental clearance for the project, the CTC denied the County’s request for funding. • In 1988 Caltrans considered revitalizing the Coloma Bypass Route. The effort was abandoned after a field survey showed that the adopted 1964 alignment had been built-out and was no longer viable. • The 1964 alignment (Coloma Bypass) has not been rescinded due to the time and money required to go through the process and therefore remains in effect even though Caltrans determined in 1988 that it was no longer a viable route. <p>Due to the fact that the 1964 route adoption is still in effect, the SR 49 Realignment Study must consider it as a potential alternative alignment. However, the adopted route has experienced even more development since 1988 so it is unlikely that a route that was not viable in 1988 would be viable today. Nonetheless, the study has to go through the process of formally evaluating the feasibility of the 1964 adopted alignment based on the criteria that all other potential alignments considered by the study will be evaluated by and record the outcome of that evaluation.</p> <p>While the SR 49 Stakeholder Advisory Committee (SAC) meetings are public meetings, the intent of the meetings is for members of the project team to work with SAC representatives in small groups to identify and evaluate potential alternative alignments. You are welcome to attend SAC meetings but only as an observer. I</p>

DATE	NAME	COMMENTS	RESPONSE/ACTION
			<p>encourage you to contact Harry Mercado, the SAC representative for the Coloma-Lotus Valley Community Association. Harry is very involved in and knowledgeable about the Coloma-Lotus community and would be able to clearly represent your concerns at SAC meetings. Harry's email address is: mercado@riverfast.net</p> <p>Please let me know if you have any other questions.</p> <p>Thanks, Dan</p> <div style="display: flex; justify-content: space-around;"> <div data-bbox="1234 516 1297 581">  <p>1964 Route Adoption - Pg 1 .pdf</p> </div> <div data-bbox="1436 516 1499 581">  <p>1964 Route Adoption - Pg 2 .pdf</p> </div> </div>
5/5/09	David Allan	<p>From: David Allan Sent: Tuesday, May 05, 2009 2:49 PM</p> <p>Subject: Route 49 Planning</p> <p>Attention Dan Bolster: Since you are inviting public comment,I decided to respond. An alternative alignment was developed based on the following concepts: - Utilize existing county roads where feasible to avoid new right-of-way acquisition - Missouri Flat Road from Pleasant Valley Road to Green Valley Road . This would provide improved access to down-town Placerville (Rte. 49 from Placerville to Green Valley Road remain as an historic alternative) - Green Valley Road to Lotus Road . Some minor realignment and widening might be necessary - Lotus Road to existing Rte. 49 near Coloma. Access to the State Park would be avoided. Realignment of Lotus Rd might be necessary in order to by-pass the State Park</p> <p>Perhaps these ideas have already been suggested. At least they are worthy of your consideration.</p> <p style="text-align: right;">Sincerely, David Allan</p>	<p>From: Dan Bolster Sent: Tuesday, May 05, 2009 2:55 PM Subject: RE: Route 49 Planning</p> <p>David,</p> <p>Thanks for your comments and interest in the study. At this point no potential alternative alignments have been identified (that will take place later this month and into the summer) but your suggestions will be considered.</p> <p>Thanks, Dan</p>



**State Route 49 Realignment Study
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DATE	NAME	COMMENTS	RESPONSE/ACTION
5/1/09	Debbi Burch	<p>From: Jeff & Debbi Sent: Friday, May 01, 2009 9:59 PM</p> <p>Subject: Proposed HWY 49 realignment</p> <p>Hello,</p> <p>We live in Garden Valley and shop and tend to medical needs in Placerville, thus we have concerns relating to the proposed realignment of Highway 49, as this is the route we use regularly. Is there representation from the Georgetown Divide on the advisory committee? If so, please provide the contact information. If not, how do we ensure the interests of us local residents are represented?</p> <p>Debbi Burch</p>	<p>From: Dan Bolster Sent: Monday, May 04, 2009 8:45 AM Subject: RE: Proposed HWY 49 realignment</p> <p>Debbi,</p> <p>Thanks for your interest in the SR 49 Realignment Study. No group from the Georgetown Divide is on the Stakeholder Advisory Committee (SAC), but the Coloma-Lotus Valley Community Association (CLVCA) is on the SAC and would probably be the group that is most familiar with issues concerning the Divide and could represent the Divide's issues at SAC meetings. Harry Mercado is the CLVCA's SAC representative. His email address is: mercado@riverfast.net</p> <p>Another way to be involved in the project is to visit the EDCTC website at www.edctc.org and follow the link to the SR 49 Realignment webpage. Under "Public Involvement" click on the link that will take you to the on-line comment form that allows you to comment on the project and to add your email address to the project distribution list to automatically receive project updates. The website also contains materials from each SAC meeting, as well as other information about the project. Additionally, all of the information that was presented at last Thursday's Open House will be posted on the website by the end of this week. You can also contact me anytime to discuss the project. In the past I've given presentations on transportation projects to the Georgetown Rotary Club and would be happy to give a presentation on the SR 49 Realignment Study to the Rotary Club or any other interested group on the Divide. Please let me know if you need any other information.</p> <p>Thanks, Dan</p>
5/1/09	Scott Chadd	<p>From: Scott Chadd Sent: Friday, May 01, 2009 4:00 PM Subject: Hwy. 49 Re-Alignment and (AB1204)</p> <p>I attended the first public workshop last night at the Marshall Bld. in the Fairgrounds. There were approximately 100 persons in attendance and I did not speak. I spoke briefly with Ellen who also attended. The EDCTC is launched into a 5-10 program of attempting to find an acceptable re-alignment of Highway 49 from Coloma on the North to the community of El Dorado on the South. This will be the third or fourth time this has been tried</p>	



**State Route 49 Realignment Study
Hotline/Website Comments Matrix**

DATE	NAME	COMMENTS	RESPONSE/ACTION
		<p>in the last 45 years.</p> <p>The problem we/they confront is that the minimum width for a State Highway is 40' (two 12' travel lanes and two 8' shoulders) and the minimum design speed (vertical and horizontal alignment) is 45mph. What this results in is a facility that cuts a wide and destructive swath through the County, disrupts business, residential, historical and cultural resources regardless of whether or not it follows some existing road or strikes out across county. This destruction and upset generally riles up the public once they find out what is going on. The second public workshop is coming up in August and I would suggest that the EDCTC get a bigger space.</p> <p>There are many rational reasons why the highway should be moved. These however will not be enough to overcome the public outcry as this process moves along.</p> <p>PS: Are you aware of the Trojan Horse bill called AB 1204/Huber? It is a gutted bill that has been filled with text adding 3 additional members to the EDCTC from the El Dorado CSD. Most new members of the Assembly make a few of these blunders until they get their fingers burned and begin talking to the local electeds prior to changing local governments. My concern is that the El Dorado Hills community deal points were made in 1989 and, with a few modifications, have served that area well these last 20 years. The County has contracts that follow the land down there controlling who is responsible to pay for the costs of required infrastructure. El Dorado Hills has gotten at least, if not more than, its share of transportation dollars and this bill would tip over an apple cart that required years of negotiations to build. I recommend the Taxpayers strongly oppose this ill conceived special interest legislation.</p>	
9/12/09	Struax	<p>Subject: SR49 Comment Form Sent: 09/12/2009 at 02:13 PM</p> <p>Everyone who lives and travels on these two routes is there by choice, has evaluated the conditions and made a decision. The status quo means that nothing is changed, no one gets any nasty surprises. Change the route and some people will be happier and some less happy. Leave it alone and no one can complain.</p> <p>The desire for county transportation to "tinker" with the road alignment is</p>	



**State Route 49 Realignment Study
Hotline/Website Comments Matrix**

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		just that. Everyone is adjusted to 49 the way it is, so leave it alone and avoid upsetting a lot of people on both routes.	



PUBLIC COMMENTS

STATE PARKS LETTER TO EDCTC DATED
10/26/09



DEPARTMENT OF PARKS AND RECREATION

Ruth Coleman, *Director*

Gold Fields District
7806 Folsom Auburn Road
Folsom, CA 95630

October 26, 2009

Dan Bolster
Senior Transportation Planner
El Dorado County Transportation Commission
2828 Easy Street, Suite 1
Placerville, CA 95667

Dear Mr. Bolster,

This letter is to express the ideas and concerns of the Gold Fields District of California State Parks regarding the State Route 49 (SR 49) Realignment Study. The Gold Fields District manages Marshall Gold Discovery State Historic Park (SHP) in Coloma which is within the project study area. Among other elements, part of the purpose and need for the project includes eliminating the existing alignment of SR 49 through Marshall Gold Discovery SHP and to ensure consistency with the general plans of El Dorado County, the City of Placerville and Marshall Gold Discovery SHP.

State Parks appreciates being invited to participate in both the Project Development Team and the Stakeholder Advisory Committee. State Parks also appreciates the time that you and project consultant Keith Rhodes of T.Y. Lin have spent in addressing State Parks concerns during the study process and your openness in discussing the study.

State Parks provides these comments to help inform the final study report and to inform the future Project Study Report (PSR) which may come out of this initial feasibility study. It is our understanding that the basic purpose of this study is to demonstrate that there are feasible alternatives, which primarily utilize existing roadways, for the realignment of SR 49 and it is not intended to limit other alternatives from being considered in the future PSR. State Parks also recognizes that we have a relatively narrow geographic interest, the area of Coloma, in a study that encompasses a much broader area.

The Marshall Gold Discovery General Plan and "Coloma Bypass"

The General Plan for Marshall Gold Discovery SHP, approved in 1979, acknowledged the threat to the historic environment, the structural stability of buildings and visitor safety created by traffic on SR 49 through Main Street in Coloma. The Plan recommended the development of a "Coloma Bypass" road which would help achieve the following goals for traffic and circulation in the park unit:

- Reduce the impact of motor vehicles in the park, specifically in the Zone of Primary Cultural Interest;
- Improve existing circulation and visitor control throughout the park;
- Improve access to the park and private lands for future management protection and development;

- Enhance the visitor experience and visual quality in the historic areas;
- Provide additional protection for environmental, recreational and cultural resources in Coloma.

The General Plan described two concepts for a Coloma Bypass both of which involve the construction of new bridge(s) across the South Fork of the American River, relocate the roadway on the north side of river and bypass traffic around Main Street in Coloma and the historic core of the park unit. The first concept would construct two bridges, one upstream of the Mt. Murphy Bridge and a second downstream of the North Beach area, which would create a bypass around Coloma approximately from the corner of Main and Sacramento Streets to the intersection of Lotus Road and SR 49. The second concept would involve a single bridge upstream of the existing Mt. Murphy Bridge and would create a bypass that approximately followed the alignment of Carvers Road to Marshall Road.

The Plan recognized (*in 1979*) that the development of a bypass might not occur in the near future and that State Parks did not have sole decision-making authority or jurisdiction over the development of a bypass which would require coordination and cooperation with Caltrans, El Dorado County and other agencies. In 2009, the current management of the Gold Fields District sees the first Coloma Bypass (two bridges) concept as the more feasible option given current circumstances. The residential community along Carvers Road and the steep topography towards Marshall Road make the second option problematic. There may be other valid ideas for a bypass around Coloma.

Regardless of how it is achieved, the General Plan is clear that the long term goal for the park unit is to eliminate all vehicle traffic on a portion of Main Street and to simulate its historic appearance during the gold rush period. The Plan envisioned public parking on either end of the park unit and the use of a portion of Main Street as a pedestrian walkway.

Current managers and planners at the Gold Fields District believe that Marshall Gold Discovery SHP is a destination park and visitors are primarily coming to the park by intention to see the gold discovery site, Sutter's Mill, the museum and the historic buildings and resources within the unit. We do not believe many visitors to the park are merely dropping by because SR 49 happens to pass through the unit. We believe the assumption that the park unit is a destination is inherent in the goals for traffic and circulation articulated in the General Plan for the park unit.

State Parks sees the current SRA 49 Realignment Study and the future PSR as an opportunity to help achieve the goals in the Marshall Gold Discovery SHP General Plan.

Feasibility Study Scope

State Parks believes it is unfortunate that the study has been limited to fully analyzing only three alternatives and that a wider array of different alignment concepts will not be carried through the entire study. We recognize the constraints of the grant that funded the study limits the number of alternatives which can be fully analyzed. However, some of the alternatives which have been eliminated in the screening have benefits or advantages which are not fully reflected in the criteria used to narrow the alternatives.

In our view, the feasibility study may have gotten bogged down in looking at the details of various iterations of alternatives which utilize the same basic routes. For instance the final three alternatives in the study include two options (5G and 5H) which utilize the same route for most of the alignment. The public and decision-makers might be better served by more fully exploring the differences, trade-offs, costs and benefits of basic alternate alignment concepts. The grouping of alternatives in the Level 1 screening provides a model for the basic alternative alignment concepts that could have been carried through the entire study process. At this level of planning and analysis, it might be more useful to compare and contrast the advantages and disadvantages of one basic alignment concept from each of these groups rather than delve into the detailed iterations of the very similar alignments within each group. These iterations may well change over the course of the realignment planning.

Some of the alternatives which have been eliminated with a relatively cursory level of analysis in the Level 1 or Intermediate Level 1 screening are options which most fully meet some of the key goals of the realignment study. For instance, the alternatives that included the Coloma Bypass concept are the only options which fully meet the goals of the Marshall Gold Discovery SHP General Plan of both eliminating SR 49 out of the park and also providing the ability to eliminate vehicle traffic on a portion Main Street in Coloma.

The Coloma Bypass alternatives were eliminated in the Level 1 and Intermediate Level 1 primarily because the emphasis the study placed on utilizing existing roadways and the concern that the Bypass, which would require one or two bridges across the South Fork of the American River, would require far greater resources and have much larger potential environmental impacts than other alternatives.

However, there are a number of factors related to the Coloma Bypass alternatives which the screening criteria may not consider, including the following:

- El Dorado County will need to replace the Mt. Murphy Bridge in the not too distant future regardless of the alignment of SR 49. There may be potential advantages to a realignment option which also addresses this critical infrastructure need;
- The potential availability of federal funding to cover nearly 90% of the costs of the replacement of the Mt. Murphy Bridge through the Federal Highway Administration Highway Bridge Program;
- Much of the Coloma Bypass could be located on State Park owned property on the north side of the river and many of the potential impacts of the Bypass on cultural and visual resources are within the park unit and are trade-offs that State Parks would need to consider and compare to the benefits a Bypass would provide to the historic core of the park unit.

Certainly the Coloma Bypass and any new bridge over the South Fork of the American River is a project which would draw lots of public interest and has the potential to be controversial. State Parks believes the realignment feasibility study could have been a vehicle for exploring the benefits, costs and impacts of the Bypass and displaying the trade-offs to the public and decision-makers.

Future Disposition of Existing SR 49

A key element of the realignment of SR 49 will be what happens to the existing route, should a new alignment be selected. We know there are many concerns and ideas regarding the relinquishment of SR 49 including the potential designation of the existing route as "Historic Highway 49". The degree to which the realignment of SR 49 out of Marshall Gold Discovery SHP benefits the park resources and users and meets the goals of the park unit General Plan is also very dependent on what happens to the existing roadway. State Parks understands that the future disposition of the existing SR 49 roadway would need to be negotiated with Caltrans, the County and other interested agencies and parties.

State Parks has considered our vision and preferences for the future management of existing SR 49 under two scenarios: 1.) a realignment which eliminates SR 49 from the park but does not provide a Coloma Bypass; and 2.) a realignment which includes a Coloma Bypass. State Parks already has plans for capital improvement projects which will enhance the pedestrian and accessible pathways and circulation throughout the park unit including from North Beach and the Sutter's Mill parking lots to the Gold Discovery Museum

Realignment without a Coloma Bypass

The final three alternatives in the feasibility study would eliminate SR 49 through the park unit, but do not include the option of a Coloma Bypass and the potential to eliminate traffic on Main Street. Even with no changes to the existing roadway, realigning SR 49 out of the park will presumably reduce the amount of traffic passing through the park unit. In order to further reduce traffic related impacts to park resources and users, should SR 49 be realigned, State Parks would like to see the following measures implemented on Main Street:

- Four way stop sign on Main Street at Bridge Street/Mt. Murphy Road.
- Stop Sign on Main Street at the North Beach parking lot entrance.
- Fifteen mph speed limit on Main Street from the Coloma Schoolhouse to the entrance to the Sutter's Mill parking lot.

If SR 49 is realigned, State Parks would consider accepting ownership (and the maintenance responsibility) for the portion of existing SR 49 which passes through the park unit, from the North Beach parking lot to the Coloma Schoolhouse.

Realignment with a Coloma Bypass

Ultimately if an SR 49 realignment option were selected which included a bypass of Coloma, State Parks could fully realize the goals expressed in the General Plan for Marshall Gold Discovery SHP. In this scenario, State Parks would like to see the following measures implemented:

- Close Main Street to vehicle traffic (except emergency and service vehicles) from the entrance to the Sutter's Mill parking lot entrance to the Coloma Schoolhouse. This would also necessarily involve closing Back and Bridge Streets to vehicle traffic at the corner of Bridge and High Streets. Exceptions may be made for accessible vehicle parking at the Gold Discovery Museum.

-Close the Mt. Murphy Bridge to vehicle traffic and use the bridge for pedestrian and bicycle traffic.

Currently there is sufficient parking on the north end of the park unit at the North Beach and Sutter's Mill parking lots. Under the scenario above additional parking would need to be created on the southern end of the park unit. There is an undeveloped lot owned by State Parks at the corner of Main Street and Sacramento Street that could be used for this purpose.

Replacement of Mt. Murphy Bridge

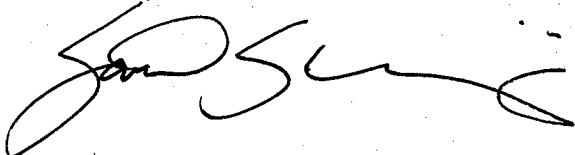
As noted above, the replacement of the Mt. Murphy Bridge and the future disposition of the existing bridge is integral to the discussion of the Coloma Bypass. However, should the eventual SR 49 realignment project not include a Coloma Bypass which would replace the Mt. Murphy Bridge, State Parks believes it is important to articulate our preferences for where a replacement bridge is located. State Parks would like to see the replacement bridge located upstream of the current bridge approximately in alignment with Sacramento Street or downstream of the North Beach area approximately in alignment with Lotus Road. Either of these locations would keep a new bridge out of the historic core of the park and are consistent with the park General Plan. State Parks does not support replacing the bridge in its current location. As articulated in the General Plan for the park unit, we would like to see the existing bridge remain for use as pedestrian and bicycle access across the river.

SR 153

It is our understanding that the realignment of SR 49 may bring up the issue of the future disposition of other State Routes which would be left unconnected to the State Highway system. This includes SR 193 and SR 153 both of which are currently owned and maintained by Caltrans. State Route 153, "the shortest State Highway", includes a portion of Cold Springs Road and Monument Drive. Monument Drive not only provides access to the Marshall Monument within the park unit but also to a number of private properties and businesses along Monument Drive. If SR 49 is realigned, State Parks would consider accepting ownership and maintenance responsibility only for the upper portion of Monument Drive which is entirely surrounded by State Park lands.

Thank you for the opportunity to comment on this important study. If you have any questions regarding this letter, please contact Gold Fields District Planner Jim Micheaels at (916) 988-0513. Thank you.

Sincerely,



Scott Nakaji
District Superintendent

CC El Dorado County DOT & Board of Sups, EDCTC Commission, Caltrans, City of Placerville



PUBLIC COMMENTS

MEDIA ARTICLES

THE SACRAMENTO BEE sacbee.com

This story is taken from [Sacbee / Our Towns / Folsom/El Dorado News](#)

Residents consider alternate routes between Coloma, El Dorado

clocke@sacbee.com

Published Friday, Oct. 16, 2009

Top-ranked alternatives to the historic Highway 49 route through the heart of El Dorado County would accomplish two key objectives, but area residents say they would do little to improve safety or traffic flow.

From an initial list of 52 potential alignments of an approximately 14-mile stretch of the narrow, winding state highway between Coloma and the town of El Dorado, three alternatives have been selected for further analysis. A \$250,000 study, launched earlier this year by the El Dorado County Transportation Commission and funded by the state Department of Transportation, is to be completed in March.

"This is ... a fact-finding mission," said Dan Bolster, a transportation planner with the county Transportation Commission. A new route wouldn't be built for eight to 10 years, he said.

Two key objectives are rerouting the highway to bypass Marshall Gold Discovery State Historic Park in Coloma and eliminating the at-grade crossing of Highway 50 in Placerville.

With minor exceptions, the routes would use existing roads, or roads that El Dorado County or the city of Placerville plan to build.

Where possible, roads in a new route would be brought up to state highway standards with two 12-foot travel lanes and 8-foot shoulders, said consultant Keith Rhodes.

Two of the proposed routes go through western Placerville. The other follows Green Valley Road to Missouri Flat Road, skirting the city.

Highway 49 was built to link California's Gold Rush towns, and Placerville officials have said they would like a portion of any new alignment to remain within the city.

About 100 people attended a Wednesday night open house in Placerville to discuss potential realignment.

Several people argued that other routes could more easily be brought up to state highway standards. They suggested following the lead of tour bus drivers who typically travel Lotus and North Shingle roads between Coloma and Highway 50.

"Shouldn't one of the major considerations be how you're spending our tax dollars?" asked Placerville resident Judy Mathat.

A route following Lotus and North Shingle roads, Mother Lode Drive and El Dorado Road would be a good engineering choice, Rhodes said. But the project also is intended to improve east-west travel between Placerville and El Dorado.

Several residents said that won't be achieved by using congested Missouri Flat Road.

Others objected to including Cold Springs Road in a new alignment, saying it has one of the highest accident rates in the county.

Rhodes said concerns voiced at the open house will be addressed in the analyses, and lower-ranked alternatives could be considered as the project progresses.

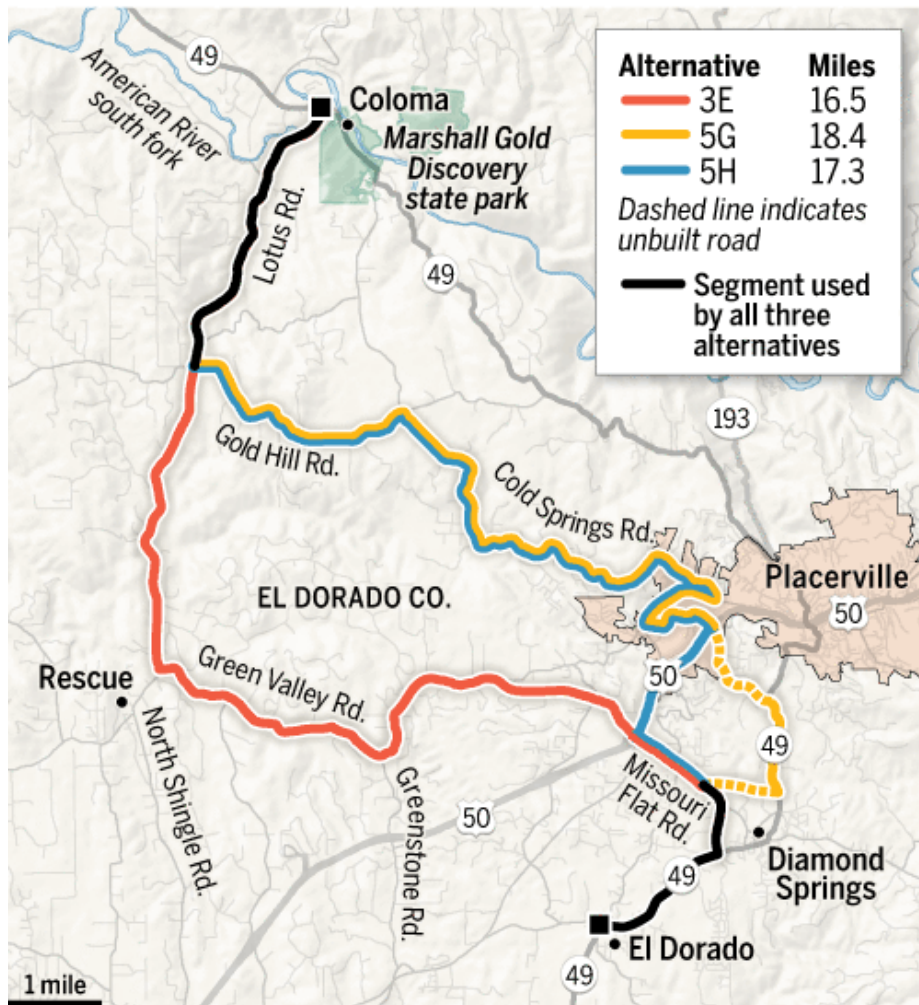
Call The Bee's Cathy Locke, (916) 773-6866.

THE SACRAMENTO BEE sacbee.com

Folsom/El Dorado News

POTENTIAL ROUTES FOR HIGHWAY 49

Alternative alignments for a 14-mile stretch of Highway 49 between Coloma and the town of El Dorado in El Dorado County have been narrowed to three. The options, generally using portions of existing or planned roadways, will undergo further study.



NATHANIEL LEVINE nlevine@sacbee.com

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Highway 49 study raises some doubts

By Charlotte Sanchez-Kosa

SPECIAL TO MOTHER LODE NEWS

El Dorado County residents spent most of a Wednesday night meeting last week voicing their concerns to traffic commission officials about a feasibility study to reroute Highway 49 from Coloma to El Dorado.

The study is a partnership between the El Dorado County Transportation Commission, the city of Placerville, El Dorado County Department of Transportation, California State Parks and Caltrans.

Because it is a feasibility study, construction is six to seven years away.

Dan Bolster, senior transportation planner, said a Caltrans grant of \$250,000 was obtained to fund the

study, which began in January.

"It seems we already have roads that are passable and wide enough, that are 55 miles per hour already," said area resident Jennifer Sands during a question-and-answer session of the meeting. "Why on Earth would we not use those roads rather than routing this all over the county? Whether it's through Green Valley, through Gold Hill down all these different roads. I don't understand why we can't use our existing roads."

Sands was referring to a presentation made earlier by Keith Rhodes of TY Lin International, a civil and structural engineering firm.

During the presentation in the Marshall building at the county Fairgrounds Oct. 14 in front of about 150 attendees, Rhodes said officials

had narrowed 52 alternative routes down to 10 routes via an evaluation process. Those 10 routes were then evaluated and narrowed down to three.

"When we were hired by EDCTC, we felt the best way to approach this project was by breaking this project into three separate phases," Rhodes said. "The first phase was to establish the purpose and need and screening criteria for the project. The second phase was to utilize the screening process to do the analysis and the third phase was to document the results."

Rhodes said the Level One screening process included purpose and need, constructability and operational feasibility. He also said the criteria included goals

► see **STUDY**, page 12

such as safety, efficiency of moving goods and people, accessibility between Placerville, Diamond Springs and El Dorado, and also looked at accessibility of people and traffic between Coloma and El Dorado. Other goals officials looked at include resources and existing roads and addressing impacts to general plans.

He added that public input from an April 30 meeting did play a role in the process.

"As a result of that screening, three alternatives were recommended for Level Two screening," he said.

Alternative 3E begins at the Lotus Road/Highway 49 intersection to Green Valley Road. It continues along Green Valley Road to Missouri Flat Road and then to Pleasant Valley Road and ends at state Highway 49/Pleasant Valley Road intersection in El Dorado.

Alternative 5G begins at the Lotus Road/Highway 49 intersection and continues to Gold Hill Road. From Gold Hill Road the route continues to Cold Springs Road and along Ray Lawyer Drive. Ray Lawyer Drive is then taken to the Ray Lawyer Drive extension and on to Highway 49. From Highway 49 the route runs to the planned Diamond Springs Parkway and on to Missouri Flat Road. From Missouri Flat Road, the route runs to Pleasant

Valley Road and ends at the intersection of Pleasant Valley Road and Highway 49 in El Dorado.

Alternative 5H begins at the Lotus Road/Highway 49 intersection and continues to Gold Hill Road. From there it goes to Cold Springs Road and then continues to Ray Lawyer Drive. Drivers would then take Ray Lawyer Drive to Highway 50. From there, drivers would proceed to the Highway 50, Missouri Flat Road interchange and then continue along Pleasant Valley Road to the Pleasant Valley Road/Highway 49 intersection in El Dorado.

"The Level Two screening is more of a detailed screening," Rhodes said. "The two criteria that we used to screen the three alternatives are transportation-type benefits and responsiveness to environmental goals."

In the end, Alternative 5H, at an estimated cost of \$23.6 million, was ranked No. 1. Alternative 3E, at a cost of \$17.4 million, was ranked second and Alternative 5G at \$27.8 million came in third.

Rhodes pointed out that project issues include Caltrans design requirements, existing Highway 49 relinquishments, state route encroachments, the Marshall Gold Discovery State Historic Park Master Plan, eliminated alternatives and impact to businesses.

"With these three alternatives, all we are saying is we have identified three feasible alternatives that would satisfy the purpose of the project," he said. "Please keep in mind that the available resources that we have are very limited. This is a high level study, so we took the information and resources that we had and used that as a means of just simply saying, 'Is it feasible?' Once we go to the next level, we will have more detailed studies available to us."

Area residents in attendance at the meeting were not shy when it came to commenting on the routes.

"It seems to me that a hybrid project of 5G and 5H should be considered," said Steve Calfee of Placerville. "The reason why I say that is because it seems it would serve commerce better and utilize investment that has been made by the community as a whole in the Ray Lawyer Drive, western Placerville area with respect to the western Placerville interchange project, the existing overpass and the Ray Lawyer Drive Interchange. I would hope that would be a consideration in the future."

Sam McClellan, an engineer, said everything would have to be built to Caltrans specifications and construction costs could be substantial.

"These dollar figures associated with each

one of those choices — those dollar figures can't be construction costs," he said. "Why don't you take those same dollars and apply them to the present Highway 49?"

Rhodes said the standards will not be met but the proposal is to first start designing the alternatives per Caltrans standards. He added due to the terrain, all the standards will not be met. Officials will look at bringing the roadway up to those standards, but if it's not effective or environmentally effective, there will be a design exception process that will bring the road up to a standard that keeps the route safe.

"The cost you see there is preliminary but we are taking into consideration that we are not going to build a Cadillac, because it's not feasible," Rhodes said.

Another area resident pointed out that according to previous Mountain Democrat articles, Cold Springs Road has been deemed one of the most accident-prone roads in the county and couldn't imagine why the road figures so prominently in two of the alternatives.

As the meeting ended, several residents asked officials one-on-one questions while looking at maps and other information.

The next stage of the study is to create a Project Study Report, which will take one to two years.



PUBLIC COMMENTS

CONCERNS REGARDING COLD SPRINGS ROAD

May 5, 2004

El Dorado County Board of Supervisors
General Plan Hearings

RE; Roads and Circulation;

One of the highest accident roads in the county is Cold Springs road from Perroz /Placerville Drive to Browns road by the Cold Springs Country Club. The houses are built tight to the road so the county has not been able to widen and straighten that stretch to make it safer or pedestrian friendly.

Attached are a few of the 20 years of documents the DOT and other studies done to solve this problem. The Missouri Flat Extension (*new proposed for 20 yrs*) would have been the answer to have saved lives and injuries. The building of this connector would allow the North/South circulation to flow without the congestion and hazards of entering Placerville.

Cal Trans has wanted to move route 49 from Diamond Springs to Gold Hill without dumping into Placerville for years. Possibly a joint venture could build this much-needed new circulation road.

At this time there is only 1 or two houses, 4 or 5 different landowners, and 97% cleared land in the proposed route. That is a miracle that should be acted upon quickly. Also the crossing of Weber Creek at the Cold Springs junction is very flat and would not require the cost of a new bridge like in the canyon of Hwy 50. The folds out Military Bridges are perfect for this area. This road will reroute around 10,000 + - cars per day. The elevation change from Green Valley/Miss Flat to Cold Sp. Rd is 300feet over a 1 ½ mile + - distance. Now how far is it to drive from the College to Cold Springs Country Club??? Or Gold Hill to El Dorado Rd and Hwy 50??

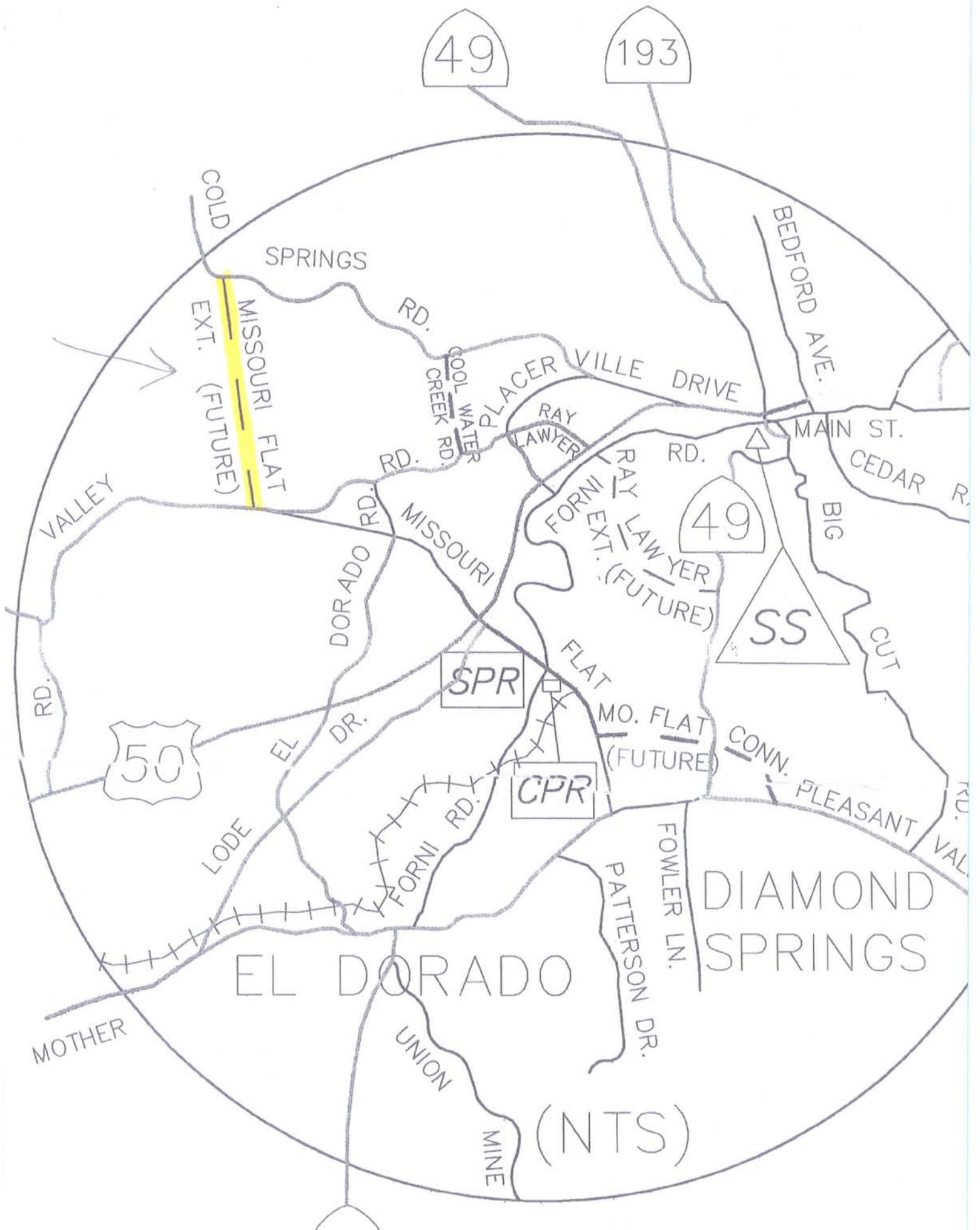
Please learn from the past and protect our future by developing this new road. Maybe the public along the County road could enjoy even part of the beautiful areas along Weber Creek. To stand on the hill and see both GreenValley Rd and Cold Springs Road off each side will assure you to fast track this much needed road.

Thank you for your attention to this matter.

Regards,

Diane Murillo





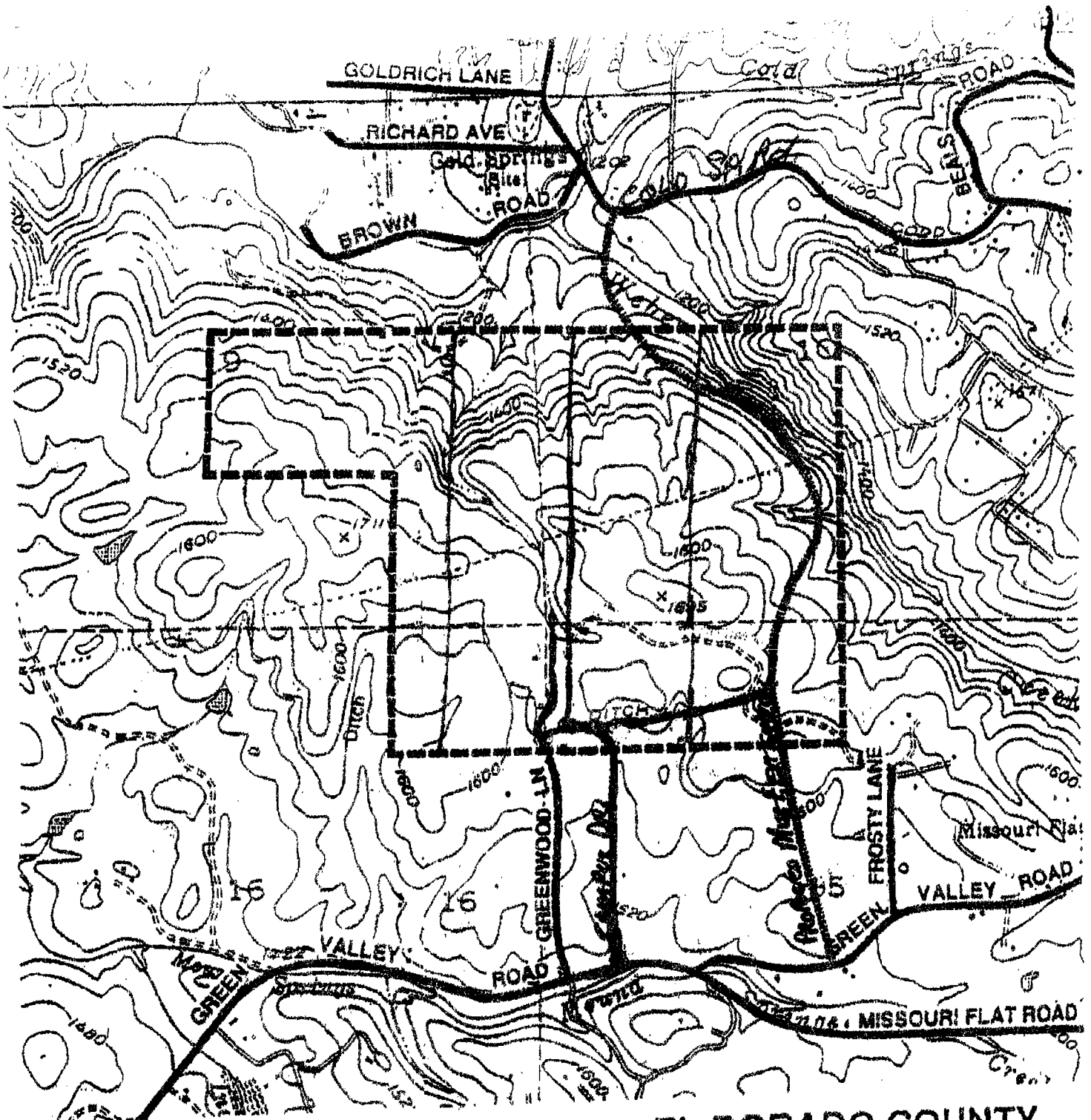


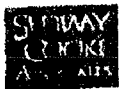
Figure 10

**EL DORADO COUNTY
FAIRGROUNDS SITE ANALYSIS**

Proposed Road



Proposed Road



SEDWAY COOKE ASSOCIATES



0 500 1000 2000
Scale in Approx. Feet

2011
1984

Wreck report: Cold Springs is the worst

By LINDA HOLDERNESSE
Staff writer

Once again, Cold Springs Road has emerged as western El Dorado County's apparently most dangerous in the Department of Public Works' annual accident location study.

The study showed the road, one of the county's oldest, was the site of 24 accidents in three locations in 1984. Two of the locations, between Belanca Lane and Beals Road and from Gold Hill Road to Gold Trail School, were the locations of a total of 48 accidents and 31 injuries from 1962 to 1984.

Those two locations, said James Imes, the county highway engineering technician who prepared the study, have been recommended for major improvements.

The stretch from Belanca Lane to Beals Road needs to be widened, Imes said, and the winding Gold Hill Road location probably needs to be straightened. The areas already have sufficient warning signs and road striping, he said. Further work will be costly and must be approved in the budget by the Board of Supervisors.

"Realignment is the hardest work," Imes said. "We would have to move the road away (from its current route) because the houses there are close to the road way. Acquiring rights-of-way is complex and expensive, but we've done everything else we can through there."

Most of the accidents along the road are caused by excessive speed, particularly driving too

fast for the condition of the road, Imes said. Driving under the influence of alcohol also contributes to the high accident rate.

The third earmarked section on Cold Springs Road, a downhill, winding stretch from Thompson Hill Road to state Highway 49, will be studied to learn if the site can be made safer through the addition of warning signs and edge and center-lane striping. Nine accidents occurred at that site, with four injuries, in 1984.

One other western county location the study targeted for possible major improvements was Lotus Road from Luneman Road north to the bottom of the grade. Fourteen accidents occurred in that area, with 15 injuries during the

see ACCIDENTS, page A-5

Proposed

Coun law

se

The Fan Wave has been sweeping the country with stadiums from coast to coast trying to outdo one another. The Wave hasn't hit El Dorado County yet but one of these nights... Find out how the Wave originated in today's Sports on page A-5.

Business	A-10
Classified Ads	B-14
Dial-a-pro	B-12, 13
Editorial	A-5
Foothill Life	B-1
Letters	A-4
Logbook	A-4
Public Notices	B-7-11
Sports	A-3

obscure stories by Samuel Clemens — "Mark Twain" — and one about him. Today we offer the second of the stories he wrote. It's an outrageous burlesque of the U.S. Senate, written during Twain's extremely brief tenure as a Washington correspondent. See below.

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and El Dorado Nev

1984

WEDNESDAY, SEPTEMBER 11

Savings by rerouting 49

County seeks overpass relief

A plan to build a freeway off-ramp and overpass for Ray Lawyer Drive could result in rerouting Highway 49 to Missouri Flat Road, thus routing traffic out of Diamond Springs and downtown Placerville.

The rerouting proposal is part of an effort by the county to reduce the cost to local government of building the interchange.

The California Department of Transportation (Caltrans) has offered to pay for half of the proposed \$6.6 million interchange project, but added some conditions that would more than double the local cost of the interchange.

The conditions are these: Ray Lawyer Drive would have to be extended to intersect Highway 49 near Weber Creek. Under Caltrans' plan, Ray Lawyer Drive south of U.S. 50 would then be designated as Highway 49. Extending Ray Lawyer Drive from Highway 50 to 49 would cost the county \$2.7 million.

The county was also asked to widen Highway 49 from the intersection of Missouri Flat Road through Diamond Springs and north to the new intersection of Ray Lawyer Drive to the tune of \$1.3 million.

In addition, the county must pay

million share of building the actual interchange, and the county faced a \$7.9 million bill for an interchange.

County officials apparently were shocked at having to cough up \$7.9 million to get a \$3.3 million grant, so they typed a letter to Caltrans making a counteroffer.

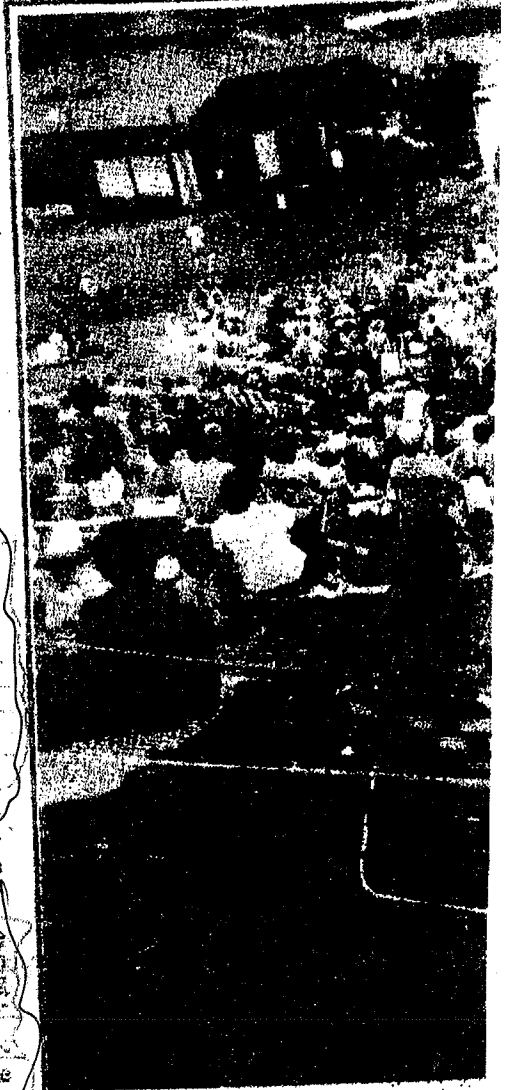
Instead of routing traffic down Ray Lawyer Drive, county officials suggested routing Highway 49 via Missouri Flat Road.

Missouri Flat Road would not require the expensive widening. Ray Lawyer Drive would not have to be extended and traffic flow on 49 would still be improved by diverting traffic out of the congested "Placerville triangle."

County Transportation Director Mark Anderson said the county still hopes to extend Ray Lawyer Drive to Weber Creek in its own time but does not want to be locked into it right away by Caltrans.

The Missouri Flat alternative would save the county an estimated \$3.3 million, according to figures on a draft letter addressed to Caltrans.

The county Board of Supervisors approved the alternative last Tuesday and the Transportation Commission followed suit on Thursday. The item will probably go before the Placerville



ENRAPTURED AUDIENCE — The Secret audience enthralled during the Sixth Annual... the lawn at the county fairgrounds. A red... which has become a f

El Dorado County
Transportation Commission

4429 Missouri Flat Road, Placerville, CA 95667 916/626-2146

To: G. Arthur Cort, Public Works Director
From: Mark Anderson, Executive Director *MAA*
Date: June 5, 1986
Re: Missouri Flat - Cold Springs Connector Road

As you are aware, at the June 5 meeting of the El Dorado County Transportation Commission, staff presented an agenda item to the Commission regarding a potential connector road between Green Valley Road and Cold Springs Road. ~~The Commission directed staff to refer~~ this item to your department, indicating that it might be in the County's interest to adopt an alignment for a County connector road.

Since you were present at the Commission meeting and are familiar with the property, I will not go into detail on the project other than to let you know that the contact on the property is Diane Murillo at the Placerville Drive Shell Station, 622-7994.

Thanks for your help on this request. If I can be of any assistance, please contact me at X 146.

cc: */* Diane Murillo



MAIN OFFICE:
360 FAIR LANE
PLACERVILLE, CA 95687

(916) 821-5355

SOUTH LAKE TAHOE OFFICE:
1359 JOHNSON BLVD.
P.O. BOX 14508
SOUTH LAKE TAHOE, CA 95702
(916) 573-3145

June 19, 1989

To: Planning Commission
From: Larry D. Walrod, Planning Director *L.D.W.*
Subject: Amendment to the General Plan
Circulation Element

BACKGROUND

Earlier this year, the Board of Supervisors had directed the Department of Transportation to develop a process to address the concerns regarding the necessary rights-of-way to achieve a County-wide circulation system. In response to the Board's directive, the Department of Transportation prepared a functional classification system, access control policies, and roadway cross sections (minimum rights-of-way) that would be necessary to develop and maintain an acceptable circulation system.

On May 30, 1989, the Department of Transportation presented this information to the Board of Supervisors for their review. At that meeting, the Board determined the following:

1. The proposed policies, including the road classification system and roadway cross sections should be incorporated as an amendment to the General Plan Circulation Element.
2. Inclusion of road and street policies was exempt from CEQA review in accordance with the provisions of Section 15301(c) and 15308 of the CEQA Guidelines.
3. The amendment to the General Plan Circulation Element be referred to the Planning Commission for consideration and recommendation.

DISCUSSION

The primary purpose of this amendment is to establish policies for future road and street improvements, including protection of the future rights-of-way from development encroachment. The functional classification and improvement standards will assist the decision makers and development community in the identification of the circulation requirements necessary to serve the County.

The policies set forth in the proposed amendment shall serve as interim guidelines until a more comprehensive Circulation Element is completed later in the year.

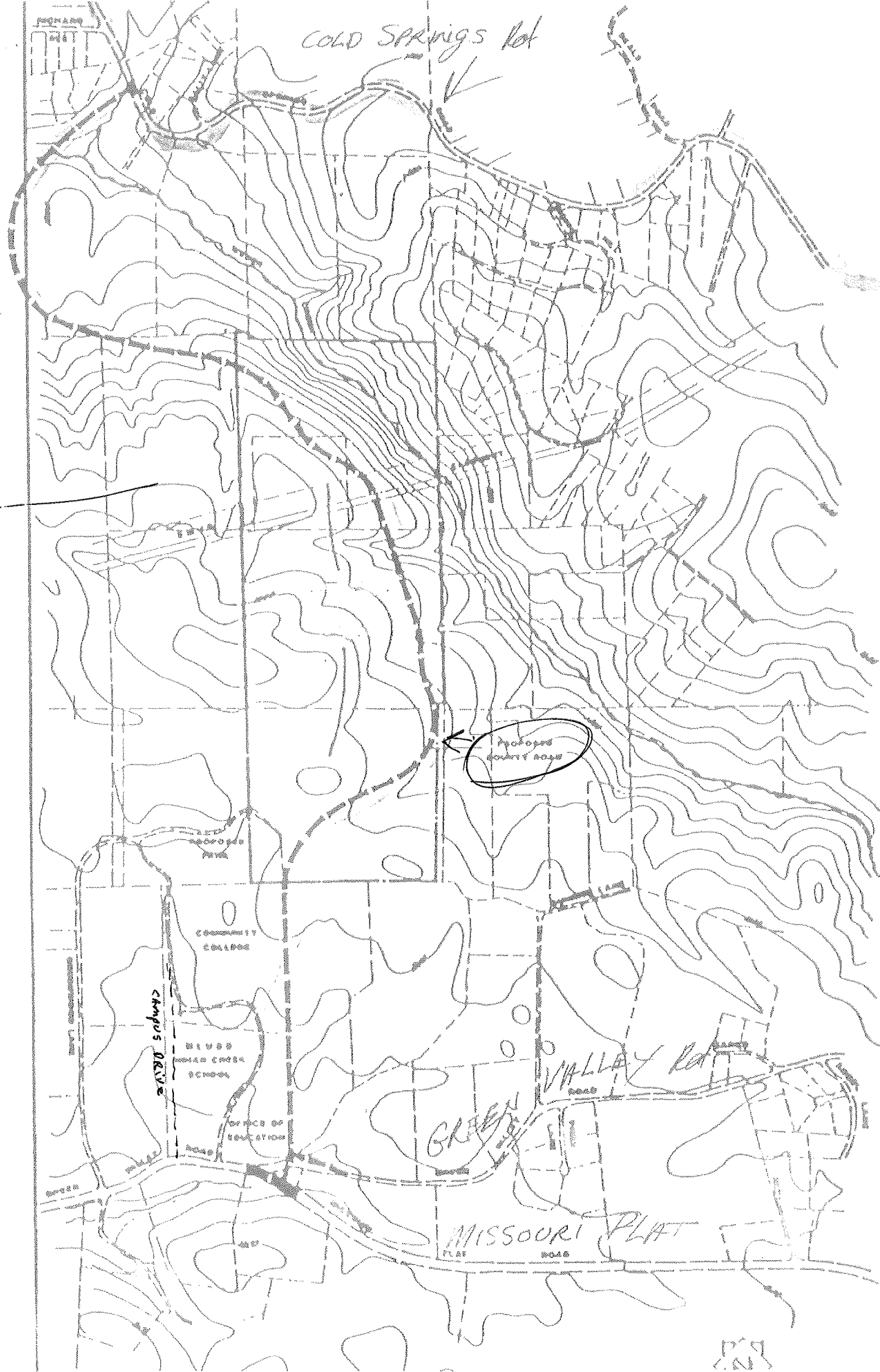
RECOMMENDATION

Staff recommends that the Planning Commission find that the amendment to the Circulation Element of the General Plan is categorically exempt, pursuant to Sections 15301(c) and 15308 of the CEQA Guidelines, and recommend that the Board of Supervisors approve the amendment to the Circulation Element.

LDW:jcb

(circlement)

COLD SPRINGS lot



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TRANSPORTATION

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Latrobe Road - White Rock Road to SR 50
 Latrobe road - Amador County Line to El Dorado Hills/Salmon Falls Area
 Plan S. Bndry.
 Lotus Road - Green Valley Road to SR 49
 Lower Main Street - Georgetown - Marshall Glade Road SR 193
 Main Street (Diamond Springs) - Missouri Flat Road to Canyon Valley Road
 Marshall Road - SR 49 to Lower Main Street (Georgetown)
 Missouri Flat Road - Headington Road to Green Valley Road
 Mother Lode Road - Cuzco Center Drive to Headington Road
 Missouri Flat Road - Pleasant Valley Road to Station Center Drive
 Mormon Enterprise Trail - Sky Park Road to Amador County Line
 Mother Lode Drive - Road 171A to Pleasant Valley Road
 Mt Auburn Road - Amador County Line to Pleasant Valley Road
 North Shingle Road - SR 50 to Ponderosa Road
 North Shingle Road - Ponderosa Road to Green Valley Road
 Onychburg Road - Mt Auburn Road to Amador County Line
 Pleasant Valley Road - Newtown Road to Mt Auburn Road
 Pleasant Valley Road - Canyon Valley Road to Newtown Road
 Pleasant Valley Road - Oriental Street to SR 49
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 60' 60' U

Green Valley Road - SR 193 to Marshall Grade Road
 Georgia Slide Road (Church Street) - SR 193 to North End
 Cold Hill Road - Lotus Road to SR 49
 Graybar Mine Road - Missouri Flat to SR 193
 Green Valley Road - Missouri Flat Road to Placerville CL
 Hastings Drive - Green Valley Road to Starbuck Road
 Ice House Road - SR 50 - Loon Lake
 Lake Tahoe Boulevard - Upper Truckee Road to S.L.T.C.L.
 Lakelands Drive - Salmon Falls road to North end
 Latrobe Parallel Road (New) - White Rock Road to Latrobe Area
 Plan S. Bndry
 Lunman Road - West end to Lotus Road
 Malcolm Dixon Drive - Salmon Falls road to Green Valley Road
 Mandan Street - Apache Avenue to Pioneer Trail
 Mader Road - Cameron Park Drive to Ponderosa Road
 Mosquito Road - Placerville CL to Wentworth Springs road
 Mother Lode Drive - Pleasant Valley Road to Missouri Flat Road
 Mother Lode Drive - South Shingle Road to Road 171A
 Mother Lode Drive Connection (New) - Mother Lode Drive to El Dorado Road Interchange
 Newtown Road - Placerville CL to Pleasant Valley Road

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CRIMINALS
 TAKE COLLECTORS
 EXISTING RIGHT-OF-WAY - FUTURE

MOTOR COLLECTOR

76' 100'
32' 60'

Missouri Flat Road (New) - Green Valley Road to Cold Springs Road

Mosquito Road - Placerville CL to Wentworth Springs Road

Mother Lode Drive - Pleasant Valley Road to Missouri Flat Road

Mother Lode Drive - South Shingle Road to Road 171A

Mother Lode Drive Connection - Mother Lode Drive to El Dorado Road Interchange

Newtown Road - Placerville CL to Pleasant Valley Road

Old French Town Road - French Creek Road to Mother Lode Drive

Old Bass Lake Road - Bass Lake Road to Green Valley Road

Oxford Road - Cambridge Road to Cameron Park Drive

Palmer Drive - Cameron Park Drive to Wild Chaparral Drive

Perry Creek Road - Fairplay Road Near SR Mt. Aukum Road to

Fairplay Road Near Fairplay

Pioneer Trail - SR 50 to SLTCL

Ponderosa Road - North Shingle Road to Green Valley Road

Pony Express Trail - Carson Road to Sly Park Road

Rattlesnake Bar Road - Folsom Lake @ Flagstaff Hill to SR 49

Road 171A - Mother Lode Drive to Buckeye Road

Rock Creek Road - SR 193 to Mosquito Road

San Diego Street - San Bernardino Street to Arapahoe Street

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PUBLIC COMMENTS

PUBLIC MEETING #1 SUMMARY



PUBLIC OPEN HOUSE

**El Dorado County Transportation Commission (EDCTC)
 El Dorado County Fairgrounds – Marshall Building
 April 30, 2009 | 6:00 p.m. – 8:00p.m.**

<p>PROJECT TEAM: Jerry Barton – EDCTC Dan Bolster – EDCTC Carl Hagen – EDCTC Kathy Mathews – EDCTC Jim Ware – EDC DOT Mindy Jackson - El Dorado Transit Bill Donovan – CHP Randy Pesses – City of Placerville Clark Peri – Caltrans Gabe Corley - Caltrans</p>	<p>Keith Rhodes - T.Y. Lin Teresa Lopes - T.Y. Lin Jeff Werner – T.Y. Lin Kim Pallari - HDR The Hoyt Company Shayna Mayen - HDR The Hoyt Company Steve Peterson – ESP Bob Delp – ESP Martin Rose - ESP Dave Robinson - Fehr & Peers Matt Kittelson – Fehr & Peers</p>
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The State Route 49 Realignment Study is being conducted by the El Dorado County Transportation Commission in partnership with Caltrans, the El Dorado County Department of Transportation, and the City of Placerville. The first public open house for the study was held on April, 30 2009 at 6:00 p.m. at the El Dorado County Fairgrounds, in the Marshall Building. To promote the project and public meeting, EDCTC implemented a variety of communication methods including: distribution of the first project newsletter through a mailing, email blasts and hand deliveries; distribution of a media release, and reminder phone calls.

On Friday, April 10th approximately 500 newsletters were mailed to local business and property owners, as well as key stakeholders. The newsletters were also distributed via email to a large number of stakeholder groups for further dissemination. On April 14th, approximately 350 newsletters were hand delivered to various local businesses, agencies, community groups, and religious centers to distribute to their patrons and members. As a result of dissemination of a press release on April 21st there were two articles written on the project in the Mountain Democrat on Friday, April 24, 2009, and in the Sacramento Bee on Sunday, April 26, 2009. In a final attempt to promote the meeting, close to 50 reminder phone calls were conducted on April 24th and 27th to

ensure attendance. As a result of the extensive promotion, approximately 130 community members were in attendance at the Public Meeting.

The meeting was scheduled to include an Open House session, Presentation, and Question and Answer session to ensure ample opportunity for communications with the attendees. There were eight information stations equipped with maps, display boards and other materials, where key staff members were available to address questions and concerns expressed by the public. During the Open House portion of the evening, attendees were encouraged to 'tour' the room, gather information, provide input, and ask questions of project team members.

Information Stations were as follows:

- Station 1 – Welcome / Sign In
- Station 2 – Project Information
- Station 3 – Alternatives Evaluation
- Station 4 – Purpose and Need
- Station 5 – Environmental Highlights
- Station 6 – Alternative Modes
- Station 7 – Traffic Operations
- Station 8 – Concept Alternatives

At 6:30 p.m., the formal presentation portion of the evening commenced with a welcome and introduction of the meeting format by Kim Pallari with HDR|The Hoyt Company, a member of the consultant team. During her introduction, K. Pallari polled the attendees to gain understanding of how they heard about the meeting. The majority of people in attendance learned about the meeting by reading the local newspaper. K. Pallari then introduced the EDCTC Chair, Carl Hagen to address the attendees.

Dan Bolster, Project Manager and Transportation Planner for EDCTC then began the power point presentation and provided attendees with background information on the Project and the organization and role of the EDCTC on the project. He encouraged the attendees to ask the 'tough questions' that might not have answers right now, but can be answered eventually. His presentation walked attendees through the timeline for the study, and eventual construction, reiterating that construction could be as far off as eight to ten years. The need for public involvement was noted, that it is necessary for the community to help identify any fatal flaws in the planning process. D. Bolster spoke about the various phases of work that will need to be implemented prior to constructing a final project and reassured the group that the SR 49 Realignment Study will honor and value history, resources, and community. He closed his portion of the presentation by discussing the project Web site and availability of project materials for review and

download on the site. He again encouraged the community to send their comments/questions via the Web site.

Keith Rhodes, Project Manager for T.Y. Lin, then spoke about the technical aspects of the project. He walked the audience through the project process and alternative evaluations. He emphasized the purpose and need for the project and its critical importance to the evaluation process for proposed future alternatives. K. Rhodes then spoke in detail about the screening criteria and evaluation of the alternatives and the importance of the public's input on the proposed evaluation criteria presented at the meeting.

After this presentation K. Pallari then facilitated the question and answer session with Shayna Mayen taking detailed notes on all questions and comments addressed during the session. The session lasted about 40 minutes with questions being addressed by Kathy Mathews, Dan Bolster, Keith Rhodes, Kim Pallari and Steve Peterson.

All other comments submitted by the attendees were addressed via comment cards or through submission via the project web site. Questions and comments submitted during the public open house are documented below:

Comments addressed during the Questions & Answer Session

- Is this budget included in state or agency planning budgets – or is this just a “wish?”
- Somewhere, you have the Stakeholder Advisory Committee group listed, where can it be found? Are all the agencies listed?
- People of El Dorado County are the stakeholders in this project. (See flyer comments) – What guarantee do we have that the historical route won't be destroyed? Is the County being misled by the State? We are worried about suburban sprawl in agricultural areas. (See circulated 'opposition' flyer for details)
- What is missing is the objective – bottom line – There must be a driving motive. (It would be helpful if you read the purpose and need to the audience – *Dan Bolster read the statement to the group*) – be careful in the analysis of the project that “sprawl” doesn't creep in.

- Is this project similar to the Sutter Creek Bypass?
- How would you describe the constraint of taking a new alignment and diverting traffic away from local business districts and tourism in the City of Placerville?
- In middle of the project foot-print there is serpentine asbestos – will it be a fatal flaw to the project?
- Why is there no option to “do nothing?” There should be a possibility of keeping the historic route and possibly creating a bypass of SR-49 or business route.
- You must have a cost/benefit analysis.
- Who do you work for? (Kim) How are stakeholders established, and how were the board members established for the Stakeholder Advisory Committee. Can the list be added to? Altered?
- How many people does the group of 19 stakeholders represent? Who is represented? Do you know what the population is in Placerville and El Dorado Counties? What about this population? Do you feel this population is represented by your stakeholder group?
- Your evaluation criteria seem to be in the wrong order. The project team should look at environmental, historical, community based, and cultural impacts before you get to alignments. You said it would be difficult – but is it do-able?
- Will this be a ballot measure? What will the approval process be? Will we waste all this money and then find out in the end that the people who live here don't the realignment?
- Will it have to be a bond measure?
- Will our taxes be raised? Will the funding come from out of our pockets? (Audience member said question was not answered properly by EDCTC director / who stood up and answered on behalf of the agency)

- Is it safe to say there will be some sort of bypass to relieve traffic congestion on SR 49? Will there be a new road built?
- Will the project include a traffic study to identify SR 49 use as it currently is? If you build an alternative route – will you be able to determine its use? (That the population is and how they are utilizing it?) How will the alignment affect current use?

Comments submitted via Comment Cards

- How do I get a copy of the Project Corridor Map listing developments and status?

Submitted by:

Shanda Hahn
3783 Forni
Placerville, CA
622-6464

shahn@mlusd.net

- The proposed realignment contains the potential to adversely impact the historical and rural nature of El Dorado County. HWY 49 was meant to be an historical route, following the Gold Rush Gold Vein, and was not intended to be a swift parkway. While the elimination of bottlenecks at Spring St./HWY 50, and the by-passing of Marshall Gold Discovery Park are needed, it is important that any route realignments do not:
 - 1) Go through rural agricultural and woodland areas and open them to subdivision sprawl: and
 - 2) Not destroy the historical route which Hwy49 defines.So far, thousands of stakeholders have been left out of the process.

Submitted by:

Dr. Richard Boylan
PO Box 1009
Diamond Springs, CA 95619
530-621-2674

drboylan@sbcglobal.net

- To include: Bicycle and foot trail across South from American River.

Submitted by:

Anonymous

- Consider time/cost phasing implementations e.g. road sign engineering, re-route to existing higher capacity roads – use Missouri Flat Rd.

Submitted by:

Anonymous

- My suggestion is to utilize a route by-passing El Dorado, Diamond Springs, and Placerville to the west. Construct a new route utilizing Greenstone Rd, Green Valley Rd, and Lotus Road right-of-ways. Minimizing “cost,” environmental impact, and encroachment to property holders. This route utilizes the existing underpass at Greenstone/US 50. Avoid Union High school pedestrian and auto traffic. This would reduce congestion in the cities and preserves the community and historical areas.

Submitted by:

John D. Schmit
2860 Molly Lane
Placerville, CA 95667
530-363-3302
johnschmit1@comcast.net

- Is the study to “eliminate” or “address” Hwy 49 at Hwy 50? Are there any “at large” members on the stakeholders group? Does the realignment have to touch City of Placerville limits? Would we be able to remove the GIANT Jackson Auburn sign on Hwy 50 at Hwy 49?

Submitted by:

Carol Patton
327 Main St
Placerville, CA
530-626-3554
capatton_pcc@yahoo.com

- I was surprised by the lack of information ob the realignment project in the Mountain Democrat. Are you working with them to provide information to the public?

Submitted by:

Donald Jassowski
jassowski@att.net

- I object to the way this project is being “framed.” “Hwy 49 Realignment” connotes there is no other alternative BUT to re-align. It scares people in the community (me and others) who envision a freeway thru our historic 49.

So I recommend a change in name Hwy 49 Alternatives – and consider presenting an alternative such as loops around sticky areas, roundabouts and establishing historic routes so the impact to our historic Hwy 49 is MINIMAL – not maximized.

Mr. Beutler, Chair of the Rural Caucus for California Democratic Party would like to be at the SAC table.

Submitted by:

Jamie Beutler
2620 Piedra Verde
Placerville, CA
530-642-1353
beutlerjamie@yahoo.com

- I came to California in 1973 because I read about Highway 49 as a special sports car road. I want no realignment. I want 49 designated a scenic highway to preserve the curves and trees. Relieve the congestion hot spots only.

Submitted by:

Ken Freese
4460 Canyon Valley Rd
Diamond Springs, CA 95619
626-9283

- Ensure that this study takes into account impacts on SR 49 south of the study area. Need to coordinate with other efforts along SR 49 in Amador County and down to Sutter Creek.

Submitted by:

Anonymous

- The presentation was very professional and information. We really appreciate you all – you have a hard job ahead of you. GREAT JOB!!

Submitted by:

Anonymous

- Need to indicate the approved route that is not abandoned. Need to notify all property owners along adopted route.

Submitted by:

Anonymous

- I am the Traffic Safety Committee Chairperson for Greenstone County. My goal at this meeting is to ensure that the new route considers safe egresses for people entering and exiting from Lotus Rd and Green Valley Rd. If a major HWY passed these gate entrances then we would like for you to consider stop lights at both entrances.

Submitted by:

Bob Casper

Greenstone County

Traffic Safety Committee Chairman

3720 Castlerock Rd

Placerville, CA 95682

530-621-2525

robertcasper@sbcglobal.net



PUBLIC COMMENTS

PUBLIC MEETING #2 SUMMARY



**EL DORADO COUNTY TRANSPORTATION COMMISSION
STATE ROUTE 49 REALIGNMENT STUDY
PUBLIC OPEN HOUSE #2**

**Wednesday, October 14, 2009 | 6:00 p.m. to 8:00 p.m.
El Dorado County Fairgrounds, Marshall Building
Meeting Summary**

Project Team Attendees

Patty Borelli, EDCTC Commissioner	Adam Bane, El Dorado County DOT
Dan Bolster, EDCTC	Steve Peterson, ESP
Mindy Jackson, El Dorado Transit	Dave Robinson, Fehr & Peers
Steve Calfee, City of Placerville	Wendy Hoyt, HDR The Hoyt Company
Keith Rhodes, T.Y. Lin International, Inc.	Kim Pallari, HDR The Hoyt Company
Clark Peri, Caltrans	Tammy Nguyen, HDR The Hoyt Company
Matt Smeltzer, El Dorado County DOT	

On Wednesday evening, October 14, 2009, the El Dorado County Transportation Commission (EDCTC) held its second public open house for the State Route 49 Realignment Study. The open house was hosted from 6:00 p.m. to 8:00 p.m. at the El Dorado County Fairgrounds, Marshall Building.

The EDCTC and the community outreach consultant firm, HDR|The Hoyt Company, conducted a significant public outreach effort to invite the community and stakeholders to the meeting. Approximately 600 postcards announcing the open house were mailed to community members and key stakeholders, as well as hand delivered to key locations along the corridor. Media announcements were published in the *Mountain Democrat* and *Sacramento Bee*. Approximately 100 reminder phone calls were made along with several email blasts to key community members and stakeholders prior to the meeting. As a result of these efforts, approximately 100 members of the community attended the meeting along with project staff and team members.

Special attendees included Patty Borelli, EDCTC Commissioner/City of Placerville Mayor, as well as representatives from the *Sacramento Bee* and *Mountain Democrat*.

The meeting was set up as an informal open house that allowed attendees to walk around the room and view a variety of project displays, including illustrations of the study area and

potential alternatives, and talk one-on-one with the project team staff and consultants. The meeting format included the following agenda:

- I. Open House – 6:00 p.m.
 - a. Station 1: Purpose / Need
 - b. Station 2: Project Development Process
 - c. Station 3: Evaluation/Screening Process
 - d. Station 4: Alternative Alignments
 - e. Station 5: Traffic Operations
 - f. Station 6: Environmental Concerns
 - g. Station 7: Alternative Transportation Modes (Transit/Pedestrian/Bicycle)
 - h. Station 8: Project Information
- II. Presentation by the SR49 Project Team – 6:30 p.m.
 - a. Introduction / Welcome
 - b. Project History / Study Limits / Purpose & Need
 - c. Project Development Process / Organization
 - d. What is a Realignment Study?
 - e. Community Involvement / Comments Heard
 - f. Alternative Evaluation / Project Issues
 - g. Project Schedule
- III. Question & Answer Session – 7:00 p.m.
- IV. Open House – 7:30 p.m.

At 6:30 p.m., community outreach consultant Wendy Hoyt opened with welcoming remarks and noted the elected officials and the project team present. She then went over the ground rules, asked attendees how they heard about the meeting, then introduced Patty Borelli, who gave a few brief remarks and thanked the attendees for coming.

Dan Bolster then gave the audience a brief overview of the project's history, study limits, purpose and need, project development process, project organization, what a realignment study is, and community involvement/comments heard. Keith Rhodes then reviewed the alternative evaluation process, project issues, and project schedule.

Prior to opening the floor to questions and comments (see below), Wendy thanked community for their critical participation and continued patience during the project planning process and then outlined the next steps.

Once the questions and concerns had been addressed, the meeting format reverted to the open house format, and attendees were encouraged to continue visiting with project staff to discuss their specific questions in more detail.

During the question and answer session, HDR/The Hoyt Company recorded all comments and questions. These comments have been categorized and placed in no particular order below.

The following comments were made during the question and answer session:

- What is the rationale for eliminating the Marshall Gold bypass? What criteria led for it to be eliminated? I do not understand why we can not attach to the existing alternative to eliminate traffic in El Dorado and Diamond Springs. The EIR has been done to my knowledge. I do not see a reason to exclude it.
- You ranked the top three alternatives in order. Can you rank the alternatives that did not make the cuts that might be back for future study? Is there any chance to still comment on those alternatives?
- Is it possible to document why those various alternatives were rejected?
- What guarantee do Caltrans, DOT, and the stakeholders have to implement the alternatives? What is the width of the right-of-way we are talking about? It is too soon—three alternatives seem arbitrary.
- The hybrid project 5G and 5H are considered because it seems to serve Diamond Springs and Placerville surface transportation needs as well as commerce. Utilize investment from community as a whole and expand on state transportation needs.
- Is the State Park's objective to eliminate SR49 from going through Marshall Gold Park?
- How will public comment be documented in the feasibility study—verbatim or summarized? When the project is handed off to Caltrans, there is no guarantee that public outreach will still be involved. Is there any guarantee to still be involved?
- All three alternatives have one link (Missouri Flat Road). Consider another crossing point since you are already throwing traffic onto the existing roads.
- I did not see any homeowners associations involved in the Stakeholder Advisory Group (SAC).
- Once the project is completed, will there be a historic SR49 in addition to an alternative SR49?
- I am a resident engineer. Of the routes looked at, did you actually look at SR49? Everything you do has to be to Caltrans strict specifications for crossing creeks, etc.
- How many people come from Diamond Springs/Coloma? Put better signage out. Most people know how to get from point A to point B.
- Why on earth would we not use existing roads rather than building all over the county? I do not understand why the alternatives were chosen. Our existing roads are already at 55 mph—why not connect to those? Your first two criteria are all about moving people and being safe—this alternative addresses it.
- It does not appear that anyone from our the neck of the woods was considered on the SAC. Was Cool considered? If it was, what happened to it? Was Greenstone considered? How about North Shingle Road?
- Highway 49 is currently not a scenic highway; however, it is eligible if we apply with Caltrans.
- What criteria eliminated North Shingle Road?
- I understand moving people and safety is important, along with the environmental process criteria looking at certain issues, however, shouldn't one major consideration be how you are spending our tax dollars?
- What are the criteria used for the different rankings? Are they equal of does one have more weight than the other? Are they all different or same?

- Regarding safety issue at Lotus and Green Valley. There is a new Y bridge with 150-200 yards to see whether a car is coming or not. Cars are coming at 55 mph. How are you addressing safety with cars coming at 55 mph with short sight availability?
- New bridge across creek at Green Valley Road—has that been taken into consideration? Increase the speed around the two curves. What is going to stop people from coming through that road?
- There are articles from the Mountain Democrat dating back from 1984 and on that Cold Springs Road has the highest accident rate in the county. Why still consider using it? Of the two alternatives, Lotus Road up Green Valley Road to Greenstone would eliminate all the issues.
- The two most expensive alternatives are most risky, twisty, twining routes. How did they end up in the top three?
- I am concerned about traffic, freight, etc.
- I moved out of Coloma and used to walk through Marshall Gold Park all the time. Is any money allocated to saving the park? Are there any monies identified to take the road out?

During sign-in and throughout the evening, attendees were given the opportunity to write comment cards, which could be turned in to the comment box during the meeting or brought home to mail or fax later.

The following comment cards were submitted at the meeting:

Comment #1:

California is bankrupt. I recommend that you propose a two phase program:

Phase I: Using exiting roads, adjust signage to route SR49 traffic onto westbound Pleasant Valley; north on Greenstone; west on Green Valley; and north on Coloma Lotus. Requires no construction, no right-of-way and meets the majority of your objectives.

Phase II: Contract a realignment to join SR49 from Diamond Springs to Coloma Lotus using Greenstone elevation separation at US 50. This accomplishes all objectives, but costs more than California will ever be able to afford.

Submitted by:

Jim Goodspeed

PO Box 587

Coloma, CA 95613

530-621-3914

jwgoodspeed@peoplepc.com

Comment #2:

Keep historic 49 as is – establish truck route. Get better signage for alternatives. I spend much time in the area and I have not seen the semi's that have been talked about. Is this study to deal with present conditions of for future growth? My fear is that you will create this road then develop it then be back to the same condition you have now.

Submitted by:

Sue Taylor
PO Box 961
Camino, CA 95709
530-391-2190
sue_taylor@comcast.net

Comment #3:

I do not understand how designation of the alternative existing routes will achieve the state goals unless drivers are somehow forced/lead to use those alternate routes. Presuming the majority of drivers using those roads are local residents and business people changing the SR49 designation will have little impact for changing traffic volume on each road in question.

Submitted by:

Rick (Richard) Gaylord
1082 Kimi Way
Placerville, CA 95667
530-626-1622
sales@telefix.net

Comment #4:

- 1) What assurances does the DOT and other stakeholders have that Caltrans will adopt and use the realignment study? If they are not “invested” in the study results, won’t they want to redo the same study at a later date? Caltrans staff should participate in meeting and hear the residents.
- 2) Why only three potential alternative alignments? Why not four or five? Seems like there are others that will meet the purpose and need and should be included in the feasibility study (or they will be questioned later).
- 3) What is the width of the right-of-way expected?

Submitted by:

Deborah Kruse (Coloma landowner)
1271 W. Fremont Avenue
Fresno, CA 93711
559-916-3570
d_kruse@mac.com

Comment #5:

State Route 49 is not currently a scenic highway; however, it is designated as “eligible.” For purposes of this project, it is a very good idea to apply to Caltrans for scenic designation. This would result in all future development of roadway and adjacent land uses to be in harmony with a scenic highway. This does not prevent development but would ascertain that alignments and site grading are done in accordance with aesthetic guidelines of a scenic highway. For more

information, please see Caltrans, Landscape Architecture Program Scenic Highway Program (on the internet).

Submitted by:

Marsha Freese
4460 Canyon Valley Road
Diamond Springs, CA 95619
530-626-9283
marsha_freese@dot.ca.gov

Comment #6:

I object to the Missouri Flat option to Green Valley Road because Indian Creek Elementary School would be right on the highway. It has little parking. People park on the street and this would be very dangerous for the young kids on the street.

Submitted by:

Jan Ives
6240 Cobblestone Road
Placerville, CA 95667
530-295-8170
janives@sbcglobal.net

Comment #7:

Live in Greenstone County Estates. Concerned about light pollution. Like to see the stars. Placerville is big glow on horizon and Sacramento to the other side. The casino is a noticeable glow. Sadly, I have a hill to the north/west so one 49 alignment will curve around my night sky. Concerned about safety getting to 50 via Greenstone Road. Concerned with current congestion crossing 50 on Missouri Flat and Ray Lawyer traffic lights are a fair nightmare to get through.

Submitted by:

Martha Cunningham
5507 Comstock Road
Placerville, CA 95667
530-642-0849

Comment #8:

- 1) I do not think the route on Green Valley Road past Folsom College and Indian Creek School is acceptable because traffic congestion and little kids being dropped off. If buses use North Shingle then North Shingle should be used.
- 2) I like the Lotus to Green Valley Road to Greenstone Road route of the Lotus to North Shingle Road route as these are more direct routes and should have less impact on the area. For North Shingle Road needs new bridge over Highway 50.
- 3) The ranking requirements should be relooked at and evaluated. *Most important!
- 4) Missouri Flat Road is already congested.

Submitted by:

Don Eddy
6240 Cobblestone Road
Placerville, CA 95667
530-295-8170
donaldeddy@sbcglobal.net

Comment #9:

The number of road affected by those three alternatives can not be the best for the citizens of Placerville, Diamond Springs and El Dorado. We have plenty of roads that currently can fulfill your goals without running a highway through our communities. Reconsider Lotus to Shingle Springs to 50 to the Missouri Flat interchange.

Submitted by:

Jennifer Sands
5921 Gold Hill Road
Placerville, CA 95667
530-621-1009

Comment #10:

I find it hard to believe the Cold Springs or Missouri Flat is being considered, considering the existing congestion. It seems the best route would be Pleasant Valley to Greenstone to Green Valley. This incorporates on existing underpass on Greenstone and bypasses all points of congestion.

Submitted by:

Mike Scorlot
1970 Coloma Road
Placerville, CA 95667
530-621-1539

Comment #11:

Need to consider Lotus to North Shingle. Need improvement of intersection of 50 (new intersection east of Ponderosa?). Why not use highway 50 to 49 south instead on Mother Lode?

Submitted by:

Jan Ives
6240 Cobblestone Road
Placerville, CA 95667
530-295-8170
janives@sbcglobal.net

Comment #12:

Gold Hill HOA—not contacted. Lotus bypass need more consideration. Heavy vehicle route versus light vehicle route.

Submitted by:

Jim Lemire
4714 Feldspar Lane
Placerville, CA 95667
530-626-5448
jlemire1@prodigy.net

Comment #13:

I am concerned about financial help for Marshall Gold State Park. Highway 49, where it exists, north of Highway 50 can not be anymore dangerous than Cold Springs Road!

Submitted by:

Carrie Guild
carrieremaxgold@yahoo.com

Comment #14:

How did this project's scope ever get started at Coloma rather than Lotus? Coloma has seasonal traffic and Lotus has year round commercial, recreational, commuter, and local traffic. Not including Lotus, which includes Marshall Road and 49 intersection and south end of bridge, congestion through Lotus Park is serious. There are year round activities in Lotus Park on both sides of the road. This is mixed with children of all ages. Please rethink your scope!

Submitted by:

Bill Bacchi
6801 Bacchi Road
Lotus, CA 95651
530-622-7713

The following comments were submitted via e-mail:

Comment #1:

Sent: Wednesday, October 14, 2009, 2:41 PM

Dear SR49 Realignment staff,

I am a stakeholder representing Greenstone Country Association in El Dorado County on the SR49 realignment study. Unfortunately tonight's meeting and the Greenstone Country Association Board Meeting has been scheduled at the same time. And because of my position as the chairman of the Greenstone Traffic Safety Committee, I am on the agenda to give a report out tonight's board meeting. I am sorry that I am going to miss the SR49 realignment meeting and hope to receive any documentation that is reviewed at your meeting. Then I will

pass on to the community any information that is pertinent such as the gate entrances and exits to our community that could be affected by the realignment of SR49 study.

In lieu of the fact that I will not be able to attend, I would like it noted that if the SR49 realignment study recommends to position the realignment such that it cross in front of one or both of our gate entrances/exits we would like for it to be noted that we are requesting the study of the need of a traffic signals be put up creating safe passage on to HWY 49. Otherwise with out traffic signals, it will create a safety hazard for traffic merging. Today the traffic is extremely heavy at times and is risky to merge, if the realign uses Lotus or Green Valley roads to accomplish the realignment, then it will substantially increase the traffic at the entrances that it interfaces with. Therefore, we would like a study done to insure the safety of individuals entering and exiting our community. Please put this in to your study so that down the road, it is not missed. The cost to do this if needed, needs to be factored into the study.

Warm regards,

Bob Casper

Submitted by:

Bob Casper

robertcasper@sbcglobal.net

Comment #2:

Sent: Thursday, October 15, 2009, 3:02 pm

Two items:

1. The three 2nd level routes are so convoluted they remind me of the gerrymandering done with congressional districts. Someone may benefit from these routes but it certainly can't be the general taxpayer... My suggestion: Lotus Road, North Shingle Road, Mother Lode Drive, Pleasant Valley Road into Eldorado. Simple, shorter, uses existing roads, etc.
2. I thought I understood the answer to my question last evening about the specific reasons for rejecting various alternatives was that the reasons and the alternatives were available on the edctc.org web site. If they are there I was unable to locate them. I found the three second level routes but not the 52 originals. Did I miss them or are they not there yet?

Thanks. Leland Sheppard

Submitted by:

Leland Sheppard

3251 Ken Derek Lane

Placerville, CA 95667

530-621-2451

lcshepp@directcon.net

Comment #3:

Sent: Thursday, October 15, 2009, 5:21 PM

Mr. Bolster:

I attended yesterday's Public Open House on behalf of the Grassy Run Community Services District (of which I am the General Manager) and of the Grassy Run Homeowners' Association (of which I am the Chair of the Legal Committee and a Director-Emeritus), and I found the exhibits and presentations most helpful. I do, however, have a couple of questions and a couple of comments, as follows:

1. QUESTIONS: We were told at the meeting that, by reason of all the various factors that went into the analysis of the preferred alternatives for Level 2 screening, the successful alternatives were, in order, Alternatives #5H, #3E and #5G. Those alternatives ranked, respectively, as Nos. 3, 2 and 4 in the Intermediate Level 1 Screening Criteria. We were told that there was no ranking for the Level 2 screening, at least for the seven alternatives that did not make the top three. The Intermediate Level Screening Scores were as follows:

- a. Alternative #5H, Score of 7.35, Rank #3;
- b. Alternative #3E, Score of 7.45, Rank #2; and
- c. Alternative #5G, Score of 7.15, Rank #4.

Two obvious questions present themselves from this information:

- i. Why, using the Commission's own criteria was Alternative #5H ranked ahead of Alternative #3E, even though Alternative #3E had a higher score? and
- ii. Why, again using the Commission's own criteria, did Alternative #10, with a Score of 8.85, Ranked #1, not even make the cut of the top three? Alternative #10 appears, from the numbers, not only to rank first, but to rank first by a very wide margin.

2. COMMENTS: First, Grassy Run's particular interest involves Alternative #2C, which scored 6.95 and is ranked #6. In my view some of the individual criteria scores resulting in that total score do not comport with reality. Specifically, there are several locations on Greenstone Road, both north and south of Highway 50, that are narrow and curvy, and one of which is on the side of a substantial grade (the grade is from side to side, not from front to back). I have in mind specifically (i) the approximately 200 yards southerly of Greenstone's intersection with Buck Mountain Road, and (ii) the area between the southerly intersection of Studebaker Road with Greenstone and Greenstone's intersection with Mother Lode Drive, particularly including a concrete bridge across Slate Creek that will have to be both replaced and widened (as will most of Greenstone Road for its entire length). Correction of these problems will involve much more than just "moderate impact," and unless there is very substantial widening of Greenstone Road (and Green Valley Road between Lotus Road and Greenstone) the reduction in travel time will be much less than "moderate."

Second, while Grassy Run is not directly impacted by this, it seems that the complete elimination of Alternative #1 (Lotus Road to North Shingle Road to Mother Lode Drive) fails to give due consideration to either (i) the issue of cost, or (ii) the issue of use of existing facilities. I have the sense that Alternative #1 was eliminated because the issue of cost was not believed to be materially significant. In my view that conclusion is flagrantly shortsighted and incorrect.

Obviously the State of California is in serious financial difficulty right now, but in my view that difficulty is not going away within the foreseeable future. Why eliminate an alternative routing that, as a practical matter, (i) is already being used and (ii) will require much less in the way of improvement costs and expenses in order to meet CalTrans' standards? I believe that in the screening analysis sight has been lost of the truism that the money-pot is not infinite!

Submitted by:

Richard W. Nichols

hmonrdick@wildblue.net

Comment #4:

Sent: Friday, October 16, 2009, 10:03 am

I attended the October 14th public meeting about the realignment of Highway 49. While it was full of good information, I am completely against the routes for Highway 49 that involve having Highway 49 run along Cold Springs Road and Gold Hill Road. These don't seem to be the best routes. The grade on Cold Springs Road is too steep to be a reasonable highway. The curves are tight on Cold Springs and on Gold Hill Road, and many houses are already quite close to the road. There are several historic buildings that would be affected.

The claim is that safety is top priority, but many smaller roads and driveways join these two roads on blind curves, making the existing traffic already unsafe to deal with. Imagine adding many more semi-trucks and buses, moving at higher speeds. How is that safer for the existing families in the area? Our safety and quality of life seems to be of no concern. The route to get to Cold Springs Road from existing Highway 49 involves some creative signage directing traffic to Ray Lawyer Drive, Placerville Drive, and Pierroz Road. This of course would just transfer a bad traffic problem from one area to another.

However, for a price, houses can be bought and demolished; grades can be leveled; roads can be widened; curves can be straightened. What they can't do for any price is preserve the quality of life of the rural area that local families bought into, hoping to raise our children in peaceful neighborhoods, when they take our quiet country roads and force them to become a state highway.

Submitted by:

Shari Moffitt

4759 Feldspar Lane

Placerville, Ca 95667

530-295-0981

moffitt@directcon.net

Comment #5:

Sent: Saturday, October 17, 2009, 3:48 pm

I propose we need a new alternative which calls for two routes. Main Hwy 49 will go from El Dorado along Pleasant Valley to Mother Lode to North Shingle to Lotus (will require major improvements)AND... Historic Route 49 will follow the existing route of 49 and require only minor improvements. The difficulties with this alternative will be mainly administrative and will include the development of a fairly complex cost share document. I believe all the existing criteria will be well met with this alternative and it will allow separation of recreation traffic that wants to visit the golden chain. Bob Smart

Submitted by:

Bob Smart

4520 Lon Court

Diamond Springs, CA 95619

530-622-6340

rsmart41@comcast.net

Comment #6:

Sent: Sunday, October 18, 2009 11:32 AM

My wife and friends were at last week's meeting and noted that Steve Chaffee and Placerville City council are hot to get the Ray Lawyer interchange built through this realignment process. We live on Gold Hill Road and travel Cold Springs to get to Placerville and KNOW that that route selection makes no sense at this time due to the steep slope of Cold Springs near the golf course, and the road does NOT connect with Ray Lawyer, it would require traveling on Pierroz to Placerville Drive to Ray Lawyer. Those 2 plans do nothing to address the traffic near the schools in El Dorado which would increase congestion and raise safety risks with all the students around. We all hope something can be done with the Lotus Road (high speed) and Green Valley Road plan and cross Route 50 using El Dorado Road to avoid the congestion at Missouri Flat - that will also allow traffic to get to southbound Route 49 in El Dorado without going past the schools. You could also consider a new interchange between Missouri Flat and El Dorado and connecting that with El Dorado from the north.

Thank you for your consideration

Submitted by:

Paul and Stephanie Sobelman

psobelman@hotmail.com



PUBLIC COMMENTS

ADDITIONAL PUBLIC COMMENTS

Date	Name	Add to list	comments
5/6/2009	Tulen Emery	YES	
5/4/2009	casey kelley	YES	
5/4/2009	Anthony J Arjil	YES	Hwy 49 is a historical hwy and must remain as such. Realigning it would destroy the historical aspect of it and turn it into just another road. In addition, and just as important, realignment would only encourage more development which is also not needed in a rural setting.
5/4/2009	Scot Wilson	YES	
5/3/2009	Van L. Dossey	YES	
5/2/2009	Mo Daly	YES	As a property owner for over 32 yrs in Lotus, I am extremely interested in being updated on upcoming hearings/or information. I was unaware of the April 30 meeting that has now passed. The realignment of h. 49 around the State park would significantly impact the serenity and privacy of the Mountain View Drive and Manzanita Lane properties. While the town of Coloma revolves around the post office and general store, the residents will continue to use these roads as the main source of travel, regardless of any bypass route. To relocate a major highway around the state park is pork-barrel spending at the very least.
5/1/2009	Richard Holmes	not checked	I was unable to attend the meeting on the issue of SR 49 realignment. However, I do have a few comments: 1. It is easy to understand why a realignment at Placerville makes some sense. The road is windy, goes through town, but doesn't go through areas of potential interest for tourists, nor does it go through an area of where tourist might stop and spend. 2. The windy road from Placerville to Coloma is actually a plus for Coloma in my opinion. It serves to remove the traveller from the everyday and to go back in time to the gold rush. I think this problem is what has ruined Placerville as a destination. A big freeway cuts right through it, ruining the ambiance. 3. It would be a shame to make Coloma into another pit stop on a major thoroughfare. I think the road at Coloma itself should only be diminished and not widened. It is also hard to imagine a road that might completely avoid Coloma, given the way the land around Coloma is arranged and owned. My advice "leave as is."
5/1/2009	Karen Mulvany	YES	
4/30/2009	Bob Smart	YES	
4/30/2009	Kathi	YES	
4/30/2009	Mel Harris	YES	Please add me to the email distribution list - thanks!
4/30/2009	Michael Mueller, RCDD, DCCA	YES	
4/30/2009	Larry Lavine	YES	Will the study consider the impact of any increase in traffic on Green Valley Road and Lotus Road if they are chosen as the "new" SR 49 (ie, traffic counts)? Will the study then consider the need to identify impacts to traffic at the intersection of Lotus Road and Stagecoach Road and Green Valley Road and Stagecoach and the residents of Greenstone Country gated community? Will those intersections need to have traffic control such as signalization?
4/30/2009	Al Morris	YES	Nice picture of proposed bike trails. Is there a proposed realignment route? Is Lotus Rd being considered? Thank you
4/29/2009	Mark Gibson	YES	Please send me project updates. I would like to see a re-route around Coloma Main Street.
4/28/2009	Pete Melnicoe	YES	Entered by Joni. Pete sent me an e-mail. To keep the date files current, I submitted it for him. He had no comments, just wanted to be added to mailing list.
4/27/2009		YES	
4/26/2009	Homer Rail	YES	Does Highway 49 have any Historic Highway designation that would preclude a realignment? Does the realignment study anticipate that the route would skirt the town of El Dorado as well as Coloma and Placerville? Does the Department of Parks and Recreation plan to close the road through Marshall Gold Discovery Park if the Hwy 49 is realigned to by-pass the park? Does the realignment plan anticipate funds will be available for new acquisition and construction and/or improvements to existing roadway upgrading? Does the criteria for selecting a new route allow for signaling intersections with existing arterials? Has a traffic count been done on Highway 49 south of El Dorado and north of Coloma along with a survey to see what the origin and destination is for the cars counted? My experience on Highway 49 is frequent and my observation is that most of the traffic is local and not just passing through the area in question. The above traffic study should resolve that issue. If the realignment happens, how many of the present cars will actually be removed from Highway 49?
4/26/2009	Robert Blase	YES	
4/24/2009	Suzanne Frey	YES	How wide will the bike lane be that goes along HWY 49 north of The Old Toll Road where my property frontage is? Thanks.
4/18/2009	Jeff Lee	YES	
4/13/2009	Mike Brink	YES	
4/13/2009	Trevor and Jamie Anders	YES	



PUBLIC COMMENTS

STAKEHOLDERS ADVISORY COMMITTEE (SAC)

MEETING MINUTES



**SR49 REALIGNMENT STUDY
STAKEHOLDER ADVISORY MEETING #1
El Dorado County Transportation Commission (EDCTC)
February 25, 2009 | 6:00 p.m.**

PROJECT TEAM:

Dan Bolster, EDCTC
Jim Ware, EDC DOT
Keith Rhodes, Ty Lin
Teresa Lopes, Ty Lin
Kim Pallari, HDR | The Hoyt Company

Rob Joyce - El Dorado Youth Commission
Bill Center - No Gridlock Committee
Howard Penn - CLVCA
Jim Michaels - California State Parks - Gold Fields District
Scott Armstrong - California Outdoors

ATTENDEES:

John Taylor - Friends of the Diamond Springs - El Dorado Community
Doug Walker - El Dorado County Historical Society
Matt Cathey - El Dorado County Office of Emergency Services
Scott Chadd - Taxpayers Association of EDC, Farm Trails
Nate Rangel - California Outdoors
Lauren Cockrell - El Dorado Youth Commission

On February 25th, the El Dorado County Transportation Commission (EDCTC) hosted the first of six Stakeholder Advisory Committee (SAC) meetings for the *State Route 49 Realignment Study*. The meeting was scheduled from 6:00 p.m. to 8:00 p.m. at the El Dorado County Office of Emergency Services Conference Room, 330 Fairlane, Placerville, CA. The SAC meeting kicked off the 18-month project and public participation effort that will involve a feasibility analysis of potential alternative alignments for SR49. The SAC will play a key role in assisting the EDCTC with project information dissemination, and gathering public input on important topics such as the purpose and need for the project, potential screening criteria for the concept alternatives and general input on the study process. The meeting was promoted via email and

telephone calls to the key identified representatives from 18 diverse stakeholder organizations/groups. Eleven stakeholders were present at meeting #1.

Kim Pallari, with HDR|The Hoyt Company kicked off the meeting with a short synopsis of the purpose of the meeting, format and opportunity for Public involvement. Dan Bolster, EDCTC, then briefly described the feasibility study and its history. Keith Rhodes, of TyLin then walked the SAC through the key topics for discussion within the breakout groups for the interactive portion of the evening. The SAC were split into two groups with a facilitator to discuss first the purpose and need for the project, then to begin discussions on the screening criteria for future proposed alternative alignments. Each group was facilitated by a member of the Project Team to ensure that all voices were heard and to record key input. Group 1 was facilitated by Dan Bolster and Kim Pallari and Group 2 by Keith Rhodes. The following representatives were included in each group:

Breakout Group #1:

Jim Ware
Bill Center
Lauren Cockrell
John Taylor
Scott Armstrong
Jim Michaels

Breakout Group #2:

Rob Joyce
Scott Chadd
Matt Cathey
Howard Penn
Doug Walker
Nate Rangel

During the breakout session, the Stakeholders were engaged and provided valuable input. Following the breakout session, each group reported out to the entire group their discussion and key thoughts. This input is recorded below.

Purpose and Need**Group #1**

1. Delete “northern and central” and replace with “movement of goods and people within El Dorado County.”
2. Delete “poor existing geometrics.” Rephrase: “sharp curves and steep grades of existing alignment (physical constraints).”
3. Purpose and Need might include the alignment of SR49 through Marshall Gold Park in Coloma and the at-grade intersection at SR49/Hwy 50 in Placerville specifically as they are key components of the project, i.e. driving the project to look at different alignments (although called out as a goal).
4. Add language: “Greatest benefit to historic, cultural, and natural resources.”

Special Note:

On aerial map: Drop Shingle Springs Dr. as it is a private access roadway.

Group #2

1. Sensibility to Cultural Resources with minimum impact. Specify “cultural” resources in addition to “environmental” resources.

Special Note: Should include signage at key intersections such as SR49 and Lotus Road.

Level 1: Screening Criteria

Group #1

Criteria 1A - Purpose and Need & Key Project Goals

C. Should include “City of Placerville General Plan”

F. Delete word “commute” and replace with “travel” or “peak traffic” times (peak times may not be typical commute times).

Group #2

Criteria 1A -

H. Add “cultural” impacts and concerns to statement

Criteria 1B - Constructability/Operational Feasibility

C. Add “cultural resource”

The following discussion was also recorded during the breakout session:

- It was mentioned (by Scott Chad) that it would be beneficial to produce a map of the project area showing portions of the existing roads which already meet minimum standards (he suggested using color coding). He felt that this would be beneficial for alternative analysis discussions.
- Howard, Nate and Doug – all expressed concerns with widening the existing SR 49 in Diamond Springs (cultural impacts, and impacts to existing historic buildings) – they suggested that existing SR 49 (if the existing alignment is maintained in this area) may not be able to be widened thru this area.
- The group thought that it would be important to add criteria to assess residential impacts when looking at alternative alignments to be used as a measure for impacts of the alternative. They suggested criteria in reference to distances of residences in proximity to the roadway to be used as the alternative route.

At the close of the SAC meeting, Kim Pallari asked that each SAC member take the handouts with them to distribute and begin to talk with their respective group members about the project and garner input. The next SAC meeting will be held on March 30th. At meeting #2, the SAC will again address the above topics as well as the screening criteria level 2 in open breakout groups.

The following comments were also submitted via comment card or email by SAC members following the meeting:

Bill Center, No Gridlock Committee - Comment Card submittal

Criteria 1A: C

Compatibility with planned zoning and land uses - Add "policies and City of Placerville General Plan."

Scott Chadd, Farm Trails and Taxpayers Association - Email submittal

Dan, I enjoyed the meeting. I thought it was informative and went pretty smoothly. I will be providing copies of your handouts to Farm Trails and Taxpayers. As I mentioned at the meeting your constraints matrix is going to rapidly reduce the options. The key project goals in Handout #1 drive the alignment in a very specific direction. Seems to me that if you are studying the section of highway 49 from Coloma to El Dorado and you place the following conditions upon yourself:

1. Improve traffic operations.
2. Eliminate route 49 through Marshall Gold Discovery Site; and the "at grade" intersection of highways 49 and 50.
3. Reduce traffic impacts to Placerville, El Dorado, and Diamond Springs.
4. Reduce vehicle travel times.
5. Evaluate the utilization of existing roads.
6. Minimize/Reduce the resources required to achieve the desired improvements.

The alignment will emerge pretty quickly when subjected to this screen. As I suggested to Keith Rhodes of T.Y. Lin, the process of creating a matrix of constraints and then forcing the local road system through that screen will guide you to the preferred alignment. No choice will satisfy all of your criteria. The challenge will be to weight the options based on their response to a "significance" scale you create.



SR49 REALIGNMENT STUDY
STAKEHOLDER ADVISORY MEETING #2
El Dorado County Transportation Commission (EDCTC)
March 30, 2009 | 6:00 p.m. – 7:30 p.m.

PROJECT TEAM:

Dan Bolster, EDCTC

Teresa Lopes, Ty Lin

Kim Pallari, HDR | The Hoyt Company

Steve Peterson, Environmental Stewardship and Planning

Randy Pesses – City of Placerville

Keith Rhodes, Ty Lin

Robert Johnson – Sierra Club Maidu Group
Mike Kobus - El Dorado County Chamber of Commerce / Kobus Pest Control

Jim Michaels – California State Parks – Gold Fields District

Howard Penn – CLVCA

Bob Smart – El Dorado Parks and Recreation Commission

John Taylor – Friends of the Diamond Springs – El Dorado Community

ATTENDEES:

Matt Cathey – El Dorado County Office of Emergency Services

Eileen Crim – Trails Now

On March 30, 2009, the El Dorado County Transportation Commission (EDCTC) hosted the second of six Stakeholder Advisory Committee (SAC) meetings for the *State Route 49 Realignment Study*. The meeting was scheduled from 6:00 p.m. to 8:00 p.m. at the El Dorado County Office of Emergency Services Conference Room, 330 Fairlane, Placerville, CA. The SAC will play a key role in assisting the EDCTC with project information dissemination, and gathering public input on important topics such as the purpose and need for the project, potential screening criteria for the concept alternatives and general input on the study process. The second SAC meeting will review past input provided by the SAC and focus on Level 2 screening criteria. Level 2 screening criteria consist of a comparative evaluation of alternatives that satisfy the purpose and need, and pass Level 1 screening. Using a set of predetermined performance criteria, alternatives will be assigned values from 1 to 4 then comparatively scored and ranked based on degree of predicted transportation benefit, potential environmental impacts, and constructability and operational feasibility. The meeting was promoted via email to the key identified representatives from 19 diverse stakeholder organizations/groups. Nine stakeholders were present at SAC Meeting #2. There were several members in

attendance that were unable to attend the first SAC meeting which required further discussion on Purpose and Need and Level 1 Screening Criteria.

Kim Pallari, with HDR | The Hoyt Company kicked off the meeting with a short synopsis of the purpose of the meeting, format and opportunity for Public involvement. Dan Bolster with EDCTC then briefly described the feasibility study and its history. Keith Rhodes, of TyLin then walked the SAC through the key topics for discussion within the breakout groups for the interactive portion of the evening. The SAC were split into two groups with a facilitator to recap input heard at the previous SAC meeting and gather further input from the representatives based on their discussions with their constituents. The next step was to focus on the Level 2 Criteria and gather input. Each group was facilitated by a member of the Project Team to ensure that all voices were heard and to record key input. Group 1 was facilitated by Steve Peterson and Kim Pallari and Group 2 by Keith Rhodes and Dan Bolster. The following representatives were included in each group:

Breakout Group #1:

Eileen Crim
Robert Johnson
Mike Kobus
Randy Pesses
John Taylor

Breakout Group #2:

Matt Cathey
Jim Michaels
Howard Penn
Bob Smart

During the breakout session, the Stakeholders were engaged and provided valuable input. Following the breakout session, each group reported out to the entire group their discussion and key thoughts. This input is recorded below.

**Group #1
General Statements**

Diamond Springs Focus

- Keep downtown business viable.
- Need more parking.
- 2 Issues (SR49 and Diamond Springs Bypass / Missouri Flat Connector).

- Businesses in Placerville want to remain economically viable if there is a new alignment.
- Many people use SR49 to travel from town to town (Golden Chain) – Is there a member represented here on the SAC from this group?
- Would like to see topographical map.
- Preserve trails and rural character.
- Should be connection for Union Mine and Charles Brown Elementary School.
- Speed control is important through alignment.
- Would be helpful to see what planned alignment Caltrans has from historical study.
- Would be helpful to show all adopted plans on a topographical map.
- Would like to provide better and safer route for students between schools and residents.
- Would like signals removed from Highway 50 in Placerville.
- Most traffic on SR49 is local with back-ups in Diamond Springs and Placerville.
- Sutter Creek bypass is a current example to research and review.
- Need to re-route SR49 where there can be a full interchange not right in downtown.
- Are there any other projects along SR49 that are similar?

Purpose and Need

- Eliminate statement of north and central and just list El Dorado County.
- Need to take out geometrics and change to “Alignment Deficiencies”.

Level 1: Screen Criteria

- We think we need some type of category that says “Other” in case there is something overlooked.
- We are concerned that without knowing, we may drop out a viable alternative through screening criteria because we do not have all the information needed.
- Need an East/West connection in Diamond Springs for kids between schools.
- May need to consider other parallel routes in conjunction with the SR49 realignment. (Local Parallel Road)
- Provide choice for efficient route and recreational or historic use.
- Provide alternative alignment at Marshall Park.
- Develop parking in Diamond Springs to support commerce.

Group #2

Purpose and Need

- Concept – Eliminate all vehicle traffic on Main Street in MGDSHP. – Bypass traffic around Main Street.

- Goal - Recognize tourism – movement of people through area to benefit tourism.

Additional Discussion regarding Purpose and Need

- How will the team differentiate between the types of traffic (i.e. commercial bound traffic, tourist pass thru traffic, destination tourist traffic, local traffic, etc.) when studying the traffic numbers and looking at alternatives. There will always be public that access the businesses along the existing SR49.
- Should keep the SR49 route in place after a new SR49 alignment has been established and call it “Historical” SR49.
- Should direct the tourism traffic to the historic route and the existing SR49 should be promoted as a historic route to attract tourism.
- Have reviewed the Parks District’s General Plan and the General Plan recommends eliminating “ALL” vehicle traffic from the main street in Coloma and eliminating thru traffic from within the State Park. This plan counters the idea of keeping the existing SR 49 route as a historical route.
- The Park’s General Plan suggests alternatives to bypass Coloma. There is an alternative to construct two new bridges; one up stream of Mount Marshall Bridge and one downstream near Lotus Road. This alternative would route SR49 traffic to the north side of the river, bypassing Coloma.
- The need and purpose talk about eliminating SR49 thru Marshall Gold Park, but the Park District’s desire (and General Plan) is to remove not only SR49 traffic, but all traffic from Marshall Gold Park.
- Suggest making two separate statements (or bullets) in the “Key Project Goals” statement. Where the “Key Project Goals” currently says *Examine alternatives that eliminate the existing alignment of SR 49 through Marshall Gold Discovery State Historic Park and the at-grade intersection of SR 49 and Route 50*; Replace with two bulleted items:
 - a. Examine alternatives that eliminate the existing at-grade intersection of SR 49 and Route 50.
 - b. Eliminate traffic through Marshall Gold Discovery State Historic Park.
- The statement “efficient movement of goods and services” also includes movement of people (such as tourists in tourist buses). It is important to specify the “efficient transport of people” in the Purpose and Need statement.

Screening Criteria

- If SR49 is re-routed, we are concerned about the condition and maintenance of the existing SR49 Route.

- Take into consideration impact of planned future development.
- Consider and/or improve emergency vehicle response time.
- Improve destination traffic versus through traffic in key locations: Coloma, El Dorado, Placerville, and Diamond Springs.
- Improve pedestrian environment in same locations.

Additional Discussion on Screening Criteria

- Diamond Springs also has a historic district to it. Would like to see the community of Diamond Springs become more pedestrian friendly. Currently it is unsafe for people to cross SR49. In the future with the SR49 realignment would like people to feel safe using their community, i.e. would like to see a pedestrian atmosphere promoted. If SR49 is realigned and if the existing route becomes a historical route, will improvements be made along the existing route to promote a pedestrian atmosphere in communities like Diamond Springs where there currently is not one. Would it be a Level 1 or Level 2 screening criteria?
- How does the team plan on balancing pedestrian improvements against other modes of transportation?
- How can the public get informed of the planned new developments along project corridor?
- Will this project place a burden on the County by removing State (Caltrans) funding from and maintenance or improvements required to the existing route after a new S 49 alignment is established?
- The route would need improvements to bring it up to usable standards. Would the County be able to pay for improvements and general upkeep required on the existing route without State money?
- It was suggested by the group members that in the criteria under Level 2, Criteria 2C: Environmental to specify a criterion that proposed alternatives take into consideration, future planning and future demographics.
- Add to Criteria 2A: Transportation Benefits, Transportation Goal 6, "evaluate for significant future planning impacts".
- The sheriff, fire and police response times are affected by congestion through areas like Diamond Springs. Matt suggested making sure emergency vehicle response time is included in the screening criteria.
- There have been studies done in the past in the Coloma area that determined that the majority of the traffic in this area is tourist traffic. 0.5 to 0.75 million people are tourists. How will we differentiate between local tourists from regional tourists?
- It was determined that most of his business comes from tourists traveling from within a 50 mile radius. It is important to note where the tourists are coming from but also the time of year that they are visiting. This comment opened discussion on "destination" tourist traffic.

- Transportation Goal 6 – “Relieve SR49 traffic impacts to densely populated residential areas and business districts of City of Placerville, El Dorado, and Diamond Springs”. How will the project improve the pedestrian accessibility in these areas once SR49 is relocated?
- How will the team measure the impacts (i.e. revenue impacts) on these business districts’?
- Transportation Goal 8 addresses pedestrian facilities but the criteria only lists number of facility connections – How will this criteria address all the pedestrian issues to make these areas more pedestrian friendly?
When SR49 is re-routed, the existing route will remain in place. How will the existing route be upgraded to make a safe more pedestrian friendly environment in the business districts?
- Would like to see a goal to improve the pedestrian environment in these historic business districts in addition to the realignment of SR49 (i.e. more of a streetscape project).
- Along with this project it would be beneficial to promote destination traffic, making the historic districts of City of Placerville, El Dorado, Diamond Springs and Coloma a destination for tourists.
- There was a recent project that was completed in the community of Sutter Creek that promoted destination tourist traffic which in turn improved business in the area. The group felt the communities could benefit from a similar increase in destination traffic along with this project.
- Would like to see a goal of this project be to promote streetscape improvements in the 4 local historic districts to promote pedestrian traffic, commerce, and the historic elements of the communities.

Alternatives General Discussion:

- A lot of people do not have a clue as to what is going on with this project. He feels the public needs to see more information.
- During discussion the group was in agreement that the locals in the area use Cold Springs Road as “their SR 49 alternative”.
- Should add an alternative route south of the existing SR49 through Diamond Springs.

At the close of the SAC meeting, Kim Pallari and Dan Bolster again promoted the Public Meeting, Project Web page on the EDCTC Web site and asked that each SAC member take the handouts with them (including the project footprint map) to distribute and talk with their respective group members about the project and garner input. Dan also talked with the SAC members about the Public Open House and their group recognition as part of the SAC group to the general public. The SAC felt it was fine to

list the identified groups. Dan also discussed his availability to present or attend regularly scheduled meetings with organizations upon their request.



SR49 REALIGNMENT STUDY
STAKEHOLDER ADVISORY MEETING #3
El Dorado County Transportation Commission (EDCTC)
May 18, 2009 | 6:00 p.m. – 7:30 p.m.

Comments taken by Kim Pallari (HDR | The Hoyt Company) and Teresa Lopes (TYLin International) from open discussion:

- Is more weight given to agency comments (i.e. as opposed to community/public comments)? The roles of the PDT and SAC as decision makers and input to this phase of the project process were discussed.
- Why is the CA State Parks not included on the PDT?
(Follow up with J. Michaels to assign someone)
- There are a lot of concerns about this project making way for future growth, and bringing new sub-divisions to the area. There was a lot of discussion at the public meeting around this issue.
- Need to be sensitive to this concern on north end of project. These concerns need to be addressed.
- Level 1 and Level 2 Screening Criteria: Hard to follow evaluation scoring because they are both numeric and alphabetical ratings. Add to Level 1: Goal 1 – to make it more clear in the scoring to tie the criteria together.
- Lotus/Coloma Community: Goal – Preserve rural lifestyle. Keeping the rural environment is the theme for the Community. Community does not want big box development, keep it rural. We could possibly add a criterion that says “keep north end rural”.
- It is important for the Community to view this project as a roadway project (i.e. a project to address safety issues and deficiencies with existing SR 49), need to distinguish this project as a roadway safety driven project as opposed to a land development driven project.
- Project may need to possibly add community character/cohesion to criteria.’
- Project should focus on existing roads, particularly those which meet Caltrans standards. Should we put energy into three areas that are not currently meeting Caltrans standards and not look at unrealistically plowing through land for a new roadway?

- There is need to do something with the bridge area where SR-49 crosses the south fork of the American River outside of the project area. We need to include in this study, cannot stop at Lotus/SR 49 intersection.
- We need to look at the history of the area to address societal issues around the bridge at Lotus (Hennessen Park). The need for safe pedestrian crossing in that area is paramount.
- Consider looking at the old historical bridge crossing as a viable alternative for a separate pedestrian bridge rather than widening the existing SR 49 bridge. A formal study has not been conducted to document this issue to date. The alternative (pedestrian bridge crossing) was mentioned in the River Management Study (conducted by County Trails).
- Sun dial type Pedestrian Bridge has been discussed in Hennessen Park.
- Will this process be flawed if it does not address the issue at Hennessen Park (bike/pedestrian crossing)?
- We may want to look into going beyond bridge into commercial road.
- If not addressed in the Feasibility Study for this project; future phases of the project should address the SR 49 bridge crossing. Suggested that a need to study this issue be addressed and documented in the Feasibility Study.
- Shingle Springs is a commuter route and would be viewed as growth inducing.
- Surprised that there is not an alignment included south of El Dorado running east to Missouri Flat Rd, this route should be included.
- Gold Hill alignment should be included by way of Lotus and Cold Springs.
- Purpose of the SR-49 project is to link the golden chain (gold rush history). Placerville would like to see SR-49 stay in the city or close to the city to preserve the original purpose of the alignment.
- The new alignment of SR 49 should be a bypass alignment, keeping the existing alignment of SR 49 as "Historic SR 49".
- Is the idea of keeping SR 49 close to Placerville to protect businesses in downtown addressed in the criteria?
- The Green Valley section from Placerville Drive to north of Missouri Flat Road seems to be a logical connection that gets close to Placerville.
- Neither Coloma bypass options are going to fly with Coloma community.
- If other options are available that avoid park, we would consider alternative bypass in Coloma. State Parks support a bypass in Coloma; it is included in their General Plan.
- The Mt. Murphy Bridge is going to become non-usable for motor traffic.
- Concern as to how so many alternatives are going to analyzed and run through criteria.
- Could this study move forward without the Caltrans standards? Discussed design exceptions.

- Diamond Springs Parkway should be included.
- **Three Generic Alignments:**
 - *Ray Lawyer Drive / Cold Springs*
 - *El Dorado or Missouri Flat/Green Valley/Lotus*
 - *Mother Lode/Greenstone or North Shingle Springs*
- All three stick to established roads
- Should include an additional one that uses open space and proposes new roadway.

Working Tasks:

- **Criteria language needs to be simplified**
- **Tie Screening Criteria Level 1 and Level 2 together**
- **Simplify the presentation of possible alternative routes. Breakdown and display possible alternatives in a more orderly/easily followed fashion.**
- **Establish a map with incorporated comments and proposed alternatives that can be emailed to SAC before next meeting**

Established Points:

- Local traffic will use roads they desire, regardless of name
- Need to consider visitors to Marshall Gold Park (Coloma is the birthplace of California) It should be treated as the crown jewel of State Park service.
- SR-49 in Diamond Springs is packed at commute hours.
- Recreational users are growing in the County, we need to consider this. (Cold Springs (canyon)
- Utilize Lotus for horse travelers



El Dorado County Transportation Commission (EDCTC)
SR 49 Realignment Study
Stakeholder Advisory Committee (SAC) Meeting #4
June 24, 2009 | 6:00 p.m. – 7:30p.m.

<p><u>PROJECT TEAM:</u> Dan Bolster – EDCTC Kim Pallari - HDR The Hoyt Company Randy Pesses – City of Placerville Keith Rhodes - T.Y. Lin</p>	<p><u>SAC MEMBERS:</u> Bill Center – No Gridlock Committee Bob Smart – El Dorado Parks and Recreation Commission Carol Patton – Placerville Downtown Association Kris Payne – El Dorado County Historical Society Jim Michaels – California State Parks Randy Hackbarth – Trails Now Lauren Cockrell – El Dorado County Office of Education Scott Chadd – Taxpayers Association of El Dorado County Kathy Daniels – El Dorado County Office of Education Doug Walker – Historical Society Harry Mercado – Coloma Lotus Valley Community Association Matt Cathey – El Dorado County OES Bob Johnson – Sierra Club Maidu Group Todd Schwenk – El Dorado Citizens for Smart Growth</p>
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On June 24, 2009, the El Dorado County Transportation Commission (EDCTC) hosted the fourth of six Stakeholder Advisory Committee (SAC) meetings at 6:00 p.m. The purpose of Meeting #4 was to begin Level 1 Screen of 52 draft alternatives developed from public input at the SAC meetings and Public Open House on April 30th. Keith explained that the alternatives were divided into 11 groups of commonality. Along with display boards, the SAC members received hard copy handouts of a map with the 52 alternatives color coded as well as a chart that identified each alternative and how they compared in the Level 1 screening process.

The following comments/questions were recorded as the SAC members discussed the screening process and walked through the screening of 1 alternative.

- How is “A” different from “D” and “E”?

- Criteria 1 seems like a feel good statement without a lot of detail.
- How would moving goods and services away from Business Districts benefit the community?
- Out of all 52 Alternatives, it seems that one Alternative has to be the worst so how can they all receive a “Yes” to meet all Level 1 criteria?
- Alternative 10 should say “Yes” (for Criteria C)
- If there is controversy over some alternatives getting cut during Level 1 screening as a result of receiving all “NO’s”, than we may need to backtrack once the issue is discovered and reopen the alternative to further screening.
- Saying Yes/No is a crude tool for evaluating alternatives.
- The whole thing seems to direct the project to switching highway signs and this will not work. Locals will continue using the best route and tourists will take what gets them to their destination and that is not the mission of this study.
- Shouldn’t Alternative 1 – C be knocked out because it does not go anywhere near downtown Placerville?
- There is some improvement by taking some traffic out of the middle of the park but it may not solve all the issues.
- It still feels like we are switching road signs.
- It seems like at some point after narrowing down alternatives, there may be some alternatives that we should reconsider. Is that a possibility?
- Local residents/tourists can read maps and 90% of them are using State Route 49 to see local historic places.
- Route 6 and 2 are the only alternatives that meet the criteria.
- Not creating new roads may not be a positive thing because it will mean moving traffic onto other roads, which will impact those existing roads.

- How much flexibility will Caltrans standards have for a proposed new alternative?
- If any segments have to go down to 25 mph due to schools, wouldn't that eliminate those alternatives from the list due to Criteria 1?
- Several roadways have 25 mph designations that should be considered.
- Is there a possibility of putting the Ray Lawyer Drive interchange into the Project?

If Ray Lawyer Drive interchange does not move forward, then State Route 49 will have to pay for it. If the interchange is part of State Route 49 alternative, it may make the interchange look better and move forward.

- Some alternatives are only one "Yes" or "No" away from others in the scoring. When ranked however, it makes the alternatives look a lot farther apart with more disparity.
- Any alternative with new construction seems to fall out because of the cost constraint.
- The criteria that are standing out might be too broad (3) and they should be analyzed more and divided up so that we are not eliminating too many alternatives too quickly.

Due to the lengthy discussion and analysis of one alternative, it was determined that the SAC members would take the handouts with them to do their own evaluation using the Level 1 criteria of the alternatives. After each alternative is evaluated and several have been eliminated, the SAC members will meet again for meeting #5 to begin Level 2 Screening of the remaining alternatives.



El Dorado County Transportation Commission (EDCTC)
SR 49 Realignment Study
Stakeholder Advisory Committee (SAC) Meeting #5
July 22, 2009 | 6:00 p.m. – 8:00p.m.

<p><u>PROJECT TEAM:</u> Dan Bolster – EDCTC Keith Rhodes - T.Y. Lin Teresa Lopes - T.Y. Lin Kim Pallari - HDR The Hoyt Company</p> <p><u>SAC MEMBERS:</u> Bill Center – No Gridlock Committee Bob Smart – El Dorado Parks and Rec Commission Carol Patton – Placerville Downtown Assoc. Kris Payne – EDC Historical Society</p>	<p>Jim Michaels – California State Parks Randy Hackbarth – Trails Now Lauren Cockrell – El Dorado County Office of Education Scott Chadd – Taxpayers Association of El Dorado County Kathy Daniels – El Dorado County Office of Education Doug Walker – Historical Society Harry Mercado – Coloma Lotus Valley Community Association Matt Cathey – El Dorado County OES Bob Johnson – Sierra Club Maidu Group Todd Schwenk – El Dorado Citizens for Smart Growth Adam Baughman – El Dorado County Scott Armstrong – California Outdoors</p>
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On July 22, 2009, the El Dorado County Transportation Commission (EDCTC) hosted the fifth of six Stakeholder Advisory Committee (SAC) meetings at 6:00 p.m. The SAC will play a key role in assisting the EDCTC with project information, dissemination, and gathering public input on important topics such as the purpose and need for the project, potential screening criteria for the concept alternatives, and general input on the study process. The fifth SAC meeting first reviewed the process and past input provided by the SAC. The purpose of this meeting was to highlight and discuss Level 2 Screening Criteria to receive further input from the SAC members prior to screening the 11 remaining alternatives. The meeting was promoted via email and phone calls to the key identified representatives from 19 diverse stakeholder organizations/groups. Sixteen SAC members were in attendance at the SAC Meeting #5.

Kim Pallari with HDR|The Hoyt Company, a member of the consultant team, commenced the evening with a welcome and brief synopsis of the meeting, format, and opportunity for public involvement. Dan Bolster, Project Manager and Transportation Planner for EDCTC provided attendees with background information on the Project and the importance of SAC’s role and comments. He then reviewed previous SAC

meeting discussions and highlighted key issues that have been discussed during the Technical Advisory Committee (TAC) meetings to get to where the process is at this point. Keith Rhodes, Project Manager for TyLin then guided the discussion through the explanation of the Level 2 Screening criteria and 11 alternatives remaining. Several handouts were distributed including a map of the 11 alternatives and Level 2 Screening Criteria.

Questions and comments submitted during the meeting are documented below:

Comments Addressed During the Open Discussion session:

Alternative Discussion:

- The issue of getting out of state park seems to be parochial rather than universal.
- To get to the Coloma Crossing (bridge), you would have to go down Cold Springs Road. Cold Springs Road would then require the largest number of improvement to bring it up to Caltrans standards.
- Last meeting you blind-sided us by deleting out every efficient alternative during the Level 1 screening because it did not meet standards set by El Dorado County's General Plan. Please look at the Plan and re-evaluate if fallen alternatives are in fact conflicting with the General Plan, see page (#36).
- It seems that if you add alternative 10 without regard for cost and environmental impacts, that you need to do the same with ones that were deleted during the Level 1 screening. That alternative 36 is a brand new road.
- If you use Mallard Lane, you will have to relocate the EDCTC office.
- If the Lotus alternative is chosen by EDCTC, it seems like the Marshall Gold State Park could address their traffic concerns on their own with separate funding to get traffic out of the park.
- Can the exhibit materials be the same for next meeting?

Level 2 Screening:

- If you split apart the local service business from transit services, the impact will be minimized. (criteria 68)
- The screening 2 will then evaluate all 10 alternatives?

- In the transportation alternative, 18 of them reference peak travel times. This gives more power to that criterion if scored as a four, it will trump others. Just because there are so many criterion that focus on peak travel times.
- With the criteria that are listed, there seems to be a focus towards traffic operations and mobility and not towards business impacts.
- The criterion should be intentionally repetitive on actual and historical impacts on the park, just as you are with speed in the other section.

Next SAC Meeting: August 20th

The following comments were submitted following the 5th SAC meeting:

Comment #1:

Via Email

Dan, next time we meet (please let me know the date), which I think will be our last gathering before you convene another public workshop, make sure the exhibits are all in order. Our work does not proceed as efficiently as it should when the maps are not coherent. The level 2 screening criteria make sense to me.

There is a weighting system contained within the criteria that automatically tips the scale toward a focus on moving the single occupancy vehicle (SOV) around in the County. From my perspective this is as it should be, hopefully, for obvious reasons. The comment on "Local Business that is traffic dependant vs. Local Business that is NOT traffic dependant" was well taken. The study could place emphasis on impacts in an unbalanced way by using this dichotomy. However, I do not have a ready solution. Seems as though the differentiation is sensible and reasonable, the consultants just need to be aware that they could be artificially giving attention to a false construct.

Taking all through traffic (local as well as regional) out of the State Park at Coloma does not seem a rational objective given the dollars and environmental consequences involved. If we are not going to look at what happens to traffic north of the intersection of Lotus Road and Highway 49, or south of the intersection in El Dorado, why the focus on what is happening in the Park?

Under the column for criteria the words "future planning impacts" should be replaced with the words "future land use impacts".

The City of Placerville is correct in their assertion that the most vibrant and successful communities are those with the highest levels of congestion (vehicular, pedestrian, transit, bike and other). This is a situation that is replicated across all cultures and times. It may appear counter intuitive but congestion/density equals economic activity.

I remain concerned that we are embarked upon a "Fools Errand" here. As I have discussed this study with people I cannot find a constituency for it outside of the halls of government. If a PSR is going to be the next step where are the people/special interests, beyond government, that will advocate doing it?

Submitted by:

Scott Chadd

SR49 SAC Member

Farm Trials

1435 Lower Lake Drive

Placerville, CA 95667

530-622-9681

scottchadd@lotusbonsai.com

Comment #2:

Via Email

Dan;

I listened with some concern about the Coloma Bypass Option, and its connection to the Marshall General Plan. In the discussions, it was mentioned that the route was near or through the Goodspeed property.

Several known graves are located on the Goodspeed property and rumors of several hundred more abound. This area MAY have been the original graveyard for Coloma, and possibly a Native American Crematory/Burial site (as the pioneers often buried their dead in sites already being used by the Indians).

I am unaware of any archaeological surveys of the projected route, but to place it through a cemetery would be a totally unacceptable environmental impact. I have discussed this with several members of the El Dorado County Cemetery Commission.

Additionally, the route would probably impact any number of archaeological sites in between the two proposed bridges, as early Coloma was on both sides of the river. The State Parks have already removed at least one historic building from this side of the river, and perhaps more, leading us to feel the need to watchdog what their plans are.

I cannot conceive of an EIR approving the building of this option.

On a lighter side, if Hwy 49 is relocated to Lotus Rd., Marshall Park could achieve its general plan goal of halting traffic through the park by placing a traffic circle in front of the Slatington School House.

Doug Walker
SR49 SAC Member
El Dorado County Historical Society
1731 Country Lane
Placerville, CA 95667
530-626-3678
dougewalker@gmail.com



**El Dorado County Transportation Commission (EDCTC)
SR 49 Realignment Study
Stakeholder Advisory Committee (SAC) Meeting #6
September 28, 2009 | 6:00 p.m. – 8:00p.m.**

<p><u>PROJECT TEAM:</u> Dan Bolster – EDCTC Randy Pesses – City of Placerville Keith Rhodes – T.Y. Lin Teresa Lopes – T.Y. Lin Kim Pallari – HDR The Hoyt Company</p>	<p><u>SAC MEMBERS:</u> Bill Center – No Gridlock Committee Carol Patton – Placerville Downtown Assoc. Eileen Crum – Trails Now Jim Michaels – California State Parks Jamie Beutler – ED Citizens for Smart Growth Scott Chadd – Taxpayers Association of El Dorado County Harry Mercado – Coloma Lotus Valley Community Association Howard Penn – ED County Chamber of Commerce</p>
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On September 28, 2009, the El Dorado County Transportation Commission (EDCTC) hosted the sixth of six Stakeholder Advisory Committee (SAC) meetings at 6:00 p.m. The SAC will play a key role in assisting the EDCTC with project information, dissemination, and gathering public input on important topics such as the purpose and need for the project, potential screening criteria for the concept alternatives, and general input on the study process. The sixth SAC meeting first reviewed the process and past input provided by the SAC. The purpose of this meeting was to discuss and review the interim alternative screening level to further narrow down alternatives for preliminary environmental screening. The meeting was promoted via email and phone calls to the key identified representatives from 19 diverse stakeholder organizations/groups. Eight SAC members were in attendance at the SAC Meeting #6.

Kim Pallari with HDR|The Hoyt Company, a member of the consultant team, commenced the evening with a welcome and brief synopsis of the meeting, format, and opportunity for public involvement. Dan Bolster, Project Manager and Transportation Planner for EDCTC provided attendees with background information on the Project and the importance of SAC’s role and comments. He then reviewed previous SAC meeting discussions and highlighted key issues that have been discussed during the Technical Advisory Committee (TAC) meetings to get to where the process is at this point. Keith Rhodes, Project Manager for T.Y. Lin then guided the discussion through the explanation of the Interim Level Screening criteria and remaining alternatives.

Questions and comments submitted during the meeting are documented below:

Comments Addressed During the Open Discussion session:

- There is a concern with the low weight of 5% given to Goal 6 regarding impacts to historic, cultural, and natural resources.
- Regarding the environmental impacts; at what point do you get down into the weeds and identify the real impacts per each alternative?
- Alternative 10 should go before the EDCTC for review and decision if it scored the highest through the screening process.
- Why is this study contained to the designated place of SR49 between Coloma and El Dorado? Why isn't it beyond these points in areas that are worse than the targeted section?
- 3C includes solid asbestos along Green Valley Road.
- The fear is that a good alternative will be tossed out too early in the higher level process. Then when you get down to Level 2, you realize "oops" we should put that back in.
- Alternatives Reviewed and Screened:
 - 3E: Lotus to Green Valley Road to Missouri Flat to Pleasant Valley to OD
 - 5H: Lotus to G Hill to Gold Springs to W. Placerville Interchange to 50 to Missouri Flat to Placerville to El Dorado.
 - 5E: Lotus to G Hill to C Springs to Placerville Dr. to Ray Lawyer Interchange to 50 to Missouri Flat
 - 5G: (using this alternative that utilizes Ray Lawyer extension) Lotus to G Hill to C Spring to PD to Ray Lawyer ext to 49 to Diamond Parkway to Missouri Flat.
- Have you bounced the idea of deleting Alternative 10 to EDCTC Board? We should get the elected involved now rather than later.
- The SR 49 Postcard makes it sound like the SAC are blessing this process but doesn't call out the advisory role of our elected officials. Have they been guiding the process?
- Why the little jog on 5G at Diamond Parkway?
- El Dorado Trail does not have access to interchange on 5E.

- It seems contradictory to originally toss out an alignment because it was too far away. Then in the second screening it seems to be penalized if too close to downtown business district of Placerville.
- When will there be a study that reflects the growth advancement of the chosen alternative?
- I live in the corridor and am horrified at the idea that this might become a freeway; that we will lose Oak trees, lost curves, etc. Why not do Lotus to North Shingle to Mother Lode? It makes the most sense.
- Why not look at taking funds and then engineering improvements to the current SR49?
- To what degree is there flexibility in improvements to Caltrans standards? We are fearful that it would look like the new Sutter's Bypass.
- Caltrans context sensitive Solution: Automatically comes into play, as apposed to SHOP projects driven by safety. If this doesn't go through, Caltrans can come in with SHOP projects and improve to their standards.
- We knew going into this that we would keep SR49 regardless of new alternative.
- As Caltrans make improvements there will be some right-of-way takes or at least partial takes of properties. How is that decided?
- We should have engaged community and SAC before defining project scope so that we could weigh in on the scope of the project before putting forward this effort.
- Are these three alternatives the only ones that will continue to be evaluated?
- Will there be more detailed analysis on these three alternatives?
- The study will highlight these analyzed alternatives. How would you then later propose or study other alternatives that might be rather suggested for studies?



EDCTC BOARD PRESENTATIONS, MEETING MINUTES, AND STAFF REPORTS

PRESENTATION**STAFF REPORT**

DATE: NOVEMBER 5, 2009

TO: EL DORADO COUNTY TRANSPORTATION COMMISSION

FROM: DAN BOLSTER, SENIOR TRANSPORTATION PLANNER

SUBJECT: STATE ROUTE 49 REALIGNMENT STUDY

REQUESTED ACTION

None. This item is for information and/or discussion only.

BACKGROUND

On January 10, 2008, EDCTC submitted an application to Caltrans for a 2008/2009 Partnership Planning Grant to fund the State Route 49 Realignment Study – Coloma to El Dorado. On August 29, 2008, Caltrans notified EDCTC that the State Route 49 Realignment Study had been selected for funding in Fiscal Year 2008/2009 with an award of \$250,000. On December 11, 2008, T.Y. Lin International was awarded the contract to develop the State Route 49 Realignment Study.

Public involvement and outreach are major components of the State Route 49 Realignment Study. In an effort to involve a broad range of potentially affected interests, the following groups/entities were ratified on February 5, April 2, and June 4, 2009, as members of the State Route 49 Realignment Study Stakeholder Advisory Committee:

- Broadway Village Association
- California Outdoors
- California State Parks – Gold Fields District
- California Trucking Association
- Coloma Lotus Valley Community Association
- El Dorado Citizens for Smart Growth
- El Dorado County Office of Education
- El Dorado Youth Commission
- El Dorado County Parks and Recreation Commission
- El Dorado County Chamber of Commerce
- El Dorado County Historical Society
- El Dorado County Office of Emergency Services
- El Dorado Union High School District
- Farm Trails
- Friends of the Diamond Springs – El Dorado Community
- Greenstone Country Owners Association
- No Gridlock Committee
- Placerville Downtown Association
- Placerville Drive Business Association
- Sierra Club Maidu Group
- Taxpayers Association of El Dorado County
- Trails Now

The purpose of the SAC is to provide both policy and technical guidance to the EDCTC during the development of the State Route 49 Realignment Study. The project scope of work included six SAC meetings and two public open houses. The schedule for the SAC meetings and two public open houses was:

SAC Meeting #1	February 25, 2009
SAC Meeting #2	March 30, 2009
Open House #1	April 30, 2008
SAC Meeting #3	May 18, 2009
SAC Meeting #4	June 24, 2009
SAC Meeting #5	July 22, 2009
SAC Meeting #6	September 28, 2009
Open House #2	October 14, 2009

DISCUSSION

Following the February and March 2009 SAC meetings and April 2009 Public Open House, 52 alternative alignments were submitted to EDCTC for evaluation during the Level 1, Intermediate Level 1, and Level 2 Screening processes. The 52 potential alternative alignments were evaluated during the Level 1 Screening based on how well each alternative met the project Purpose and Need and its constructability and operational feasibility. Alternatives were scored on a basic “Yes” or “No” scoring. The project Purpose and Need reads:

PURPOSE AND NEED

State Route 49 (SR 49) provides a regional and interregional route for the movement of goods and people within El Dorado County. The purpose of the SR 49 Realignment Study is to evaluate potential alternative alignments for the safe and efficient transport of goods and people (i.e. tourists and local traffic) along SR 49 from Coloma to the community of El Dorado while minimizing impacts to historic, cultural, and natural resources.

The study is needed to evaluate potential alignments that will eliminate the existing alignment of SR 49 through Marshall Gold Discovery State Historic Park and the at-grade intersection of SR 49 and Route 50 and will respond to current and projected regional and local traffic demand on the state and local road systems along SR 49 and U.S. Highway 50, especially through densely populated residential areas and the business districts of the City of Placerville and the communities of Coloma, Diamond Springs, and El Dorado. The sharp curves and steep grades of the existing alignment within the study area, in conjunction with the commercial traffic combined with regional and local traffic, are not adequate for modern transportation demands, resulting in congestion and reduced traffic safety for vehicle, bicycle, and pedestrian travel. The study will focus on the use of existing roads to reduce the amount of resources necessary to achieve improved conditions in the SR 49 corridor and support the adopted general plans of El Dorado County, the City of Placerville, and Marshall Gold Discovery State Historic Park.

As a result of the Level 1 Screening, ten alternatives were recommended for advancement to the Intermediate Level 1 Screening. The goal of the Intermediate Level 1 Screening was to reduce the list of ten alternative alignments down to three. The ten alternatives were evaluated based on how well they met the Purpose and Need and were scored from one to four (weighted) according to the following point system:

- 1 = No improvement or unacceptable impact
- 2 = Marginal improvement or high impact
- 3 = Acceptable improvement or moderate impact
- 4 = Substantial improvement or low impact

The results of the Intermediate Level 1 Screening recommended the following three alternatives for advancement to Level 2 Screening:

- Alternative 3E: Begin at Lotus Road / State Route (SR) 49 Intersection. Lotus Road to Green Valley Road, Green Valley Road to Missouri Flat Road, Missouri Flat Road to SR 49 (Pleasant Valley Road), SR 49 to El Dorado.
- Alternative 5G: Begin at Lotus Road / SR 49 Intersection. Lotus Road to Gold Hill Road, Gold Hill Road to Cold Springs Road, Cold Springs Road to Pierroz Road, Pierroz Road to Placerville Drive, Placerville Drive to Ray Lawyer Drive, Ray Lawyer Drive to Ray Lawyer Drive Extension, Ray Lawyer Drive Extension to SR 49, SR 49 to Diamond Springs Parkway, Diamond Springs Parkway to Missouri Flat Road, Missouri Flat Road to SR 49 (Pleasant Valley Road), SR 49 to El Dorado.
- Alternative 5H: Begin at Lotus Road / SR 49 Intersection. Lotus Road to Gold Hill Road, Gold Hill Road to Cold Springs Road, Cold Springs Road to Pierroz Road, Pierroz Road to Placerville Drive, Placerville Drive to Ray Lawyer Drive, Ray Lawyer Drive to US 50 (Ray Lawyer Drive Interchange), US 50 to Missouri Flat Road (Missouri Flat Interchange), Missouri Flat Road to SR 49 (Pleasant Valley Road), SR 49 to El Dorado.

Alternatives 3E, 5G, and 5H were then evaluated in the Level 2 Screening based on the following criterion and points:

Criteria:

- Transportation Benefits
- Responsiveness to Environmental Goals

Scoring:

- 1 = No improvement or unacceptable impact
- 2 = Marginal improvement or high impact
- 3 = Acceptable improvement or moderate impact
- 4 = Substantial improvement or low impact

The Level 2 Screening resulted in the following ranking of the three alternatives:

- Rank #1 – Alternative 5H
- Rank #2 – Alternative 3E
- Rank #3 – Alternative 5G

The results of the Level 1, Intermediate Level 1, and Level 2 Screening processes were presented to the public at Open House #2 on October 14, 2009. The purpose of the Open House was to provide an overview the study process and present key highlights from the State Route 49 Realignment Study, including the project's history, schedule, and alternatives currently being discussed. Attendees had the opportunity to discuss the project with Project Team members from Caltrans, the El Dorado County Department of Transportation, El Dorado Transit, the EDCTC, and project consultant T.Y. Lin International.

EDCTC staff and Keith Rhodes, Project Manager with T.Y. Lin International, will present an overview of the study and the results of the Level 1, Intermediate Level 1, and Level 2 Screening processes to the Commission today.

Based on comments received during the six SAC meetings, at the October 14 Open House, and during today's presentation to your Commission, the Draft State Route 49 Realignment Study will be prepared and presented to your Commission in February 2010.

Approved for Agenda:

Kathryn F. Mathews, AICP
Executive Director

**El Dorado County Transportation Commission
Presents**

State Route 49 Realignment Study

November 5, 2009


TYLIN INTERNATIONAL



TYLIN INTERNATIONAL

PRESENTATION

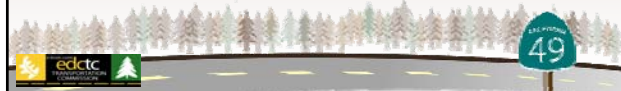
- ❑ Project History / Study Limits / Purpose & Need
- ❑ Project Development Process / Organization
- ❑ What is a Realignment Study?
- ❑ Community Involvement / Comments Heard
(Dan Bolster, EDCTC)
- ❑ Alternative Evaluation / Project Issues / Schedule
(Keith Rhodes, TY Lin International)



Project History / Study Limits /
Purpose & Need

Dan Bolster - EDCTC


TYLIN INTERNATIONAL



Project History

- EDCTC Identifies Need for Study
- EDCTC Applies for Partnership Planning Grant – January 2008
- Caltrans Awards EDCTC \$250,000 Partnership Planning Grant to fund SR 49 Realignment Study – August 2008
- SR 49 Realignment Study begins – January 2009


TYLIN INTERNATIONAL



Project Study Limits

TYLIN INTERNATIONAL

State Route 49 (SR 49) from the intersection of SR 49 with Lotus Road in the town of Coloma to the intersection of SR 49 with Pleasant Valley Road in the town of El Dorado.




Purpose & Need

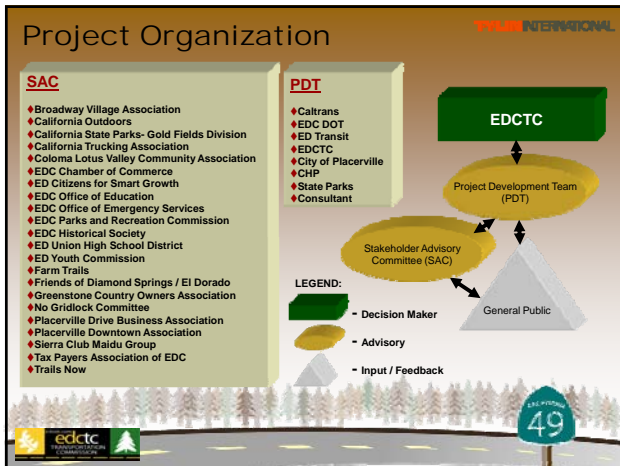
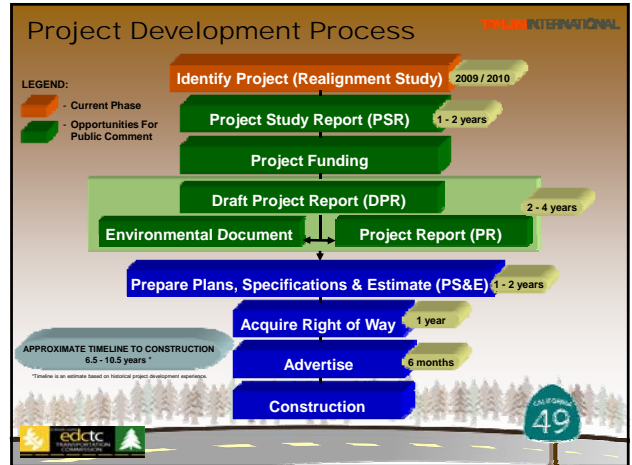
TYLIN INTERNATIONAL

Key Goals

- Provide safe and efficient transport of goods and people (i.e. tourists and local traffic) along SR 49 from Coloma to the community of El Dorado while minimizing impacts to historic, cultural, and natural resources.
- Eliminate the at-grade intersection of SR 49 and U.S. 50.
- Eliminate the existing alignment of SR 49 through Marshall Gold Discovery State Historic Park.
- Relieve SR 49 traffic impacts to densely populated residential areas and business districts of City of Placerville, El Dorado, and Diamond Springs.
- Reduce the amount of resources necessary to achieve improved conditions in the SR 49 corridor by using existing roads.
- Consider and analyze land uses identified in the City of Placerville, El Dorado County, and Marshall Gold Discovery State Historic Park General Plans to ensure that potential new alignments are compatible with planned zoning and land uses in the project area.



Project Development Process / Project Organization



What is a Realignment Study?

A Realignment Study is...

- Preliminary planning/conceptual document.
- Identifies potential alternatives to address the purpose and need of the project.
- Identifies approximate project cost, scope and schedule.

It isn't a Final Design or Environmental Impact Analysis document.

Community Involvement / Comments Heard

Community Involvement

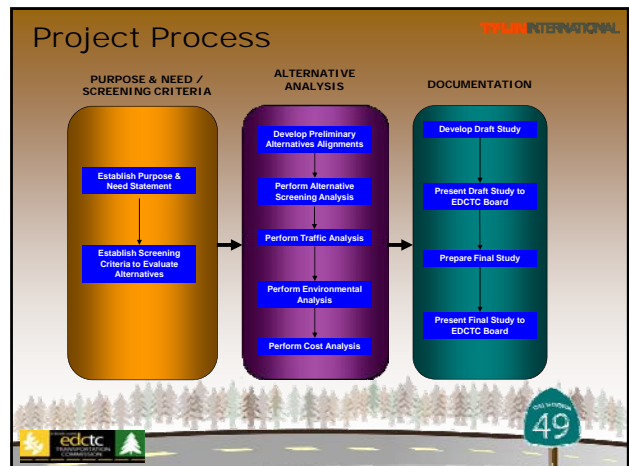
- Stakeholders Advisory Committee (SAC)
6 Meetings
- Public Information Meetings
2 Meetings

Comments Heard

- Safety is an important issue
- Honor existing historical heritage – “Golden Chain”
- Minimize impacts on existing businesses & residents
- Remove SR 49 from Marshall Gold Discovery Historic State Park
- Address intersection of SR 49 and US 50
- Reduce congestion on SR 49 through Diamond Springs area
- Maximize bicycling, pedestrian and transit opportunities
- Improve emergency vehicle access
- Address school-related safety issues
- Consider land use impacts of alternatives

Alternative Evaluation / Project Issues / Project Schedule

Keith Rhodes - TY Lin International



Alternative Evaluation

LEVEL 1 SCREENING

Alternative Evaluation

LEVEL 1 SCREENING:

Criteria:

- Meet Purpose & Need
- Constructability & Operationally Feasible


Scoring:

- “YES” of “NO”

Alternative Evaluation TVALIN INTERNATIONAL

Level 1 Screening Key Goals


- Improve traffic operations
- Improve interregional and regional conditions
- Ensure compatibility with General Plans
- Eliminate the existing alignment of SR 49 through MGDSPH
- Eliminate the at-grade intersection of SR 49 and U.S. 50
- Reduce travel times
- Relieve SR 49 traffic impacts to residential & business districts of Placerville and Diamond Springs
- Minimize environmental impacts
- Reduce the amount of resources by the utilization of existing local roads
- Maximize multi-modal opportunities
- Improve safety
- Maintain context sensitive solutions



Alternative Evaluation TVALIN INTERNATIONAL


LEVEL 1 SCREENING RESULTS:

- 52 alternatives were evaluated
- 10 alternatives recommended for advancement to Intermediate Level 1 Screening



Alternative Evaluation TVALIN INTERNATIONAL

INTERMEDIATE LEVEL 1 SCREENING



Alternative Evaluation TVALIN INTERNATIONAL


INTERMEDIATE LEVEL 1 SCREENING:

Criteria:

- Meet Purpose & Need

Scoring: 1 to 4 (Weighted)


- 1 = No improvement or unacceptable impact
- 2 = Marginal improvement or high impact
- 3 = Acceptable improvement or moderate impact
- 4 = Substantial improvement or low impact



Alternative Evaluation TVALIN INTERNATIONAL

Intermediate Level 1 Screening Goals


- Goal 1: Safe transport of goods and people (20%)
- Goal 2: Efficient transport of goods and people (15%)
- Goal 3: Improve accessibility of traffic between City of Placerville, Diamond Springs, and El Dorado (15%)
- Goal 4: Improve accessibility of traffic between Coloma and El Dorado (15%)
- Goal 5: Maximize the use of existing roads to minimize resources (15%)
- Goal 6: Minimize impacts to historic, cultural, and natural resources (5%)
- Goal 7: Ensure compatibility with land uses identified in GPs of the El Dorado County, City of Placerville, and the Marshall Gold Discovery State Historic Park (15%)



Alternative Evaluation TVALIN INTERNATIONAL

INTERMEDIATE LEVEL 1 SCREENING RESULTS:


- 10 alternatives were evaluated
- 3 alternatives recommended for advancement to Level 2 Screening
- Alternatives 3E, 5G, and 5H.



Alternative Evaluation TVAL INTERNATIONAL
INTERMEDIATE
LEVEL 1 SCREENING

Alternative 3E:

- Begin: Lotus Rd / SR 49 Intersection
- Lotus Rd to Green Valley Rd
- Green Valley Rd to Missouri Flat Rd
- Missouri Flat Rd to SR 49 (Pleasant Valley Rd)
- End: SR 49 (Pleasant Valley Rd) / SR 49 intersection in El Dorado



Alternative Evaluation TVAL INTERNATIONAL
INTERMEDIATE
LEVEL 1 SCREENING

Alternative 5G:


- Begin: Lotus Rd / SR 49 Intersection
- Lotus Rd to Gold Hill Rd
- Gold Hill Rd to Cold Springs Rd to Pierroz Rd
- Pierroz Rd to Placerville Dr to Ray Lawyer Dr
- Ray Lawyer Dr to Ray Lawyer Dr Extension
- Ray Lawyer Dr Extension to SR 49
- SR 49 to Diamond Springs Parkway
- Diamond Springs Parkway to Missouri Flat Rd
- Missouri Flat Rd to SR 49 (Pleasant Valley Rd)
- End: SR 49 (Pleasant Valley Rd) / SR 49 intersection in El Dorado



Alternative Evaluation TVAL INTERNATIONAL
INTERMEDIATE
LEVEL 1 SCREENING


Alternative 5H:

- Begin: Lotus Rd / SR 49 Intersection
- Lotus Rd to Gold Hill Rd
- Gold Hill Rd to Cold Springs Rd to Pierroz Rd
- Pierroz Rd to Placerville Dr to Ray Lawyer Dr
- Ray Lawyer Dr to U.S. 50 (Ray Lawyer Dr Interchange)
- U.S. 50 to U.S. 50 (Missouri Flat Rd Interchange)
- Missouri Flat Rd to SR 49 (Pleasant Valley Rd)
- End: SR 49 (Pleasant Valley Rd) / SR 49 intersection in El Dorado



Alternative Evaluation TVAL INTERNATIONAL

LEVEL 2 SCREENING



Alternative Evaluation TVAL INTERNATIONAL


LEVEL 2 SCREENING:

Criteria:

- Transportation Benefits
- Responsiveness to Environmental Goals


Scoring: 1 to 4

- 1 = No improvement or unacceptable impact
- 2 = Marginal improvement or high impact
- 3 = Acceptable improvement or moderate impact
- 4 = Substantial improvement or low impact



Alternative Evaluation TVAL INTERNATIONAL
LEVEL 2 SCREENING

CRITERION 2A: TRANSPORTATION BENEFITS	CRITERION 2B: RESPONSIVENESS TO ENVIRONMENTAL GOALS
<p><i>Goals:</i></p> <ul style="list-style-type: none"> ☑ Improve Safety ☑ Improve interregional and regional traffic operations ☑ Reduce travel times ☑ Reduce vehicle-miles traveled ☑ Improve vehicular accessibility ☑ Relieve SR-49 traffic impacts to business districts in the area ☑ Relieve SR-49 traffic impacts to densely populated residential areas ☑ Utilization of existing local roads ☑ Maximize multi-modal opportunities 	<p><i>Goals:</i></p> <ul style="list-style-type: none"> ☑ Maintain visual integrity of the natural environment ☑ Maintain agricultural land uses ☑ Maintain air quality integrity of the natural environment ☑ Maintain ecological integrity of the natural environment ☑ Preserve historical properties ☑ Maintain geological integrity of the natural environment ☑ Maintain noise integrity of the natural environment ☑ Maintain transportation / circulation integrity of the environment ☑ Promote recreational opportunities



Alternative Evaluation TYLON INTERNATIONAL

LEVEL 2 SCREENING RESULTS:

- Alternatives 3E, 5G, & 5H were evaluated
- Rank #1 – Alternative 5H (\$23.6 million*)
- Rank #2 – Alternative 3E (\$17.4 million*)
- Rank #3 – Alternative 5G (\$28.7 million*)

* Cost includes construction cost only. Does not include right of way and engineering support.

Project Issues

Project Issues TYLON INTERNATIONAL

- Caltrans Design Requirements
- Existing SR 49 Relinquishment
- State Route Encroachments
- Funding the PSR
- Marshall Gold Discovery State Historic Park General Plan
- Eliminated Alternatives
- Impacts to Business Districts

Project Schedule

Project Schedule TYLON INTERNATIONAL

➤ Project Began	Jan 2009
➤ SAC Meetings 1 & 2	Feb 25 & Mar 30, 2009
➤ Public Information Meeting #1	Apr 30, 2009
➤ SAC Meetings 3, 4, 5, & 6	May 18, Jun 24, Jul 22, & Sep 28, 2009
➤ Public Information Meeting #2	Oct 14, 2009
➤ Present Alternatives to EDCTC Board	Nov 5, 2009
➤ Present Alternatives to EDC Board of Supervisors & Placerville City Council	Dec 8, 2009
➤ Present Draft SR 49 Realignment Study to EDCTC Board	Feb 2010
➤ Present Final SR 49 Realignment Study to EDCTC Board	Mar 2010

Questions?



2828 Easy Street Suite 1 | Placerville CA 95667 | tel: 530.642.5260 | fax: 530.642.5266 | www.edctc.org

Councilmembers Representing City of Placerville
Carl Hagen, Chair
Mark Acuna
Patti Borelli
Kathryn Mathews, Executive Director

Supervisors Representing El Dorado County
John Knight, Vice Chair
Ray Nutting
Jack Sweeney

EL DORADO COUNTY TRANSPORTATION COMMISSION
REGULAR MEETING

MINUTES

November 5, 2009

1. CALL TO ORDER AND PLEDGE OF ALLEGIANCE

The regular meeting of the El Dorado County Transportation Commission was called to order at 2:05 pm at 2850 Fair Lane, Building C Hearing Room, Placerville, California. Chair Hagen led the Pledge of Allegiance.

2. ROLL CALL

COMMISSIONERS PRESENT: Chair Hagen, Vice Chair Knight, and Commissioners Acuna, Borelli, Nutting, and Sweeney.
ABSENT: None

3. APPROVAL OF AGENDA

REQUESTED ACTION: Approve the agenda as presented.

ACTION: The Commission approved the agenda as presented, by the following vote:

MOTION/SECOND: Acuna/Knight
AYES: Acuna, Borelli, Hagen, Knight, Nutting, Sweeney
NOES: None
ABSENT: Knight
ABSTAIN: None

4. PUBLIC COMMENT PERIOD

Bob Smart commented on the new trail opening.

5. PRESENTATIONS

A. State Route 49 Realignment Study

REQUESTED ACTION: None. This item was for information and/or discussion only.

Senior Transportation Planner Dan Bolster introduced this item. Keith Rhodes, of T.Y.Lin Consulting provided details on the Study.

Public comments were received from Jim Michaels, representing the State Parks; Bob Smart; and Lindell Price.

No action was taken.

INFORMATION ITEM**STAFF REPORT**

DATE: FEBRUARY 4, 2010

TO: EL DORADO COUNTY TRANSPORTATION COMMISSION

FROM: DAN BOLSTER, SENIOR TRANSPORTATION PLANNER

SUBJECT: DRAFT STATE ROUTE 49 REALIGNMENT STUDY

REQUESTED ACTION

None. This item is for information and/or discussion only.

BACKGROUND

On January 10, 2008 EDCTC submitted an application to Caltrans for a 2008/2009 Partnership Planning Grant to fund the State Route 49 Realignment Study – Coloma to El Dorado. On August 29, 2008, Caltrans notified EDCTC that the State Route 49 Realignment Study had been selected for funding in Fiscal Year 2008/2009 with an award of \$250,000. On December 11, 2008, T.Y. Lin International was awarded the contract to develop the State Route 49 Realignment Study.

Public involvement and outreach are major components of the State Route 49 Realignment Study. In an effort to involve a broad range of potentially affected interests, the following groups/entities were ratified on February 5, April 2, and June 4, 2009, as members of the State Route 49 Realignment Study Stakeholder Advisory Committee:

- Broadway Village Association
- California Outdoors
- California State Parks – Gold Fields District
- California Trucking Association
- Coloma Lotus Valley Community Association
- El Dorado Citizens for Smart Growth
- El Dorado County Office of Education
- El Dorado Youth Commission
- El Dorado County Parks and Recreation Commission
- El Dorado County Chamber of Commerce
- El Dorado County Historical Society
- El Dorado County Office of Emergency Services
- El Dorado Union High School District
- Farm Trails
- Friends of the Diamond Springs – El Dorado Community
- Greenstone Country Owners Association
- No Gridlock Committee
- Placerville Downtown Association
- Placerville Drive Business Association
- Sierra Club Maidu Group
- Taxpayers Association of El Dorado County
- Trails Now

The purpose of the SAC is to provide both policy and technical guidance to the EDCTC during the development of the State Route 49 Realignment Study. The project scope of work included six SAC meetings and two public open houses. The schedule for the SAC meetings and two public open houses was:

SAC Meeting #1 February 25, 2009
 SAC Meeting #2 March 30, 2009
 Open House #1 April 30, 2008
 SAC Meeting #3 May 18, 2009
 SAC Meeting #4 June 24, 2009
 SAC Meeting #3 July 22, 2009
 SAC Meeting #4 September 28, 2009
 Open House #2 October 14, 2009

DISCUSSION

Following the February and March 2009 SAC meetings and April 2009 Public Open House, fifty-two alternative alignments were submitted to EDCTC for evaluation during the Level 1, Intermediate Level 1, and Level 2 Screening processes. The fifty-two potential alternative alignments were evaluated during the Level 1 Screening based on how well each alternative met the project Purpose and Need and its constructability and operational feasibility. Alternatives were scored on a basic “Yes” or “No” scoring. Ten alternatives were recommended for advancement to Intermediate Level 1 Screening.

The goal of the Intermediate Level 1 Screening was to reduce the list of ten alternative alignments down to three. The ten alternatives were evaluated based on how well they met the Purpose and Need and were scored from one to four (weighted):

- 1 = No improvement or unacceptable impact
- 2 = Marginal improvement or high impact
- 3 = Acceptable improvement or moderate impact
- 4 = Substantial improvement or low impact

The results of the Intermediate Level 1 Screening recommended the following three alternatives for advancement to Level 2 Screening:

- Alternative 3E: Begin at Lotus Road / State Route (SR) 49 Intersection. Lotus Road to Green Valley Road, Green Valley Road to Missouri Flat Road, Missouri Flat Road to SR 49 (Pleasant Valley Road), SR 49 to El Dorado.
- Alternative 5G: Begin at Lotus Road / SR 49 Intersection. Lotus Road to Gold Hill Road, Gold Hill Road to Cold Springs Road, Cold Springs Road to Pierroz Road, Pierroz Road to Placerville Drive, Placerville Drive to Ray Lawyer Drive, Ray Lawyer Drive to Ray Lawyer Drive Extension, Ray Lawyer Drive Extension to SR 49, SR 49 to Diamond Springs Parkway, Diamond Springs Parkway to Missouri Flat Road, Missouri Flat Road to SR 49 (Pleasant Valley Road), SR 49 to El Dorado.
- Alternative 5H: Begin at Lotus Road / SR 49 Intersection. Lotus Road to Gold Hill Road, Gold Hill Road to Cold Springs Road, Cold Springs Road to Pierroz Road, Pierroz Road to Placerville Drive, Placerville Drive to Ray Lawyer Drive, Ray Lawyer Drive to US 50 (Ray Lawyer Drive Interchange), US 50 to Missouri Flat Road (Missouri Flat Interchange), Missouri Flat Road to SR 49 (Pleasant Valley Road), SR 49 to El Dorado.

Alternatives 3E, 5G, and 5H were then evaluated in the Level 2 Screening based on the following criterion and points:

Criteria:

- Transportation Benefits
- Responsiveness to Environmental Goals

Scoring:

- 1 = No improvement or unacceptable impact
- 2 = Marginal improvement or high impact
- 3 = Acceptable improvement or moderate impact
- 4 = Substantial improvement or low impact

The Level 2 Screening resulted in the following ranking of the three alternatives:

- Rank #1 – Alternative 5H
- Rank #2 – Alternative 3E
- Rank #3 – Alternative 5G

The results of the Level 1, Intermediate Level 1, and Level 2 Screening processes were presented to the public at Open House #2 on October 14, 2009. The purpose of the Open House was to provide an overview the study process and present key highlights from the State Route 49 Realignment Study, including the project's history, schedule, and alternatives currently being discussed. Attendees had the opportunity to discuss the project with Project Team members from Caltrans, the El Dorado County Department of Transportation, El Dorado Transit, the EDCTC, and project consultant T.Y. Lin International.

The results of the Level 1, Intermediate Level 1, and Level 2 Screening processes were also presented to your Commission on November 5, 2009 and to the Placerville City Council on December 14, 2009. Based on comments received during the six SAC meetings, at the October 14, 2009 Open House, and during the November 5, 2009 presentation to your Commission and the December 14, 2009 presentation to the Placerville City Council, the Draft State Route 49 Realignment Study was prepared for presentation to your Commission.

The purpose of the study is to demonstrate that there are feasible transportation solutions that fulfill the project goals and objectives, not to establish all possible alternatives that may satisfy the goals and objectives of the project. Therefore, the alternatives considered in the study are provisional rather than conclusive and are not intended to limit other alternatives from being considered in a future Project Initiation Document (PID), such as a Project Study Report (PSR). In addition to identifying possible alternatives that may satisfy the purpose and need of the project, infeasible alternatives were also identified so that the alternatives studied in a PSR can focus on those alternatives that are potentially feasible as recognized in this study.

Keith Rhodes, Project Manger for project consultant T.Y. Lin International, will present the Draft SR 49 Realignment Study to your Commission.

Approved for Agenda:

Kathryn F. Mathews, AICP
Executive Director

Attachment A) Draft State Route 49 Realignment Study
(Note: This document is available for review in the EDCTC office and electronically at <http://www.edctc.org/SR49Realignment.htm>.)



PROJECT DEVELOPMENT TEAM MEMBERS

ATTACHMENT K

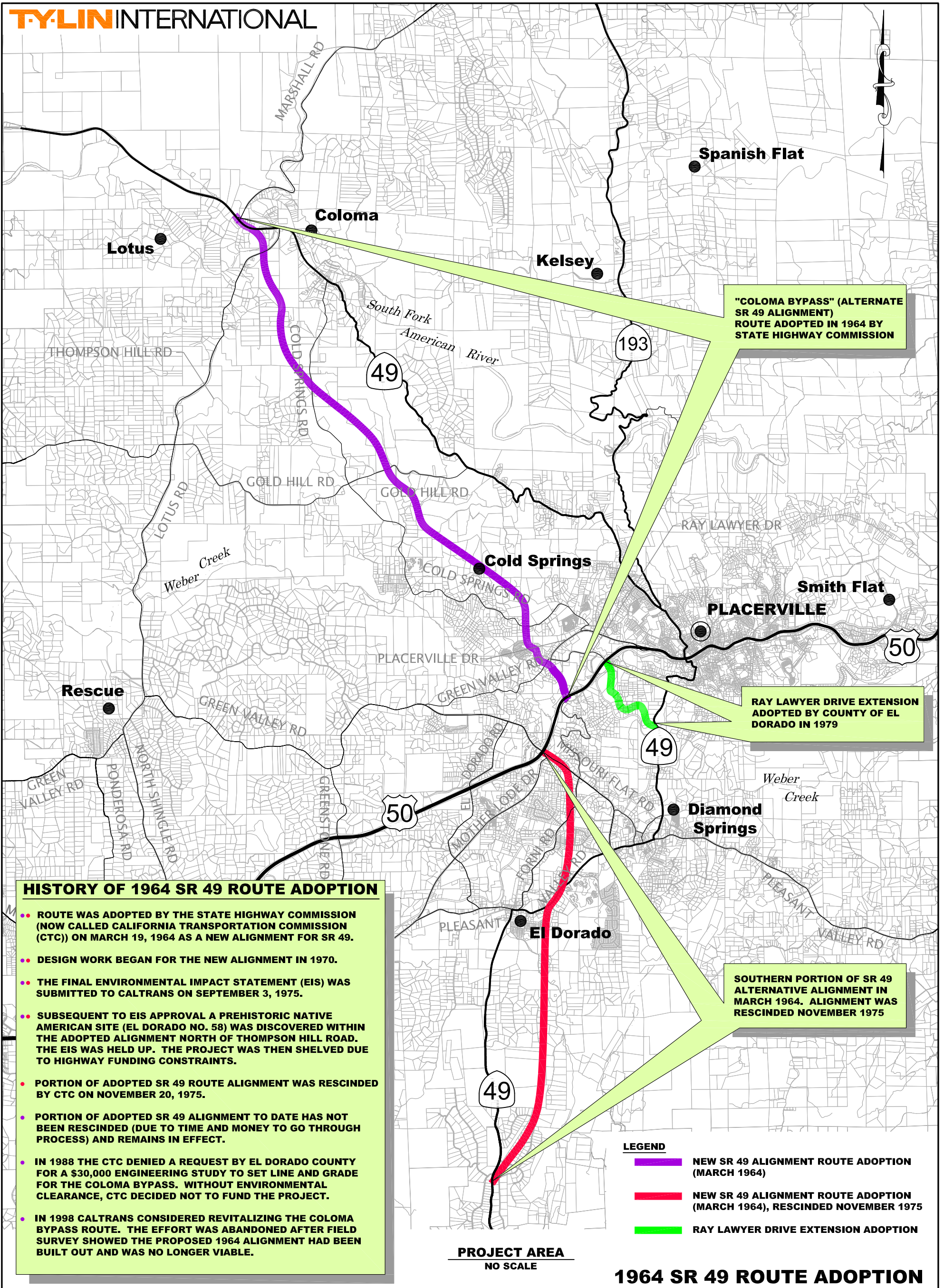
Project Development Team Members

Name	Company	Phone Number
Kathryn Mathews <i>Executive Director</i>	El Dorado County Transportation Commission (EDCTC)	530.642.5260
Dan Bolster <i>Project Manager</i>	EDCTC	530.642.5262
Keith D. Rhodes <i>Project Manager</i>	T.Y. Lin International	916.366.6331
Steve Peterson <i>Project Manager</i>	Environmental Stewardship & Planning (ESP)	916.455.1115
Dave Robinson <i>Project Manager</i>	Fehr & Peers	916.773.1900
Kim Pallari <i>Project Manager</i>	HDR/The Hoyt Company	916.448.2440
Jim Ware <i>Director of Transportation</i>	El Dorado County DOT	530.621.7533
Janet Postlewait <i>Transportation Planner</i>	El Dorado County DOT	530.621.5993
Randy Pesses <i>Director of Public Works</i>	City of Placerville	530.642.5557
Lacey Symons <i>Transportation Planner</i>	Sacramento Area Council of Governments (SACOG)	916-340-6212
Clark Peri <i>Project Manager</i>	Caltrans	916.274.0538
Gabe Corley <i>Transportation Planner</i>	Caltrans	916.274.0611
Bill Donovan <i>Captain</i>	California Highway Patrol	530.622.1110
Mindy Jackson <i>Director</i>	El Dorado Transit	530.642.5383
Jim Michaels <i>Senior Park & Recreation Specialist</i>	State Parks - Gold Fields District	916.988.0513



1964 SR 49 ROUTE ADOPTION DOCUMENTS

ATTACHMENT L



"COLOMA BYPASS" (ALTERNATE SR 49 ALIGNMENT) ROUTE ADOPTED IN 1964 BY STATE HIGHWAY COMMISSION

RAY LAWYER DRIVE EXTENSION ADOPTED BY COUNTY OF EL DORADO IN 1979

SOUTHERN PORTION OF SR 49 ALTERNATIVE ALIGNMENT IN MARCH 1964. ALIGNMENT WAS RESCINDED NOVEMBER 1975

HISTORY OF 1964 SR 49 ROUTE ADOPTION

- ROUTE WAS ADOPTED BY THE STATE HIGHWAY COMMISSION (NOW CALLED CALIFORNIA TRANSPORTATION COMMISSION (CTC)) ON MARCH 19, 1964 AS A NEW ALIGNMENT FOR SR 49.
- DESIGN WORK BEGAN FOR THE NEW ALIGNMENT IN 1970.
- THE FINAL ENVIRONMENTAL IMPACT STATEMENT (EIS) WAS SUBMITTED TO CALTRANS ON SEPTEMBER 3, 1975.
- SUBSEQUENT TO EIS APPROVAL A PREHISTORIC NATIVE AMERICAN SITE (EL DORADO NO. 58) WAS DISCOVERED WITHIN THE ADOPTED ALIGNMENT NORTH OF THOMPSON HILL ROAD. THE EIS WAS HELD UP. THE PROJECT WAS THEN SHELVED DUE TO HIGHWAY FUNDING CONSTRAINTS.
- PORTION OF ADOPTED SR 49 ROUTE ALIGNMENT WAS RESCINDED BY CTC ON NOVEMBER 20, 1975.
- PORTION OF ADOPTED SR 49 ALIGNMENT TO DATE HAS NOT BEEN RESCINDED (DUE TO TIME AND MONEY TO GO THROUGH PROCESS) AND REMAINS IN EFFECT.
- IN 1988 THE CTC DENIED A REQUEST BY EL DORADO COUNTY FOR A \$30,000 ENGINEERING STUDY TO SET LINE AND GRADE FOR THE COLOMA BYPASS. WITHOUT ENVIRONMENTAL CLEARANCE, CTC DECIDED NOT TO FUND THE PROJECT.
- IN 1998 CALTRANS CONSIDERED REVITALIZING THE COLOMA BYPASS ROUTE. THE EFFORT WAS ABANDONED AFTER FIELD SURVEY SHOWED THE PROPOSED 1964 ALIGNMENT HAD BEEN BUILT OUT AND WAS NO LONGER VIABLE.

LEGEND

- NEW SR 49 ALIGNMENT ROUTE ADOPTION (MARCH 1964)
- NEW SR 49 ALIGNMENT ROUTE ADOPTION (MARCH 1964), RESCINDED NOVEMBER 1975
- RAY LAWYER DRIVE EXTENSION ADOPTION

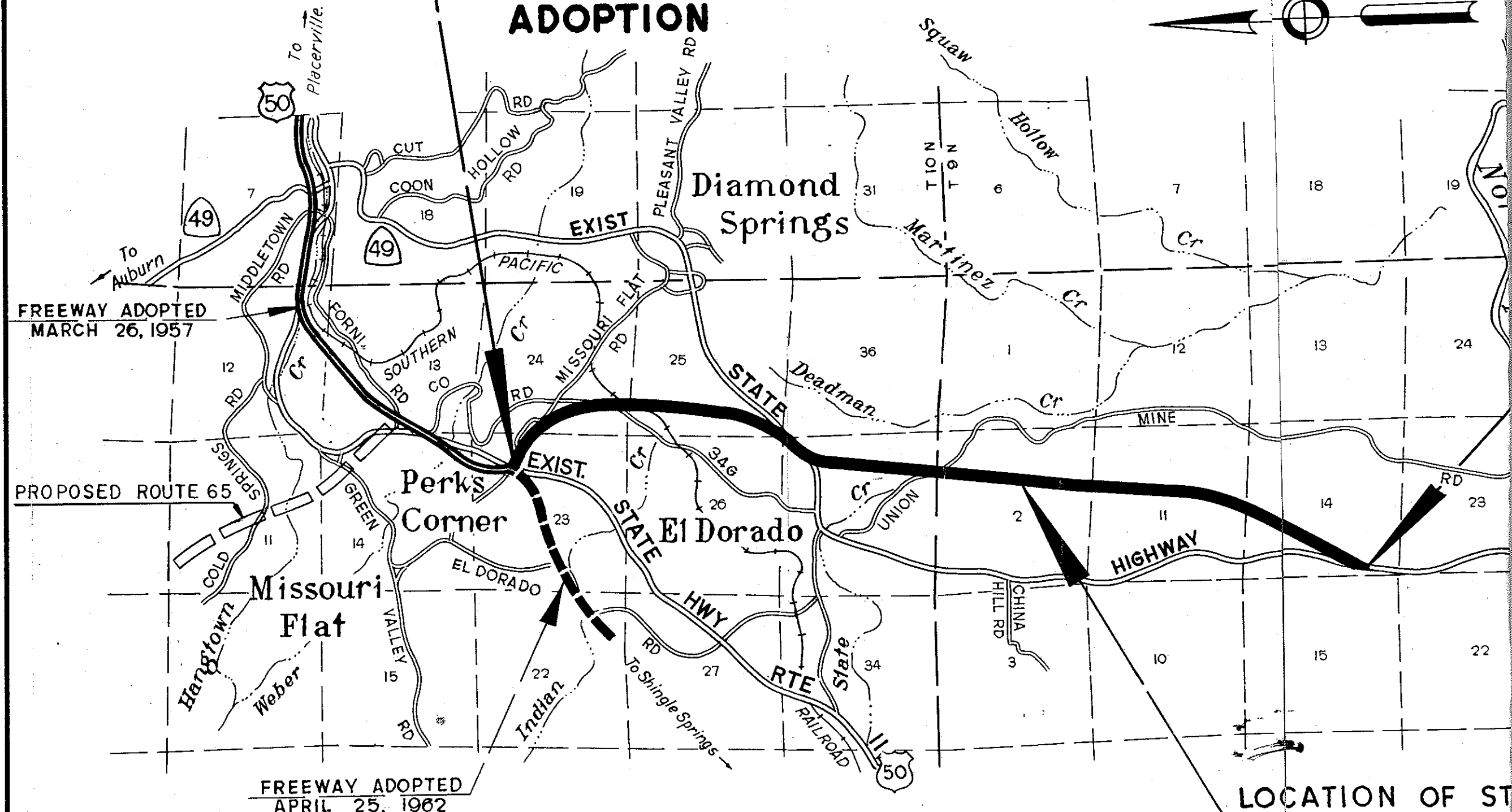
PROJECT AREA
NO SCALE

1964 SR 49 ROUTE ADOPTION

STATE ROUTE 49
REALIGNMENT STUDY



BEGINNING OF ADOPTION



I hereby certify that by resolution of the California Highway Commission on March 19, 1964 the location of State Highway on this map was selected, adopted and determined as the location for a section of State Highway Route 65, and declared a Freeway.

Attest: *[Signature]*
Secretary
California Highway Commission

Approved: March 19, 1964

[Signature]
ADMINISTRATOR OF HIGHWAY TRANSPORTATION
AND EX OFFICIO MEMBER AND CHAIRMAN
OF THE CALIFORNIA HIGHWAY COMMISSION

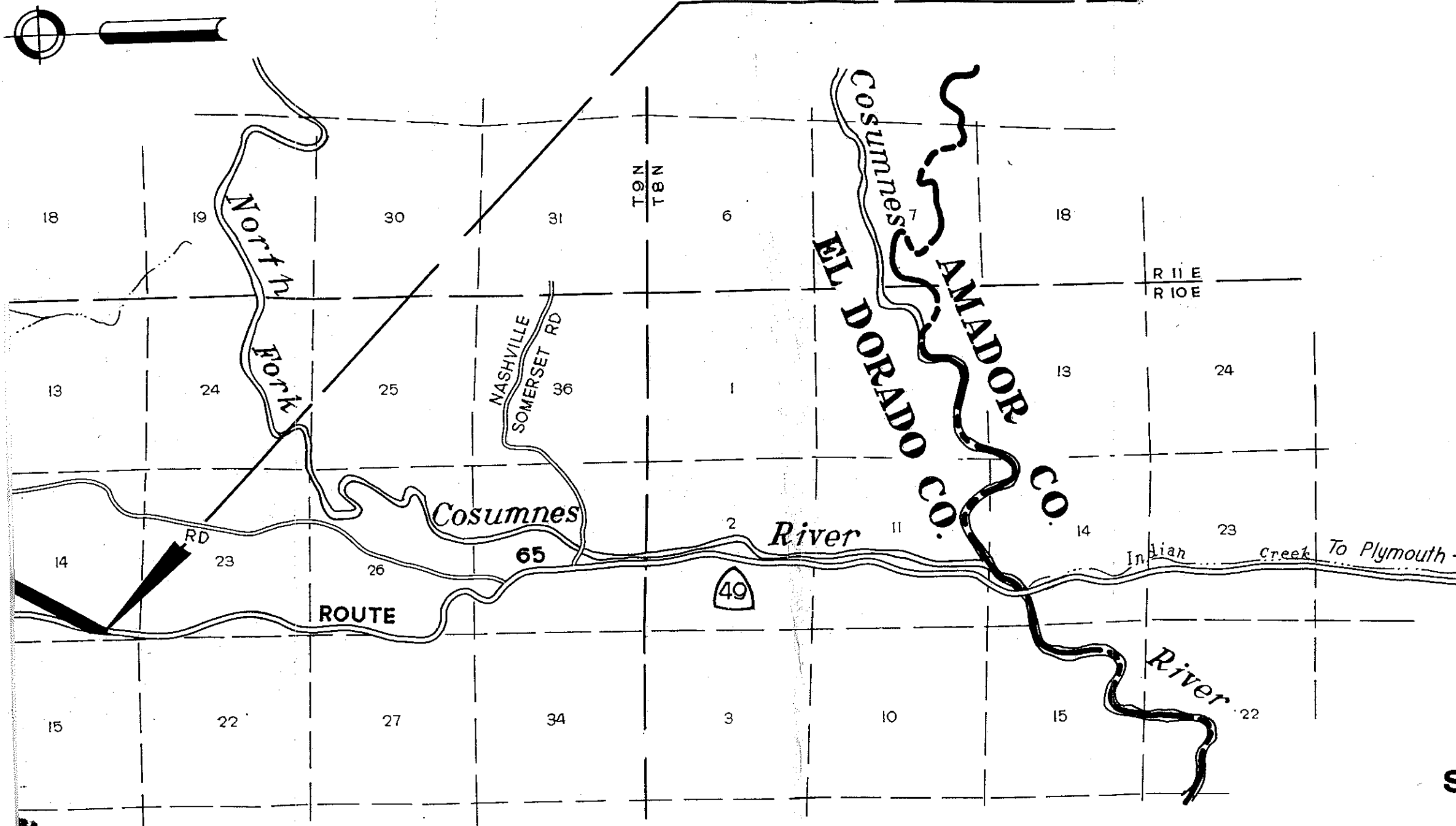
[Signature]
MEMBER OF CALIFORNIA HIGHWAY COMMISSION
[Signature]
MEMBER OF CALIFORNIA HIGHWAY COMMISSION

END OF ADOPTION

I hereby certify that this map was prepared pursuant to and under my direction and is a true and correct map of a section of proposed State Highway Route 65.

Submitted January 10, 1964

[Signature]
 State Highway Engineer
 Registered Civil Engineer No. 5945



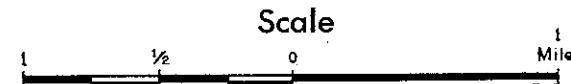
STATE SIGN ROUTE 49
 STATE OF CALIFORNIA
 DEPARTMENT OF PUBLIC WORKS
 DIVISION OF HIGHWAYS

MAP SHOWING
LOCATION OF STATE HIGHWAY

IN EL DORADO COUNTY
 Between Route 11 at Perks Corner and
 5.7 Miles North of the Amador County
 Line.

III-ED-65-C
 (New III-ED-49)

A FREEWAY



LOCATION OF STATE HIGHWAY

[Signature]
 MEMBER OF CALIFORNIA HIGHWAY COMMISSION

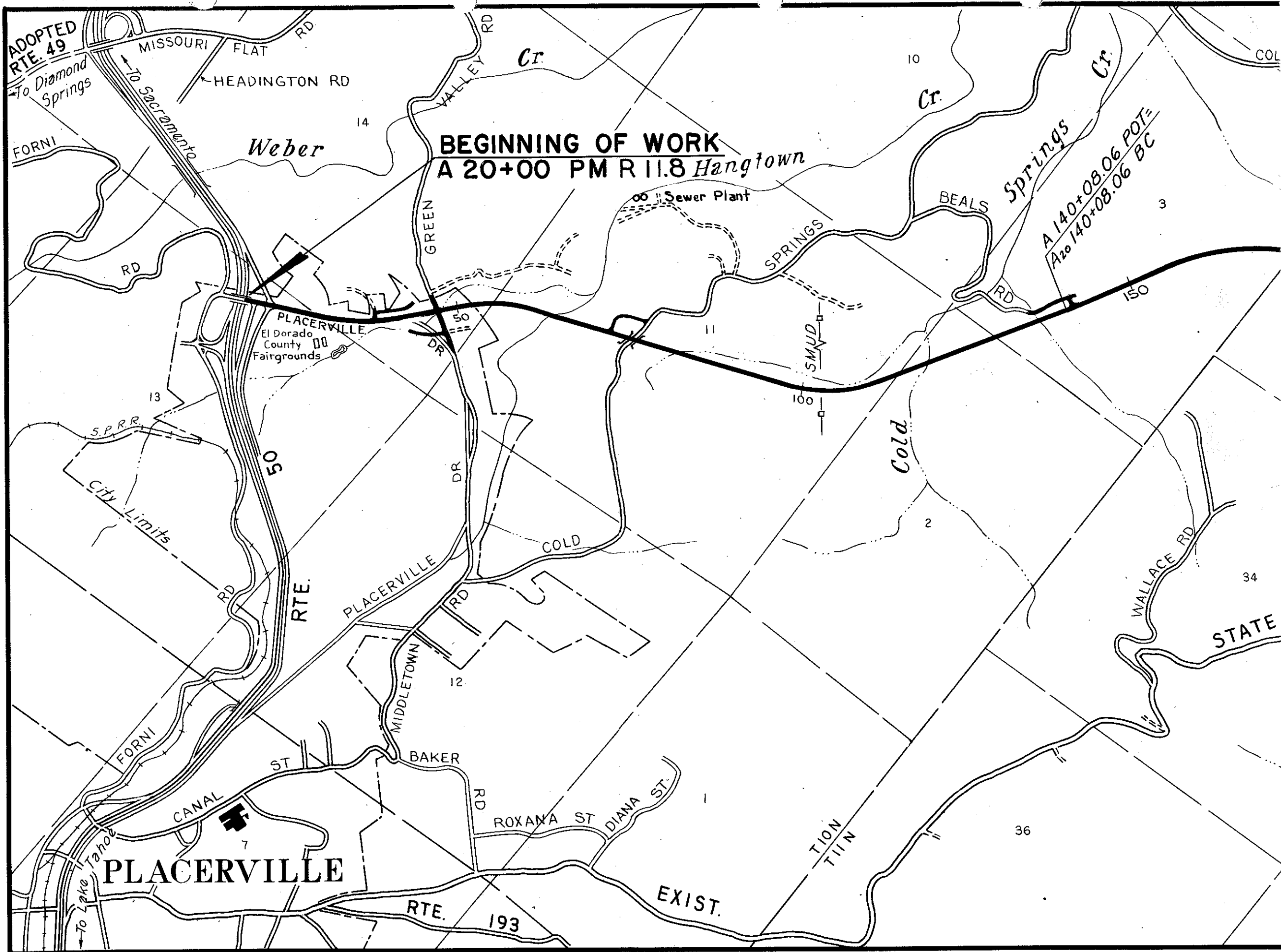
[Signature]
 MEMBER OF CALIFORNIA HIGHWAY COMMISSION

MEMBER OF CALIFORNIA HIGHWAY COMMISSION

[Signature]
 MEMBER OF CALIFORNIA HIGHWAY COMMISSION

MEMBER OF CALIFORNIA HIGHWAY COMMISSION

ROUTE 49
 Number Revised by 1963 Statutes



ADOPTED
RTE. 49
To Diamond Springs
To Sacramento

MISSOURI FLAT RD
HEADINGTON RD

Weber

BEGINNING OF WORK
A 20+00 PM R 11.8 Hangtown

Sewer Plant

A 140+08.06 POT
A 20+08.06 BC

PLACERVILLE
El Dorado County
Fairgrounds

City Limits

RTE. 50

PLACERVILLE RD

COLD

STATE 34

PLACERVILLE

CANAL

BAKER RD

ROXANA ST

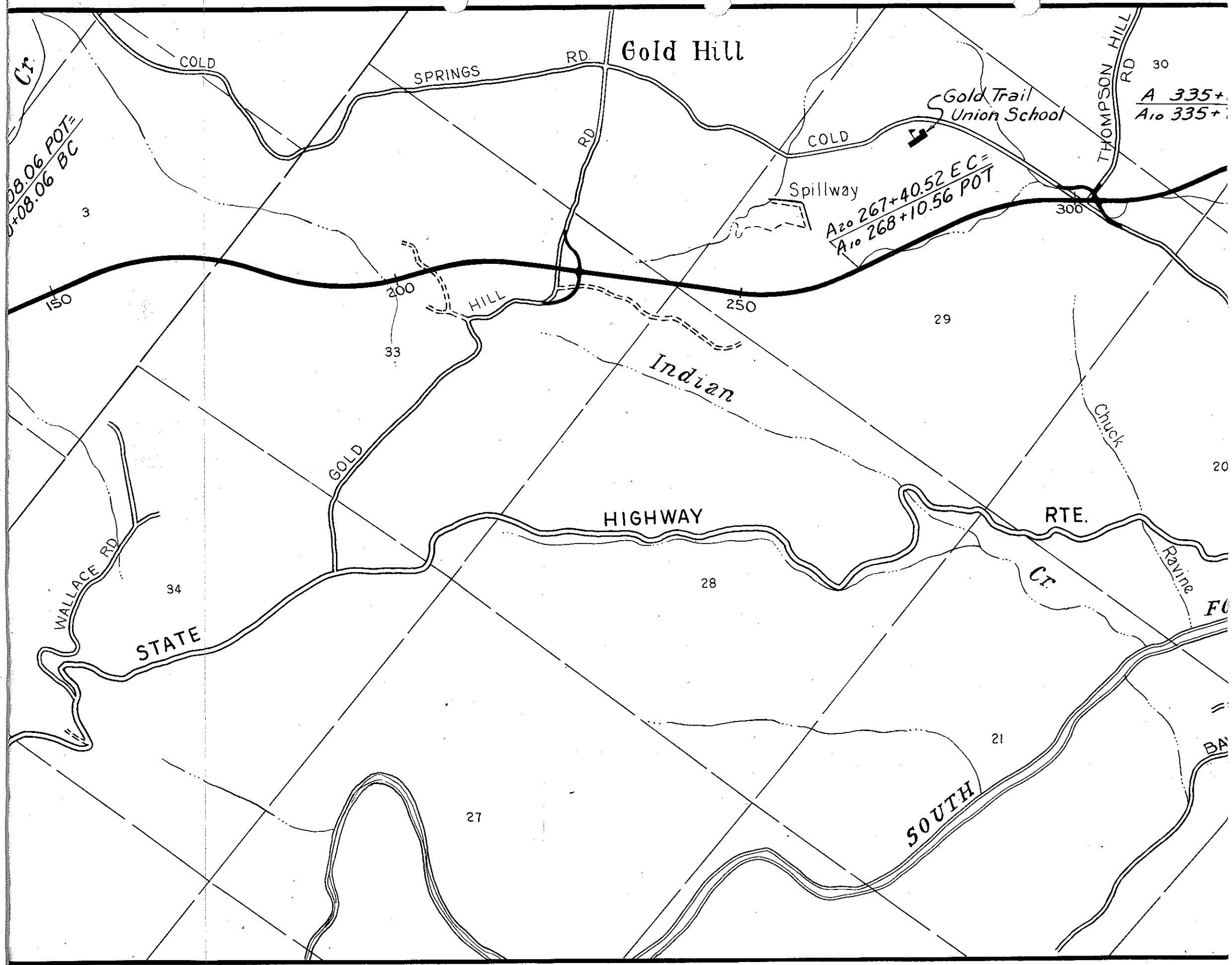
DIANA ST

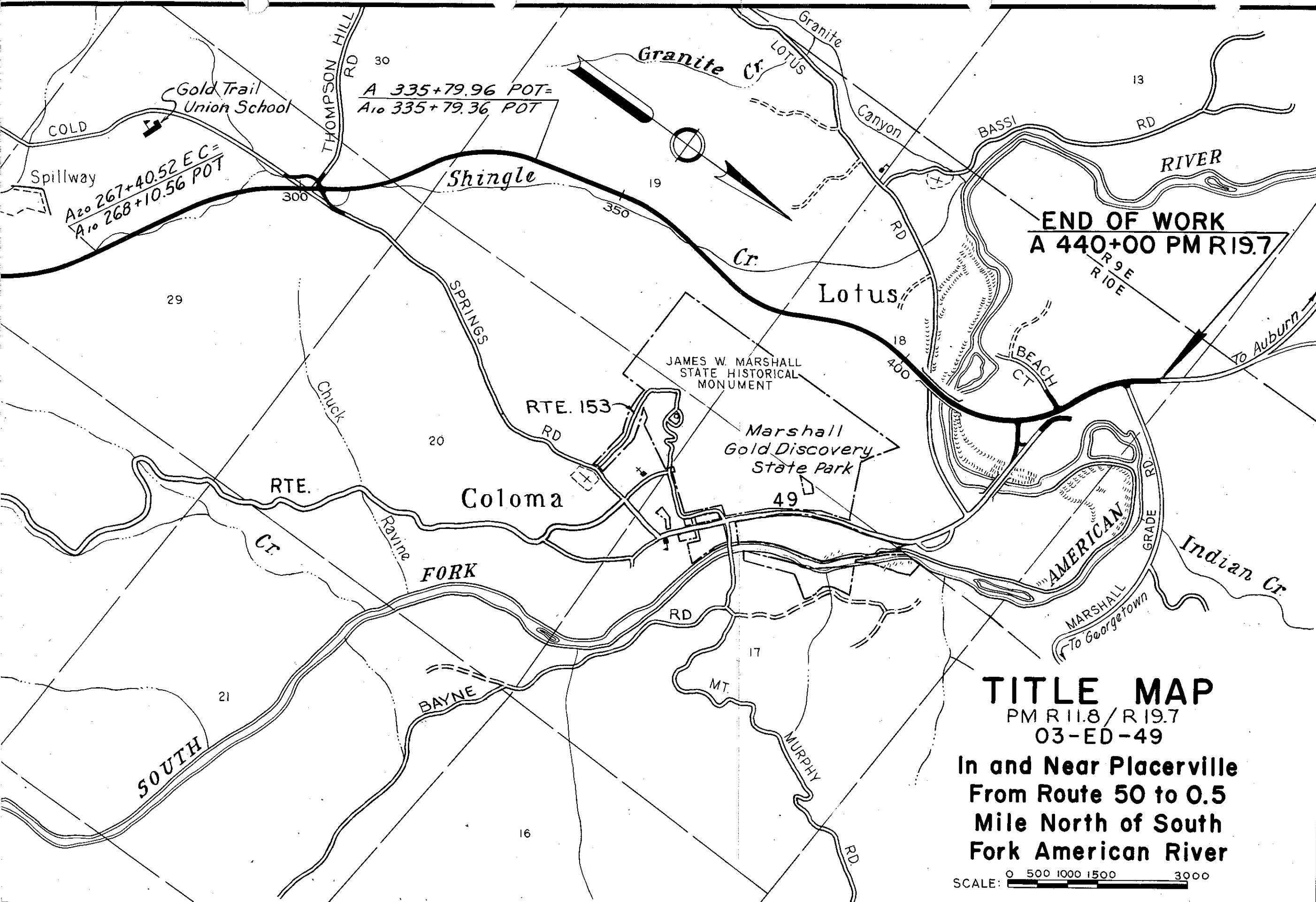
RTE. 193

EXIST.

TION TIIIN

36





END OF WORK
A 440+00 PM R19.7

TITLE MAP
 PM R11.8 / R19.7
 03-ED-49
In and Near Placerville
From Route 50 to 0.5
Mile North of South
Fork American River

SCALE: 0 500 1000 1500 3000

Memorandum

To : Chairman and Members
California Transportation Commission

Date : May 11, 1982

File No.: Resolution NIU 82-7
03-ED-49 11.8/19.5

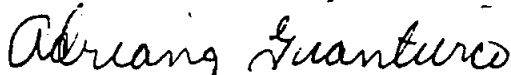
ACTION REQUIRED

From : **DEPARTMENT OF TRANSPORTATION**
Director's Office

Subject: Notice of Intent to Consider Rescinding Adopted Controlled
Access Highway Location

RECOMMENDATION

Having reviewed the information contained in the attached report and resolution, I concur in the recommendation that recycling procedures be initiated to consider rescinding the adopted controlled access highway location of Route 49 in El Dorado County between Route 50 and 0.5-mile west of the South Fork American River.

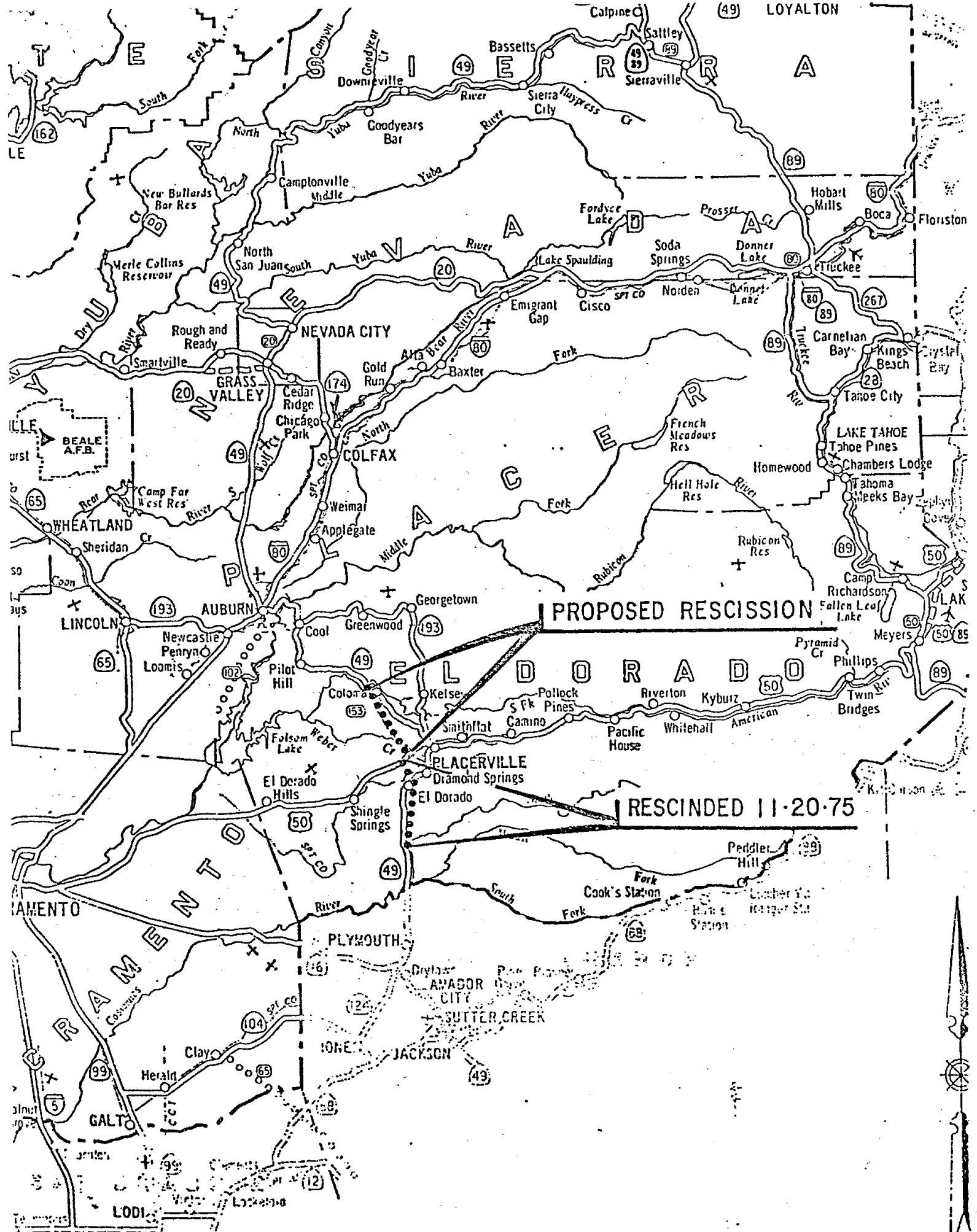


ADRIANA GIANTURCO
Director of Transportation

TO: Adriana Gianturco, Director
FROM: Robert O. Watkins, Deputy Director, Project Development

RECOMMENDATION

It is recommended that the Transportation Commission adopt attached Resolution No. NIU 82-7 which will initiate recycling procedures to consider rescinding the adopted controlled access highway location and disposing of previously acquired rights of way on the 7.7-mile segment of Route 49 in El Dorado County between Route 50 and 0.5-mile west of the South Fork American River.



PROPOSED RESCISSION

RESCIENDED 11-20-75



03-ED-49

BACKGROUND

This report is a part of a series of reports and recommendations covering route inventories of adopted but unconstructed freeway routes for which right of way and construction probably cannot be financed in the foreseeable future. The purpose is to evaluate current status of adopted locations and need for acquired lands as future highway right of way. This review was initially requested by the Highway Commission at its May 1972 meeting. The procedures for recycling established by the prior Highway Commission were basically incorporated in Resolution No. G-15 adopted by the Transportation Commission on November 17, 1978, and modified on February 29, 1980.

PREVIOUS PLANNING

The future freeway location for this 7.7-mile segment of Route 49 was adopted by the California Highway Commission on March 19, 1964. The adoption, together with a concurrent freeway adoption extending 6.1 miles south of Route 50, provided for a bypass of the downtown Placerville area.

The local officials desired such an alignment because of residential development along the existing highway, as well as anticipated build up of traffic and limited capacity through the business section of Placerville. The adoption also would remove traffic from the James Marshall Gold Discovery Historic State Park in Coloma. There was no controversy at the time of the adoption and none has subsequently developed.

Since only two-lane expressway construction was contemplated, the adoption was redennominated as a controlled access highway on July 11, 1974. Controlled access highway agreements have not been executed with either El Dorado County or the City of Placerville.

This portion of Route 49 is not included in the California Freeway and Expressway System. Route 49 to the south of Route 50 is included in the system and was the basis for the then concurrent freeway adoption extending 6.1 miles south of Route 50. At the request of local officials, and to be comparable to the planning to the south, the adoption north of Route 50 was also planned and adopted on a freeway basis. The 6.1-mile freeway adoption south of Route 50 was rescinded by the California Highway Commission on November 20, 1975. Thus, there is no longer any need to retain the adoption north of Route 50 from a system planning standpoint.

This portion of Route 49 is included as part of the State Scenic Highway System. The existing highway has not been officially designated and is not signed as a scenic highway.

Because anticipated construction was always far in the future, the adopted location was never included as a Federal-aid Highway route. Existing Route 49 is on the Federal-aid Primary System.

At the time of route adoption in 1964, right-of-way acquisition and construction were not programmed. The 1971 Planning Program indicated right-of-way acquisition for the 1972-73 fiscal year and construction in the 1974-75 fiscal year. In the 1972 Planning Program, right-of-way acquisition slipped one year and construction three years to the 1977-78 fiscal year. By 1974, construction had slipped to the "after" period and all scheduling and project activity was dropped during the 1975 financial crunch and was never reinstated.

On the basis of the 1971 Planning Program schedule, design and environmental studies were initiated. A Draft EIS was prepared and circulated for comments between October and December of 1972. A design public hearing was held December 12, 1973. Completion of the Final EIS was delayed pending resolution of an archaeological site conflict. Because of the lack of foreseeable project funding, all project activity was suspended in early 1976. The Final EIS was not completed. Detail design was then about 50 percent completed.

Planning had been based on construction of a basic two-lane expressway. A major cost was the proposed construction of a new 625-foot long bridge across the South Fork American River. The then proposed geometric typical section for the 0.6-mile segment between Route 50 and Green Valley Road provided for a continuous left-turn lane through the business section along Placerville Drive. The estimated current cost of the proposed expressway is \$15.2 million, including \$2 million for rights of way.

One right-of-way protection parcel has been acquired at a cost of \$18,500. If the routing is rescinded, the disposal value of the parcel is estimated to be in the range of \$140,000.

EXISTING HIGHWAY

The existing highway is essentially unchanged since it was incorporated into the State Highway System in 1921. It is very circuitous with numerous short radius curves, switchbacks, and a considerable number of grade segments in excess of 7 percent as it traverses foothill terrain. The prevailing paved width is about 18 feet with little or no usable shoulder. The average travel speed is about 35 miles per hour.

Route 49 is known as the Mother Lode Highway and is a popular tourist route. A primary tourist attraction along this segment is the James Marshall Gold Discovery State Park at Coloma. The State Park encompasses both sides of Route 49 for a short distance in Coloma.

The weighted average daily traffic (ADT) volume is about 1600 vehicles. However, there is a wide variation in traffic volumes on the route ranging from 5400 vehicles in Placerville to a low of 1150 vehicles at Gold Hill Road to 2700 vehicles in Coloma.

The weighted ADT is forecasted to increase to 2700 vehicles in the year 2000.

The accident rate is about double the statewide average for two-lane facilities carrying this volume of traffic in foothill terrain. The accidents occur at random throughout the length of the route and are not concentrated.

ALTERNATIVES

As noted earlier, construction of a basic two-lane expressway on the adopted alignment is estimated to currently cost about \$15.2 million. As this is the least facility that could be built, there are no options to lower the cost of the adopted alignment.

The option of constructing a conventional two-lane facility on the adopted routing would not offer any measurable saving in costs. The facility to be constructed would be the same as the expressway plan except for access control. Because of the foothill terrain and sparse development, private and public access provisions on both concepts would be essentially the same.

Spot low cost improvements as needed along existing Route 49 could also be considered an alternative. Such improvements could not be expected to appreciably raise the overall level of traffic service. The existing highway is not adaptable to major upgrading in alignment and grade without high cost and much disruption to the residents along the route. Significant opposition could be expected for any major modifications of the scenic character of this segment of the "Mother Lode Highway".

An already existing alternative is the County of El Dorado's Cold Springs Road, which the adopted routing parallels throughout most of its length. Like existing Route 49, it is somewhat circuitous but does provide an all-weather access corridor also connecting Route 50 and Coloma. Some local traffic now utilizes Cold Springs Road in preference to existing Route 49. (See attached map.)

LOCAL AND REGIONAL PLANNING

The adopted controlled access highway alignment for Route 49 has been incorporated into the general plan of the City of Placerville and of El Dorado County's Gold Hill Area Plan, Lotus-Coloma Area Plan, and Placerville Periphery Area Plan.

The James Marshall Gold Discovery State Historic Park General Plan is based on the assumption that Route 49 will be ultimately relocated away from the park. The plan states, in part, that "Traffic on Highway 49 through Coloma's Main Street, is an increasing major threat to the historic environment, the structural stability of nearby buildings, and visitor safety".

The 1978 El Dorado County Regional Transportation Plan listed construction of the adopted Route 49 alignment as a State highway improvement "needed now" in El Dorado County. The 1980 El Dorado County Regional Transportation Plan deleted the Route 49 realignment from its list of "needed now" State highway improvements. It was not included in the 1980 listing because there were no identifiable funding sources in the foreseeable future. However, existing Route 49 was classified as "deficient now" and adopted Route 49 was still delineated in the plan. It should also be noted that the listing of State highway improvements "needed now" in El Dorado County totaled \$88 million even without the Route 49 realignment.

Included in the listing of "needed now" improvements were two projects totaling \$730,000 for alignment improvements of existing Route 49 north of Route 50. (These improvements are not included in the 1981 State Transportation Improvement Program or Department's 1982 Proposed State Transportation Improvement Program.)

The proposal to consider rescinding the Route 49 controlled access highway adoption has been discussed with and drawn criticism from El Dorado County officials. In a letter dated March 5, 1982, to California Transportation Commission Executive Director Michael Evanhoe, Mr. Robert E. Dorr, Chairman of the El Dorado County Transportation Commission, strongly opposed any possible consideration of rescission of the adopted rerouting of State Highway 49. He cited the deficiencies of both existing Route 49 and Cold Springs Road, the desirability of removing State highway traffic from the James Marshall Gold Discovery State Historic Park, and the congestion on existing Route 49 in downtown Placerville.

CONCLUSIONS

Regardless of the current validity of the adoption, an expenditure of over \$15 million for construction of a two-lane expressway cannot be justified in the foreseeable future. Existing and forecasted traffic volumes are relatively low. There is not a serious traffic problem when compared to other competing needs on the State Highway System, or even within El Dorado County.

The validity of the adopted routing can also be questioned. One of the purposes of the adoption was to remove Route 49 traffic from downtown Placerville. However, a satellite business district of

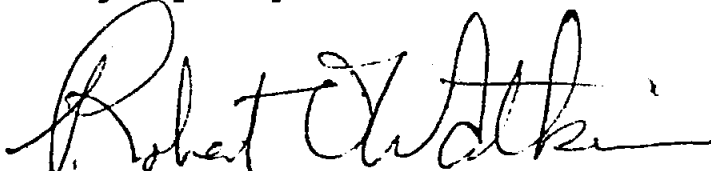
considerable magnitude has developed along the adopted routing on Placerville Drive between the Route 50 Freeway interchange and Green Valley Road. This 0.6-mile strip is already experiencing concentrated congestion. Admittedly, forecasted through traffic volumes on Route 49 are too low to have a major impact on this congestion problem. But the routing no longer would offer congestion-free access for Route 49 traffic to Route 50.

As noted earlier, the prior freeway adoption for Route 49 south of Route 50 was rescinded in 1975. There is no need to retain a freeway or controlled access highway adoption to the north of Route 50 for route continuity purposes. As an element of the scenic and historic "Mother Lode Highway", route continuity might best be served by the present Route 49 routings which junction in downtown Placerville. Placerville, known as historic "Hangtown", is a major tourist attraction along the Route 49 "Mother Lode Highway".

Considering the relatively low traffic volumes in the corridor and the impacts of construction, it does not now seem prudent to consider a new third highway facility between Route 50 and Coloma in addition to existing Route 49 and the County's Cold Springs Road. It should be noted that the current Regional Transportation Plan for El Dorado County does not include the adopted routing.

In summary, it is no longer realistic to assume that construction of an expressway on the adopted routing is financeable or is needed in the foreseeable future. Both local and State planning must be reoriented to the realities of today and the foreseeable future. It is recognized that rescission will be controversial with local officials. However, to continue the status quo would not be facing up to the hard facts.

In view of the above, it is concluded that the recycling process should be initiated to consider rescinding the controlled access highway adoption.



ROBERT O. WATKINS
Deputy Director
Project Development

Attachment

NOTICE OF INTENTION TO CONSIDER RESCINDING

MAY 28 1982

CONTROLLED ACCESS HIGHWAY ADOPTION

WHEREAS, a location for State Highway Route 49 in El Dorado County between Route 50 and 0.5-mile west of the South Fork American River was previously adopted as a controlled access highway on March 19, 1964; and

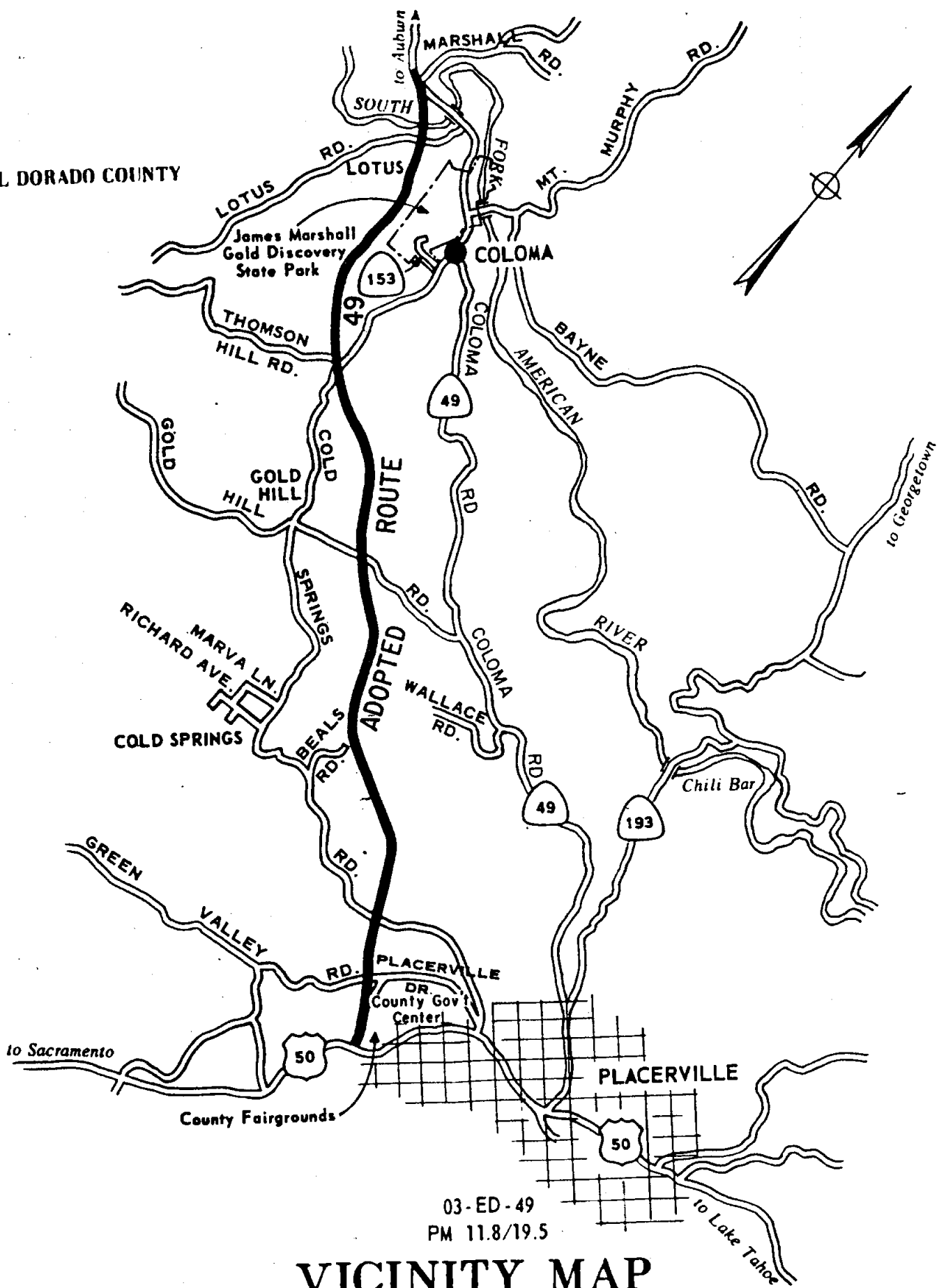
WHEREAS, monetary and other constraints have forced a re-evaluation of the State Highway Planning Program; and

WHEREAS, the aforementioned freeway is not likely to be constructed as a State highway within the foreseeable future; and

WHEREAS, retention of the freeway adoption may not be desirable and would subject the Transportation Commission to possible future expense for acquisition of property on a hardship basis;

NOW, THEREFORE, BE IT RESOLVED that the Department be authorized and directed to give public notice of the Transportation Commission's intention to consider rescinding the freeway adoption and disposing of previously acquired rights of way on State Route 49 in El Dorado County between Route 50 and 0.5-mile north of the South Fork American River; and also to give notice to local, regional, and affected State agencies of such intention. Such agencies so notified should be requested to furnish within 60 days any additional information that the Transportation Commission should have prior to its final consideration.

EL DORADO COUNTY



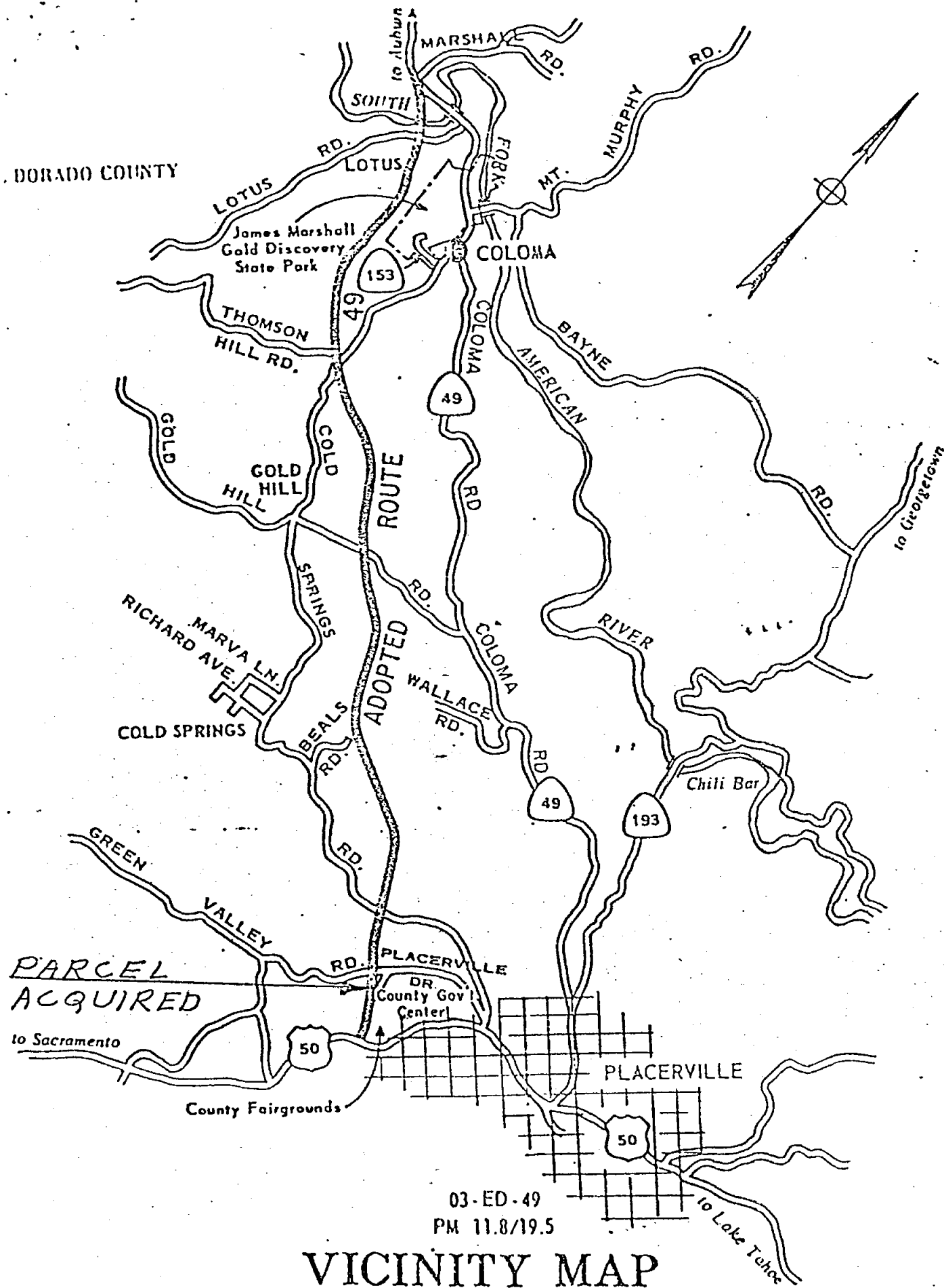
03-ED-49
PM 11.8/19.5

VICINITY MAP



03-ED-49

DORADO COUNTY



03-ED-49
PM 11.8/19.5

VICINITY MAP



TION-RIDE MDM
SEC 14 RD

P.M.R. 12.3

VALLEY

GREEN

Limit

72.44.05
N51°52'30"W "A" 426.05

359.94

24891

24893

PLACERVILLE DRIVE

N4°05'30"W

N48°20'01"W

N55°09'30"W

N50°33'50"E 270'

N46°32'56"W 447.02'

94.67'

N46°32'56"W 447.02'

94.67'

N46°32'56"W 447.02'

94.67'

N46°32'56"W 447.02'

94.67'

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94.67'

N46°32'56"W 447.02'

94.67'

N46°32'56"W 447.02'

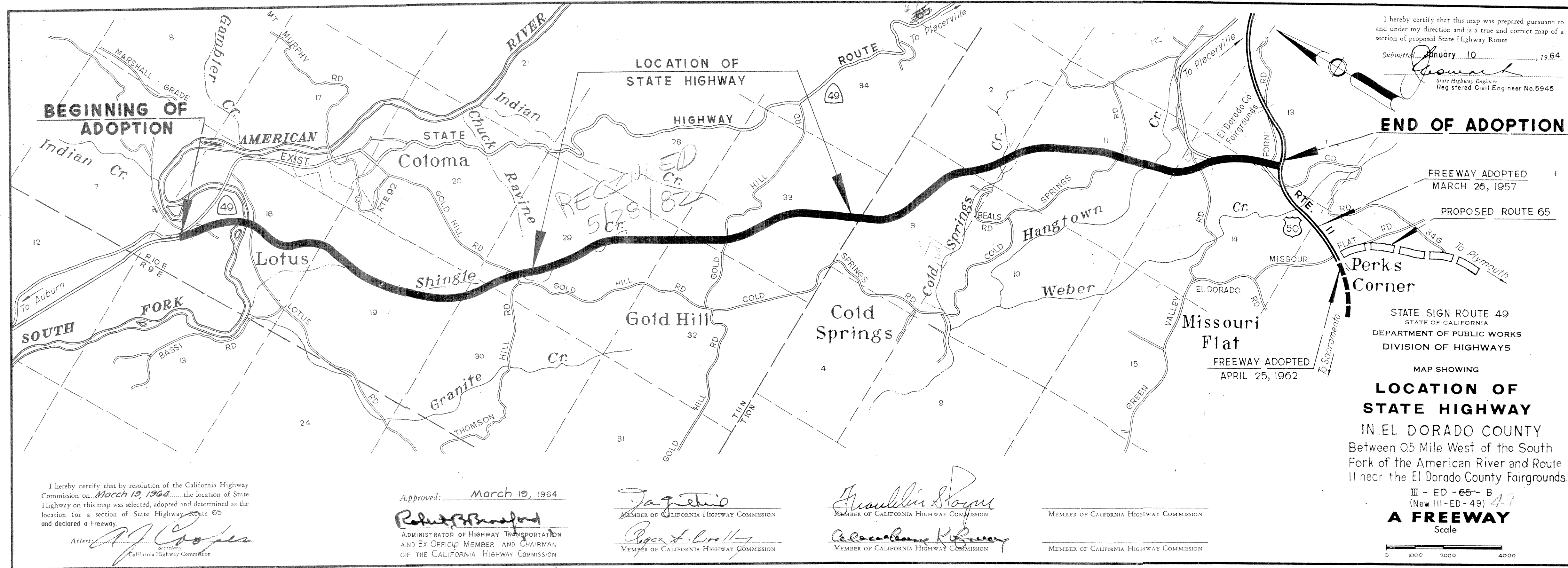
94.67'

PLACERVILLE

24854

03 Ed-49-12.3

Scale: 1"=100'



I hereby certify that this map was prepared pursuant to and under my direction and is a true and correct map of a section of proposed State Highway Route
 Submitted January 10, 1964
Edward
 State Highway Engineer
 Registered Civil Engineer No. 5945

BEGINNING OF ADOPTION

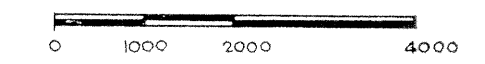
END OF ADOPTION

FREEWAY ADOPTED
 MARCH 25, 1957
 PROPOSED ROUTE 65

STATE SIGN ROUTE 49
 STATE OF CALIFORNIA
 DEPARTMENT OF PUBLIC WORKS
 DIVISION OF HIGHWAYS

MAP SHOWING
LOCATION OF STATE HIGHWAY
 IN EL DORADO COUNTY
 Between 0.5 Mile West of the South Fork of the American River and Route 11 near the El Dorado County Fairgrounds.

III - ED - 65 - B
 (New III - ED - 49) 49
A FREEWAY
 Scale



I hereby certify that by resolution of the California Highway Commission on March 12, 1964 the location of State Highway on this map was selected, adopted and determined as the location for a section of State Highway Route 65 and declared a Freeway.
 Attest: *[Signature]*
 Secretary
 California Highway Commission

Approved: March 19, 1964
Robert Bradford
 ADMINISTRATOR OF HIGHWAY TRANSPORTATION AND EX OFFICIO MEMBER AND CHAIRMAN OF THE CALIFORNIA HIGHWAY COMMISSION

Jaguetio
 MEMBER OF CALIFORNIA HIGHWAY COMMISSION
Robert A. Woolley
 MEMBER OF CALIFORNIA HIGHWAY COMMISSION

Franklin S. [Signature]
 MEMBER OF CALIFORNIA HIGHWAY COMMISSION
Calvin K. [Signature]
 MEMBER OF CALIFORNIA HIGHWAY COMMISSION

MEMBER OF CALIFORNIA HIGHWAY COMMISSION
 MEMBER OF CALIFORNIA HIGHWAY COMMISSION