

Draft

**Environmental Impact Report/
Environmental Assessment**
for the
**U.S. Highway 50/
El Dorado Hills Boulevard-Latrobe Road
Interchange Project**

Volume II: Appendices

**El Dorado County
Department of Transportation**

November 1999

This document should be cited as :

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NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT

LEAD AGENCY: El Dorado County

Agency Name: El Dorado County Department of Transportation
Street Address: 2850 Fairlane Court
City/State/Zip: Placerville, CA 95667

CONTACT: Kris Payne, Supervising Civil Engineer

El Dorado County (County) is the Lead Agency for the preparation and review of an Environmental Impact Report (EIR) for the U.S. Highway 50/El Dorado Hills Boulevard - Latrobe Road Interchange Project. The County has prepared this notice of preparation (NOP) pursuant to Section 15082 of the California Environmental Quality Act (CEQA) Guidelines. The County is soliciting the views of interested persons and agencies on the scope and content of the environmental information which is germane to the proposed project. Agencies will need to use the EIR prepared under the direction of the County when considering permits or other approvals for the project. Because of the time limits mandated by State law, your response must be sent at the earliest possible date but no later than the 30-day review period ending **August 14, 1998**.

A public scoping meeting will be held on **Wednesday July 15, 1998 at 7:00pm** at the El Dorado Hills Community Services District Pavilion (located on the northeast corner of El Dorado Hills Boulevard and Harvard Way). All public comments are appreciated, but only written public comments will be considered in the CEQA process, and should be submitted to the Lead Agency before the close of the comment period.

Please send written comments to the El Dorado County Department of Transportation, Attention: Kris Payne, at the above address. Please include the name of the contact person for your agency, if applicable.

PROJECT TITLE: U.S. Highway 50/El Dorado Hills Boulevard - Latrobe Road Interchange Project

PROJECT LOCATION: The U.S. Highway 50/El Dorado Hills Boulevard - Latrobe Road interchange is on U.S. Highway 50 in western El Dorado County, approximately 1.6 kilometers (about one mile) east of the Sacramento County line between Folsom and Placerville.

PROJECT DESCRIPTION: The proposed project involves reconstructing the El Dorado Hills Boulevard-Latrobe Road interchange on Highway 50, improving the vertical and horizontal alignment of the interchange on- and off-ramps, widening El Dorado Hills Boulevard-Latrobe Road

underneath the existing undercrossing structure from 4 to 6 lanes to provide dual left-turn lanes at the eastbound and westbound on-ramp intersections, and realigning Saratoga Way to intersect with Park Drive to address the existing spacing problem between the westbound on-ramp and the Saratoga Way/El Dorado Hills Boulevard intersection.

Reconstruction of the El Dorado Hills Boulevard interchange is included in the 1996 El Dorado Hills General Plan. The project is also included in the biennial 1994 Metropolitan Transportation plan and will be constructed to be consistent with the project approved in the El Dorado County Regional Transportation Improvement Program/Federal Transportation Improvement Program.

The proposed configuration is a hybrid of two previously identified alternatives considered during the alternatives development process - Alternative 3A and Alternative E (the "A" in Alternative 3A represents Option A for the configuration of the eastbound diagonal off-ramp in the southwest quadrant). Alternative E, developed as a result of the community outreach effort, contains the same ramp configurations as Alternative 3A; however, the ramp geometrics under Alternative E are more compact so as to increase the distance between the ramp improvements and the town homes located in the northwest quadrant.

The proposed project also incorporates the previously considered "S" curve configuration for the relocated Saratoga Way. The west leg of Saratoga Way is proposed to be reconfigured as an "S" curve. In this configuration, Saratoga Way swings east toward El Dorado Hills Boulevard, and then curves back westerly toward the town homes located in the northwest quadrant. This configuration is intended to minimize traffic-related impacts on the nearby town homes and allow usable space in the commercially-zoned area that the roadway traverses. Under the proposed project, Saratoga Way is proposed to remain as a two-lane roadway, requiring an amendment to the General Plan Circulation Element map which designates Saratoga Way as a four lane roadway to be extended to Folsom.

Right-of-Way Acquisition. Construction of the proposed project would not require the displacement of any existing structures. Right-of-way would need to be acquired from several properties in all four quadrants of the interchange. Required right-of-way would be dedicated to the State for this project.

Phasing and Schedule. The proposed project will be constructed in two phases. Phase 1 will consist of the realignment of the west leg of Saratoga Way, the construction of the westbound loop off-ramp structure, the westbound diagonal on-ramp, and the eastbound diagonal on-ramp. The existing eastbound loop off-ramp will be widened to provide for two left-turn lanes to southbound Latrobe Road. El Dorado Hills Boulevard will be widened underneath the existing undercrossing structures to provide dual left-turn lanes to the eastbound and westbound ramp intersections.

The Ultimate Phase (or second phase) will include construction of the new eastbound loop off-ramp, the new eastbound diagonal off-ramp, and the replacement of the undercrossing structures on Highway 50 mainline.

The project is included in the County's 5-year capital improvement program with construction to begin in fiscal year 2002-2003. Construction of both phases is estimated to require 15 months.

FOCUS OF THE EIR: The environmental effects to be addressed, in detail, in the draft EIR will be focused based on the results of the initial study checklist provided in the attached Notice of Preparation and comments on potential significant environmental effects submitted to the County in response to this NOP. It is anticipated that the draft EIR will focus on:

- Noise
- Air Quality
- Visual Resources
- Traffic
- Land Use and General Plan Consistency
- Earth Resources
- Hydrology and Water Quality
- Biological Resources
- Cultural Resources

Based on the results of the project initial study (May 1996), we assume that the following topics will not need to be analyzed in the EIR and that these topics will be listed in the EIR as effects found not to be significant:

- Population and Housing
- Risk of Upset
- Energy and Mineral Resources
- Public Service and Utilities
- Recreation

As required under the State CEQA Guidelines, the draft EIR will discuss alternatives to the proposed project and focus on those alternatives capable of avoiding or substantially lessening the significant environmental effects of the proposed project. Cumulative impacts of the proposed project will also be discussed.

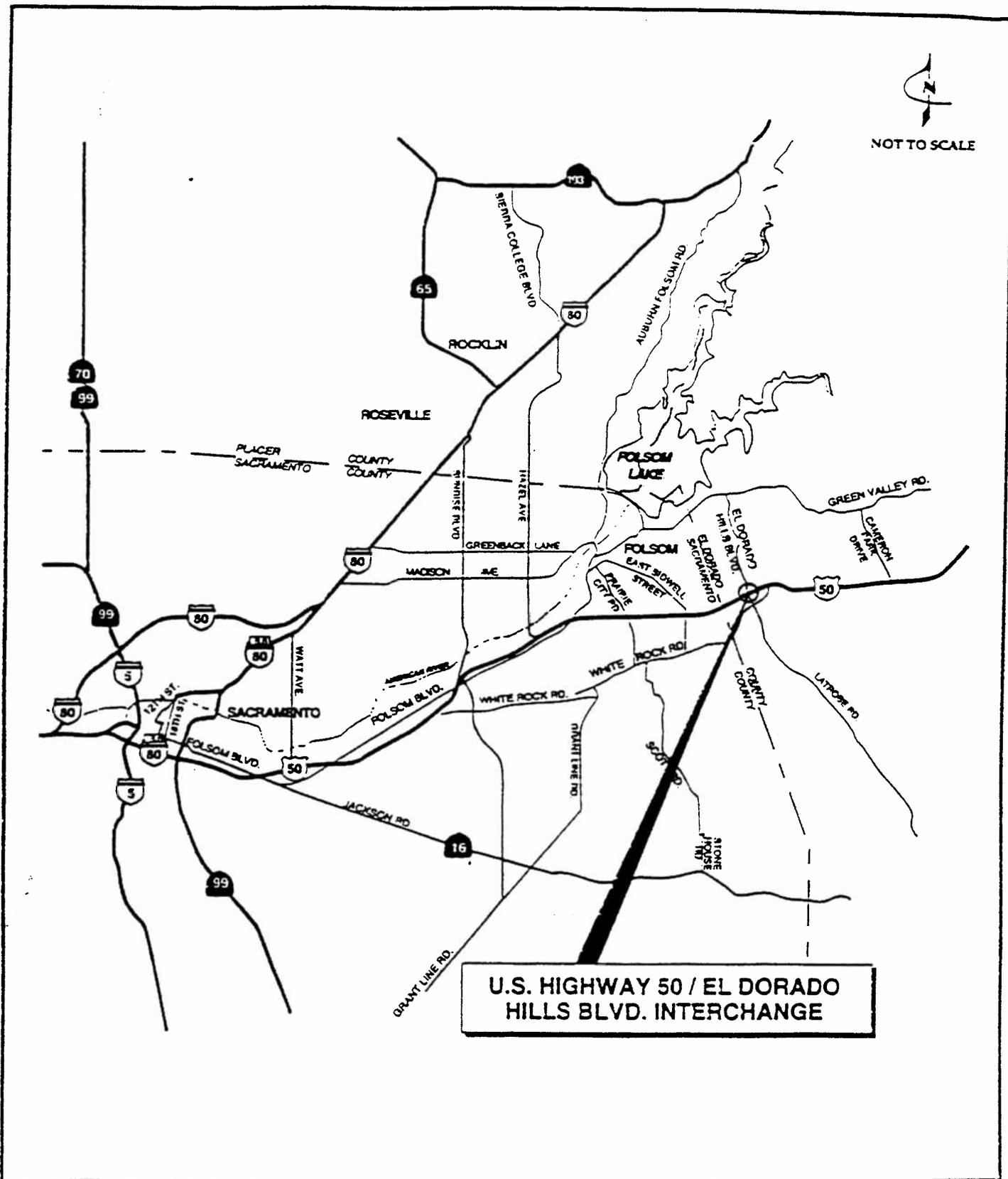


FIGURE 1

PROJECT LOCATION

fp Fehr & Peers Associates, Inc.
Transportation Consultants

CALIFORNIA ENVIRONMENTAL QUALITY ACT

ENVIRONMENTAL CHECKLIST FORM EL DORADO COUNTY

I. BACKGROUND

1. Name of Proponent: El Dorado County Department of Transportation
2. Contact /Address: Kris Payne, Supervising Civil Engineer
El Dorado County Department of Transportation
2850 Fairlane Court
Placerville, CA 95667
(530) 621-5926
3. Date of Checklist Submittal: July 6, 1998
4. Agency requiring checklist: El Dorado County Department of Transportation
5. Name of Proposal: U.S. Highway 50/El Dorado Hills Boulevard - Latrobe Road Interchange Project
6. Project Location: The U.S. Highway 50/El Dorado Hills Boulevard - Latrobe Road interchange is on U.S. Highway 50 in western El Dorado County, approximately 1.6 kilometers (about one mile) east of the Sacramento County line between Folsom and Placerville (Figure 1).
7. Project Description: The proposed project involves reconstructing the El Dorado Hills Boulevard-Latrobe Road interchange on Highway 50, improving the vertical and horizontal alignment of the interchange on- and off-ramps, widening El Dorado Hills Boulevard-Latrobe Road underneath the existing undercrossing structure from 4 to 6 lanes to provide dual left-turn lanes at the eastbound and westbound on-ramp intersections, and realigning Saratoga Way to intersect with Park Drive to address the existing spacing problem between the westbound on-ramp and the Saratoga Way/El Dorado Hills Boulevard intersection.

Reconstruction of the El Dorado Hills Boulevard interchange is included in the 1996 El Dorado Hills General Plan. The project is also included in the biennial 1994 Metropolitan Transportation plan and will be constructed to be consistent with the project approved in the El Dorado County Regional Transportation Improvement Program/Federal Transportation Improvement Program.

The proposed configuration is a hybrid of two previously identified alternatives considered during the alternatives development process - Alternative 3A and Alternative E (the "A" in Alternative 3A represents Option A for the configuration of the eastbound diagonal off-ramp in the southwest quadrant). Alternative E, developed as a result of the community outreach effort, contains the same ramp configurations as Alternative 3A; however, the ramp geometrics under Alternative E are more

compact so as to increase the distance between the ramp improvements and the town homes located in the northwest quadrant.

The proposed project also incorporates the previously considered "S" curve configuration for the relocated Saratoga Way. The west leg of Saratoga Way is proposed to be reconfigured as an "S" curve. In this configuration, Saratoga Way swings east toward El Dorado Hills Boulevard, and then curves back westerly toward the town homes located in the northwest quadrant. This configuration is intended to minimize traffic-related impacts on the nearby town homes and allow usable space in the commercially-zoned area that the roadway traverses. Under the proposed project, Saratoga Way is proposed to remain as a two-lane roadway, which will require an amendment to the General Plan Circulation Element map, which designates Saratoga Way as a four lane roadway to be extended to Folsom.

Construction of the proposed project would not require the displacement of any existing structures. Right-of-way would need to be acquired from several properties in all four quadrants of the interchange. Required right-of-way would be dedicated to the State for this project.

The proposed project will be constructed in two phases. Phase 1 will consist of the realignment of the west leg of Saratoga Way, the construction of the westbound loop off-ramp structure, the westbound diagonal on-ramp, and the eastbound diagonal on-ramp. The existing eastbound loop off-ramp will be widened to provide for two left-turn lanes to southbound Latrobe Road. El Dorado Hills Boulevard will be widened underneath the existing undercrossing structures to provide dual left-turn lanes to the eastbound and westbound ramp intersections.

The Ultimate Phase (or second phase) will include construction of the new eastbound loop off-ramp, the new eastbound diagonal off-ramp, and the replacement of the undercrossing structures on Highway 50 mainline.

The project is included in the County's 5-year capital improvement program with construction to begin in fiscal year 2002-2003. Construction of both phases is estimated to require 15 months.

8. Project Purpose: The project is proposed to improve the U.S. Highway 50/El Dorado Hills Boulevard-Latrobe Road interchange. El Dorado County has identified the following objectives which the project is intended to achieve. The project objectives are to:

- increase interchange capacity to accommodate existing vehicular traffic and traffic associated with planned growth in the County, as identified in the 1996 El Dorado County General Plan and the 1988 El Dorado Hills Specific Plan;
- address existing operational deficiencies and safety problems associated with the interchange, including the intersection spacing problem between the interchange's westbound ramp and the Saratoga Way/El Dorado Hills Boulevard intersection;

- achieve the operational goal of level of service D or better during the a.m. and p.m. peak periods at all ramp and adjacent roadway intersections in the year 2020;
- meet the design requirements of Caltrans' Highway Design Manual; and
- minimize environmental impacts of the proposed improvements, to the extent feasible.

9. Project Setting: The project site is located in the foothills of the Sierra Nevada Range, in El Dorado County, at the crossing of U.S. Highway 50 and the El Dorado Hills Boulevard/Latrobe Road interchange. South of U.S. Highway 50, El Dorado Hills Boulevard provides access to the community of El Dorado Hills. South of U.S. Highway 50, Latrobe Road, a two-lane roadway, terminates at U.S. Highway 16 in Amador County. Saratoga Way is a two lane divided road north of U.S. Highway 50 that serves as the main entrance to a large commercial area to the east of El Dorado Hills Boulevard. The commercial area consists of two gas stations, Raley's, fast food establishments, and other business and commercial uses. To the west, Saratoga Way is a two lane collector road that parallels U.S. Highway 50 and currently provides access to a relatively small number of single family and multi-family residential units on Finders Way and Arrowhead Drive. Saratoga Way terminates approximately 0.6 kilometers (about 0.37 miles) west of its intersection with El Dorado Hills Boulevard, but in the future is planned to connect with a proposed extension of Russell Ranch Road in Folsom.

Existing land uses in this area include golf courses, a fire station, schools, limited commercial, and several residential subdivisions north of the interchange. Residential areas in the northwest quadrant of the interchange include town homes located just west of El Dorado Hills Boulevard, Park Village, and Crescent Ridge. In the northeast quadrant of the interchange, there is a large commercial area (accessed directly by Saratoga Way) which attracts numerous trips on the east side of El Dorado Hills Boulevard between Park Drive and Highway 50. South of the interchange, construction has begun on the planned commercial developments of Town Center East and Town Center West. The El Dorado Hills Business Park is located along the west side of Latrobe Road approximately 0.4 kilometers (about 0.25 miles) south of White Rock Road. Much of the land south of Highway 50 is currently undeveloped annual grassland, with scattered oak trees, but the area is planned for extensive additional commercial, industrial and residential development.

II. ENVIRONMENTAL IMPACTS

	Significant	Potentially Significant Unless Mitigation Incorporated	Less Than Significant	No Impact
1. Earth.				
Will the proposal result in:				X
a. Unstable earth conditions or changes in geologic substructures?				
b. Disruptions, displacements, compaction, or overcovering of the soil?		X		
c. Change in topography or ground surface relief features?		X		
d. The destruction, covering, or modification of any unique geologic or physical features?				X
e. Any increase in wind or water erosion of soils, either on or off the site?		X		
f. Changes in deposition or erosion of beach sands, or changes in siltation, deposition, or erosion that may modify the channel of a river or stream or the bed of the ocean or any bay, inlet, or lake?		X		
g. Exposure of people or property to geologic hazards, such as earthquakes, landslides, mudslides, ground failure, or similar hazards?		X		
2. Air.				
Will the proposal result in:				
a. Substantial air emissions or deterioration of ambient air quality?		X		
b. The creation of objectionable odors?			X	
c. Alteration of air movement, moisture, or temperature, or any change in climate, either locally or regionally?				X

	Significant	Potentially Significant Unless Mitigation Incorporated	Less Than Significant	No Impact
3. Water.				
Will the proposal result in:				
a. Changes in currents, or the course or direction of water movements, in either marine or fresh waters?				X
b. Changes in absorption rates, drainage patterns, or the rate and amount of surface runoff?		X		
c. Alterations to the course or flow of flood waters?				X
d. Change in the amount of surface water in any water body?		X		
e. Discharge into surface waters or any alteration of surface water quality, including but not limited to, temperature, dissolved oxygen, or turbidity?		X		
f. Alteration of the direction or rate of flow of groundwaters?				X
g. Change in the quantity of groundwaters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations?				X
h. Substantial reduction in the amount of water otherwise available for public water supplies?				X
i. Exposure of people or property to water-related hazards such as flooding or tidal waves?				X
4. Plant life.				
Will the proposal result in:				
a. Change in the diversity of species or number of any species of plants (including trees, shrubs, grass, crops, and aquatic plants)?				X

	Significant	Potentially Significant Unless Mitigation Incorporated	Less Than Significant	No Impact
b. Reduction of the numbers of any unique, rare, or endangered species of plants?				X
c. Introduction of new species of plants into an area, or result in a barrier to the normal replenishment of existing species?				X
d. Reduction in acreage of any agricultural crop?				X
5. Animal life. Will the proposal result in:				
a. Change in the diversity of species or numbers of any species of animals (birds; land animals, including reptiles; fish and shellfish; benthic organisms; or insects)?				X
b. Reduction of the numbers of any unique, rare, or endangered species of animals?				X
c. Introduction of new species of animals into an area, or result in a barrier to the migration or movement of animals?				X
d. Deterioration to existing fish or wildlife habitat?				X
6. Noise. Will the proposal result in:	X			
a. Increases in existing noise levels?				
b. Exposure of people to severe noise levels?		X		
7. Light and glare. Will the proposal produce new light or glare?			X	
8. Land use. Will the proposal result in a substantial alteration of the present or planned land use of an area?			X	

	Significant	Potentially Significant Unless Mitigation Incorporated	Less Than Significant	No Impact
9. Natural resources. Will the proposal result in an increase in the rate of use of any natural resources?				X
10. Risk of upset. Will the proposal involve: a. A risk of an explosion or the release of hazardous substances (including, but not limited to, oil, pesticides, chemicals, or radiation) in the event of an accident or upset conditions?			X	
b. Possible interference with an emergency response plan or an emergency evacuation plan?				X
11. Population. Will the proposal alter the location, distribution, density, or growth rate of a human population of an area?				X
12. Housing. Will the proposal affect existing housing, or create a demand for additional housing?				X
13. Transportation/Circulation. Will the proposal result in: a. Generation of substantial additional vehicular movement?		X		
b. Effects on existing parking facilities or demand for new parking?				X
c. Substantial impact upon existing transportation systems?				X
d. Alterations to present patterns of circulation or movement of people and/or goods?		X		
e. Alterations to waterborne, rail, or air traffic?				X
f. Increase in traffic hazards to motor vehicles, bicyclists, or pedestrians?			X	

	Significant	Potentially Significant Unless Mitigation Incorporated	Less Than Significant	No Impact
14. Public services.				
Will the proposal have an effect upon, or result in a need for, new or altered governmental services in any of the following areas:				X
a. Fire protection?				
b. Police protection?				X
c. Schools?				X
d. Parks or other recreational facilities?				X
e. Maintenance of public facilities, including roads?				X
f. Other governmental services?				X
15. Energy.				
Will the proposal result in:				X
a. Use of substantial amounts of fuel or energy?				
b. Substantial increase in demand upon existing sources of energy, or require the development of new sources of energy?				X
16. Utilities.				
Will the proposal result in a need for new systems or substantial alterations to the following utilities:				X
a. Power or natural gas?				
b. Communications systems?				X
c. Water?				X
d. Sewer or septic tanks?				X
e. Stormwater drainage?				X
f. Solid waste and disposal?				X

	Significant	Potentially Significant Unless Mitigation Incorporated	Less Than Significant	No Impact
17. Human health.				
Will the proposal result in:				X
a. Creation of any health hazard or potential health hazard (excluding mental health)?				
b. Exposure of people to potential health hazards?		X		
18. Aesthetics.				
Will the proposal result in the obstruction of any scenic vista or view open to the public, or will the proposal result in the creation of an aesthetically offensive site open to public view?		X		
19. Recreation.				
Will the proposal result in an impact upon the quality or quantity of existing recreational opportunities?				X
20. Cultural resources.				
a. Will the proposal result in the alteration or the destruction of a prehistoric or historic archaeological site?		X		
b. Will the proposal result in adverse physical or aesthetic effects to a prehistoric or historic building, structure, or object?		X		
c. Does the proposal have the potential to cause a physical change that would affect unique ethnic cultural values?				X
d. Will the proposal restrict the existing religious or sacred uses within the potential impact area?				X

	Significant	Potentially Significant Unless Mitigation Incorporated	Less Than Significant	No Impact
21. Mandatory findings of significance.				
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of California history or prehistory?			X	
b. Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals? (A short-term impact on the environment is one that occurs in a relatively brief, definitive period of time, while long-term impacts will endure well into the future)				X
c. Does the project have impacts that are individually limited, but cumulatively considerable? (A project may have an impact on two or more separate resources where the impact on each resource is relatively small, but where the effect of the total of those impacts on the environment is significant.)			X	
d. Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?				X

4b. No unique, rare, or endangered plant species are expected to be found in the project area. Construction of the project would impact ruderal grassland, and may affect emergent wetland vegetation found in some locations in the project area along an existing drainage channel that conveys surface water flows to a tributary to Carson Creek. A site-specific biological resource survey will be conducted to document the presence or absence of special-status species.

5b. No unique, rare, or endangered wildlife species are expected to be found in the project area. Construction of the project would not affect freshwater emergent vegetation in surface water drainage ditches, which is the only habitat suitable for great blue heron, great egret and tricolored blackbird. A site-specific biological resource survey will be conducted to document the presence or absence of these or other special-status species and identify appropriate mitigation measures, if necessary.

5d. See 1f. Construction of the proposed project could affect water quality in a surface water drainage channel on a short-term basis, but this is not expected to affect potential fish habitat downstream in Carson Creek.

6a. Reconfiguration of the interchange and realignment of Saratoga Way will accommodate increased traffic volumes and would bring traffic closer to noise sensitive uses, increasing existing noise levels at sensitive residential receptors northwest of the interchange. Noise levels are expected to exceed County general plan noise guidelines, and would therefore be significant. Site-specific noise analysis will be conducted to determine the level of significance, and the potential to mitigate noise impacts.

6b. See 6a. Noise levels are expected to only marginally exceed significance thresholds, and may be reduced by appropriate mitigation measures.

7. Reconfiguration of the interchange will not introduce any new sources of light or glare. Realignment of Saratoga Way will bring vehicles closer to existing sensitive residential receptors and may introduce additional light and glare. This impact is not expected to be significant, but will be addressed in the visual resources analysis and appropriate mitigation measures will be proposed, if necessary.

8. Construction of the proposed project will require acquisition of land for realignment of Saratoga Way, thereby altering planned commercial land uses on the northwest quadrant of the project area and resulting in smaller, poorly configured, commercial parcels. This impact is not expected to be significant because ample undeveloped commercial land is available in the immediate area.

9. The proposed project will not increase the rate of use of any natural resources. Construction of the proposed project will result in use of construction materials and energy sources that are anticipated for projects of this type and are readily available.

10a. There is no evidence that an underground fuel storage tank under the Union 76 station near the project area poses any hazard (Initial Study, May 1996). If an unknown fuel release or spill has occurred, potentially exposing construction personnel to hazardous materials, on-going monitoring

III. DISCUSSION OF ENVIRONMENTAL EVALUATION

1b. Reconfiguration of the interchange will result in the disruption, displacement, compaction, and overcovering of existing soil in the project area.

1c. Reconfiguration of the interchange will require placement of fill and recontouring of the soil surface.

1e. Soils that are disturbed during construction may be subject to wind or water erosion on a short-term basis if not protected.

1f. Soils disturbed during construction could result in water erosion and siltation into an existing drainage channel that conveys surface water flows to a tributary and then to Carson Creek.

1g. Movement of soil could result in the exposure of serpentine, which occurs in various locations in this part of western El Dorado County. Uncontrolled grading of serpentine soils could result in release of particulate asbestos, which is potentially hazardous. Site-specific soils information will be evaluated to determine if this issue could be significant and identify appropriate mitigation measures, if necessary.

2a. Emissions from construction equipment and the generation of dust during construction may deteriorate air quality on a short-term basis. Reduced traffic congestion resulting from implementation of the project may reduce localized automobile emissions, but relocation of Saratoga Way closer to sensitive residential receptors could expose residents to increased vehicle exhaust emissions.

2b. Paving of roadway surfaces may result in short-term localized odor.

2c. The project would not affect air movement, moisture, temperature or climate in the project vicinity.

3a. The project would not alter an existing drainage channel that conveys surface water flows along the east side of El Dorado Hill Boulevard through the project area and south to a tributary of Carson Creek.

3b. Increased roadway surfaces and other impervious surfaces in the project area and may increase the rate and amount of surface stormwater runoff that could discharge to an existing surface drainage channel and to Carson Creek.

3d. See 3b.

3e. See 1f.

of the area for evidence of any soil contamination during grading would be ensure any needed remediation. Construction of the proposed project is unlikely to result in the release of hazardous materials or fuels, based on implementation of standard construction practices which are controlled and regulated by law.

10b. Construction-related activities associated with the project would not result in interference with implementation of emergency response or evacuation plans, based on implementation of standard construction practices and vehicle access plans. Temporary roads to El Dorado Hill Boulevard and Latrobe Road from Highway 50 will be maintained during construction to provide for emergency access.

11. The project will not directly or indirectly affect the location, distribution, density, or growth rate of the existing or planned population of the area. The project will not displace existing or planned housing. The planned intersection capacity improvements will accommodate existing and future traffic circulation needs in this area. No additional housing is proposed, or required by this project.

12. See 11.

13a. Implementation of the proposed project will allow traffic to move more freely through the area resulting in additional vehicle movement. The project will not increase trip generation in the area.

13b. No existing parking facilities are affected, and no new parking facilities are required by this project.

13d. Improved circulation through the interchange as a result of the project may cause an alteration of the current circulation pattern.

13f. A short-term increase in safety hazards to bicyclists and pedestrians may be associated with construction activities. As a result of additional vehicle movement through the interchange, a long-term minor increase in safety hazards to bicyclists and pedestrians may occur.

14. The project will not create an increase demand for any governmental services. Existing levels of roadway maintenance are anticipated for the completed facility.

15. The proposed project will not cause increased energy consumption. See 9.

16. The project will have no long-term impact on utilities. Any existing electricity, natural gas, or telephone lines that are affected by the project will be replaced. The cost of utility replacement will be borne by the affected utilities, unless it can be determined that they have prior right. Increased impervious surfaces associated with the road widening may increase stormwater runoff, but proposed replacement drainage facilities in the project area, and existing downstream drainage facilities are expected to accommodate these increase flows.

17b. See 10a.

18. Implementation of the proposed project will result in modified views of the interchange.
19. The project will not have any affect on the quality or quantity of existing recreational opportunities in the vicinity, and would not create a demand for new recreational opportunities. The project will provide improved on street bicycle lanes to facilitate bicycle circulation in the vicinity.
- 20a. Construction of the proposed project could result in disturbance to unknown historic or prehistoric resources. If such resources are disturbed, this impact is would be significant. Implementation of appropriate mitigation measures is expected to reduce this impact to a less-than-significant level.
- 20b. See 20a.
- 21a. The project will require grading and fill in the immediate interchange area, marginally degrading a relatively small amount of ruderal annual grassland habitat. These activities would not result in long-term degradation of the environment, loss of habitat or species, or elimination of examples of California history.
- 21b. The project will achieve long-term environmental goals associated with maintenance of traffic and circulation levels of service.
- 21c. The project may have traffic, noise and air quality impacts that are individually limited, but cumulatively considerable when viewed in connection with the effects of other current and future projects. The significance of these impacts will be disclosed.
- 21d. The project is not expected to cause substantial adverse effects on human beings, either directly or indirectly. All significant impacts are expected to be substantially avoided, reduced, or compensated through appropriate mitigation measures to be disclosed.

IV. DETERMINATION

On the basis of this initial evaluation:

I find that the proposed project WILL NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added to the project. A NEGATIVE DECLARATION will be prepared.

I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

DATE: _____ SIGNATURE _____
NAME AND TITLE: Kris Payne
Supervising Civil Engineer
El Dorado County Dept. of Transportation
Phone: (530) 621-5926

TO: El Dorado County Department of Transportation
Attention: Kris Payne, Supervising Civil Engineer

FROM: C.A.R.E.

DATE: August 3, 1998

RE: NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT
REPORT (NOP) - Highway 50/ El Dorado Hills Blvd. Interchange

Background

C.A.R.E. was formed in 1997 as an organization of El Dorado Hills homeowners opposed to the unilateral selection of Alternative 3 by the transportation staff as the Highway 50/ El Dorado Hills Boulevard Interchange design. The El Dorado Hills Townhouses Association, as well as individual homeowners in Park Village, Crescent Ridge and other villages (e.g., Ridgeview, St. Andrews) formed C.A.R.E., which is represented by the Law firm of Zumbrun and Findley.

A "door to door" effort raised awareness among residents that had no idea that the El Dorado County Department of Transportation (DOT) was seeking approval of a Negative Declaration on Alternative 3 on 1/28/97. Approximately 400 signatures were gathered in opposition to Alternative 3 that includes the proposal to "realign" Saratoga Way within 30 feet of back doors of homes.

According to county traffic consultants, Saratoga Way is expected to explode from 500 to 15,000 cars per day. A county noise study revealed that a "sound wall" would not reduce the noise impacts below county standards. Individuals with two story homes would especially need to keep windows closed and attempt to sound proof their homes.

Response to Recent Events

C.A.R.E. submitted written comments in conjunction with the July 15, 1998 "public scoping meeting." Please refer to our July 15, 1998 letter (enclosed) regarding objections to the exclusion of "topics" (e.g., hazards, effects on human beings, blight, etc.) for analysis from the draft EIR. At the June 2, 1998 Board of Supervisors hearing, C.A.R.E. submitted two letters from Lyons & Associates Realtors (enclosed, dated 11/12/97 & 11/19/97) regarding the ability to sell homes in a timely manner at a fair market value. In addition to comments at previous hearings, these two letters support the need to include "blight and the effects thereof" and "effects on human beings" (Also, review comments made at the 2/4/97 Board of Supervisors meeting by H. Krogh, Psychologist) as a topics in the draft EIR. In addition, a recent letter from Coker & Cook Real Estate, dated 7/27/98 is enclosed.

After reviewing the "check list," that was distributed at the NOP meeting, it has come to our attention that "Human Health" impacts may not be included as a topic. C.A.R.E. previously submitted a report from an Air Quality Consulting Engineer at the June 2, 1998 Board of

Supervisors hearing that indicates the probable impacts on health. The draft EIR should include effects on human health as a topic area since there are cancer risks associated with the anticipated emissions on Saratoga Way (enclosed, January 1998 document).

The agencies contracted to complete the EIR should not have a conflict of interest or experiences that may prevent an impartial and objective draft EIR. C.A.R.E. objects to the reliance on Fehr and Peers Associates, Inc. as the transportation consultant on this project. Fehr & Peers Associates has been repeatedly hired by local developers. In fact, the *same person* the consultant group has also completed the traffic study on development adjacent to the interchange project. These local developers have supported the DOT preferred design, Alternative 3.

At the July 15, 1998 public scoping meeting, DOT revealed that **only two** Interchange design Alternatives were being considered for study in the draft EIR. Specifically, Alternative 3-E (with two "realignment" configurations for Saratoga Way) and Alternative 1. One of the variations of 3-E was not even presented to the Board of Supervisors. The staff decision to study Alternative 3-E with a *two lane* Saratoga Way aligned adjacent to homes is totally unacceptable. The two lane Saratoga Way option was only considered in the "S curve" configuration for Saratoga Way, not as the DOT option adjacent to homes.

C.A.R.E. has previously endorsed Alternative 1, but also with the request that DOT use their expertise to improve the level of service through modifications. Since DOT intends to include Alternative 1 in the draft EIR, C.A.R.E. has outlined specific additions to the design for study. For example, Alternative 3A3B has an eastbound diagonal off-ramp with a "free right turn" in the south west quadrant to "accommodate the southbound demand." There is no reason to exclude the diagonal off-ramp with the free right turn to accommodate the southbound demand with Alternative 1. Other modifications to avoid the "spacing problem" between signals are outlined in the enclosed Attachment I, "Alternatives for Inclusion in the Draft EIR on the U.S. 50 El Dorado Hills Blvd./Latrobe Road Interchange."

C.A.R.E. is concerned about wasting time, effort and resources on meaningless design alternatives, especially since we were told that there would be a limited number studied due to financial constraints. The draft EIR should include alternatives that have the potential to lessen the impacts of the project. The viable alternatives that also have the interest of the public should be included. At the 1/27/97 Board of Supervisors hearing, a report from KORVE Engineering was submitted (enclosed, dated 1/27/97). KORVE endorsed the need to consider additional alternatives and included other designs for consideration.

We wish to incorporate by reference the prior oral and written comments filed concerning this project by our organization, as well as comments by others concerning the project. The draft EIR is required to "focus on those alternatives capable of avoiding or substantially lessening the significant environmental effects of the proposed project." C.A.R.E. has outlined "Alternatives for Inclusion in the Draft EIR on the U.S. 50 El Dorado Hills Blvd./Latrobe Road Interchange" (*See enclosed Attachment I*).

C.A.R.E. Board Memorandum (cont..)

Hilary Krogh

Hilary Krogh
Chairperson

Joni Royal

Joni Royal
Vice-Chair

Robert L. Beegle

Robert L. Beegle
Secretary

Kim L. Ryan

Kim L. Ryan
Treasurer

C.A.R.E. (Attachment I)

ALTERNATIVES FOR INCLUSION IN THE DRAFT EIR U.S. HIGHWAY 50 EL DORADO HILLS BLVD./LATROBE ROAD INTERCHANGE

INTERCHANGE DESIGN ALTERNATIVES

1. **Alternative 2** from the September 1996 Project Study Report (PSR), but with each of the "Options for Saratoga Way" (see below) with *"an exclusive right turn lane"* as recommended by Caltrans to resolve the potential "queuing" associated with the westbound diagonal off-ramp (see PSR, Traffic Analysis Report, page 27). When the westbound diagonal off-ramp is widened, *perhaps* it can also be lengthened.
2. **Alternative 5** from the Project Study Report, but with each of the "Options for Saratoga Way" listed below.
3. **Single Point Urban Interchange Design (SPUD)** with each of the "Options for Saratoga Way" listed below.

OPTIONS FOR SARATOGA WAY

1. **Two Lane "S Curve" options, as follows:**
 - a) Saratoga Way realigned with a **two lane S Curve (no right of way for four lanes)**.
 - b) Saratoga Way realigned with a **two lane S Curve; and with Town Center Boulevard*** as a two or four lane collector road parallel to Highway 50 with possible connection to Folsom (e.g., at the Russell Ranch Interchange).
 - c) Saratoga Way realigned with a **two lane S Curve with no connection to the Folsom** (i.e., No connection through to Iron Point Road); and with **Town Center Boulevard*** as a two or four lane collector road parallel to Highway 50 with possible connection to Folsom (e.g., at the Russell Ranch Interchange).
2. **No realignment of Saratoga Way for the SPUI only.**
3. **Saratoga Way intersection with El Dorado Hills Boulevard moved slightly north or at a mid point intersection with El Dorado Hills Boulevard (Whatever distance is minimally necessary) to avoid the "spacing problem" of two signals. As necessary, additional options for modifications can be made as follows:**
 - a) Saratoga Way with **two lanes with "slightly north or mid point"** realignment.
 - b) Saratoga Way two lane **"slightly north mid point"** realignment; and with **Town Center Boulevard*** as a two or four lane collector road parallel to Highway 50 with possible connection to Folsom (e.g., at the Russell Ranch Interchange).
 - c) Saratoga Way two lane **"slightly north or mid point "** with **no connection to Folsom**

(i.e., No connection through to Iron Point Road); and with **Town Center Boulevard*** as a two or four lane collector road parallel to Highway 50 with possible connection to Folsom (e.g., at the Russell Ranch Interchange).

4. **Dead end** (e.g., cul-de-sac and/or dead end) Saratoga Way in approximately its current location (i.e., close to the intersection with El Dorado Hills Blvd.) with **two or four lane Town Center Boulevard*** as an alternative collector road parallel to Highway 50.
5. **Realigned next to El Dorado Hills Blvd.**, two lane with a "hook" options, as follows:
 - a) Saratoga Way realigned next to El Dorado Hills Blvd., **two lane with a hook**.
 - b) Saratoga Way realigned next to El Dorado Hills Blvd. with a **two lane hook**; and with **Town Center Boulevard*** as a two or four lane collector road parallel to Highway 50 with possible connection to Folsom (e.g., at the Russell Ranch Interchange).
 - c) Saratoga Way realigned with a **two lane hook** with **no connection to the Folsom** (i.e., No connection through to Iron Point Road); and with **Town Center Boulevard*** as a two or four lane collector road parallel to Highway 50 with possible connection to Folsom (e.g., at the Russell Ranch Interchange).

* and/or other parallel roads extending to Folsom located south of Highway 50.

Additional Options for Saratoga Way with Alternative 3-E

Alternative 3-E with the two lane "S Curve" is already being included in the draft EIR. It is inappropriate to study *only one* additional option for Saratoga Way (i.e., the one chosen by DOT that realigns Saratoga Way next to homes). Alternative 3-E study should include the alternative "Options for Saratoga Way" as listed above, as numbered items 1.(a, b, c), 3.(a, b, c), 4., 5.(a, b, c).

Additional Options for Saratoga Way with Alternative 1

Alternative 1 is already being included in the draft EIR. Alternative 1 study should include the alternative "Options for Saratoga Way" as listed above, as numbered items 3.(a, b, c); 4. and/or an eastbound diagonal off-ramp with a free right turn for southbound traffic.

Summary

C.A.R.E. is adamantly opposed to a four lane *realigned* Saratoga Way. There are other options to accommodate traffic without expecting one area to accept the impacts of all four lanes (five lanes with center turn lane). If DOT intends to pursue a four lane realigned Saratoga Way, the "four lane with hook" option should also be evaluated. Secondly, a four lane Saratoga Way "slightly north or mid point" realignment with the addition of Town Center Boulevard suggestions should be studied. C.A.R.E. does not prefer these other four lane options, but requests inclusion in the draft EIR for study so the impacts can be evaluated in comparison to the DOT suggested four lane option. A four lane Saratoga Way adjacent to homes or a four lane S curve is totally unacceptable.

TO: El Dorado County Department of Transportation
FROM: C.A.R.E.
DATE: July 15, 1998
RE: Response to the Notice mailed out by El Dorado County Department of Transportation (DOT)

NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT (Highway 50/El Dorado Hills Blvd. Interchange)

The following correspondence is being submitted in conjunction with the July 15, 1998 "public scoping meeting." This is not an all inclusive memorandum, but comments primarily on the section titled FOCUS OF THE EIR in the NOTICE OF PREPARATION (NOP).

It is not acceptable for DOT to unilaterally exclude "topics" for analysis from the draft EIR. Other locally proposed projects (e.g. Promontory, Silva Valley Interchange) required the typical topics for focus for the draft EIR. Our community is entitled to at least as much respect on this current project.

The NOP indicates that the exclusion is based on an assumption that certain topics will not have significant effects. This assumption was "based on the results of the project initial study (May 1996)." The basis for the assumption is inappropriate due to contradictory evidence submitted at subsequent public hearings.

There are many topics in the May 1996 initial study that were "found not to be significant." Through subsequent evidence and public hearing comments, the Board of Supervisors did not approve the mitigated Negative Declaration that included the May 1996 initial study. Consequently, the focus of this draft EIR should not be "based on the results of that initial study."

It is difficult to understand the areas that DOT suggested for omission for focus in the EIR, even if the exclusion of topics was based on the May 1996 initial study. There are major topic headings in the May 1996 initial project study that are not listed in the NOP in either category (i.e. included or excluded for analysis). Specifically, the May 1996 Initial Study found section "IX. Hazards" to be "Potentially Significant unless Mitigation Incorporated."

The Board of Supervisors indicated that they want to know the impacts for residents; and the mitigation that would solve the impacts. C.A.R.E. understands that a separate category may not exist for certain potential impacts that have been already identified. For example, the "Sequence of Mitigation Implementation" may not be a typical "topic" area, but can still be addressed, as part of each topic (e.g. Noise).

All of the categories under Transportation/Circulation should be analyzed not just the "traffic" subcategory. All of the subcategories, including "Increased vehicle trips," "Hazards or barriers for pedestrians or bicyclists," and "Hazards to safety from design features (dangerous intersections)", etc., have a potential impact.

In addition, considerable evidence has been presented at public hearings about the potentially significant financial impact. The Community Process Report (May 12, 1998) recommended analysis of the financial impacts. C.A.R.E. submitted evidence at previous public hearings (see letters from Lyon & Associates) regarding the inability to sell a home at a fair market value in a timely manner due to the project. Financial impact can either be a separate category or possibly included in "Population and Housing" or "Risk of Upset" or "Effects on Human Beings/ Cumulative Impacts."

The potential for people to vacate homes begins during the construction period. Many of the adjacent homes are renter occupied. Mitigation measures should be identified to plan for the increased vacancy rate in the event that it occurs.

The listed topics for analysis in the NOP letter (i.e. Noise, Air Quality, Visual Resources, Traffic, Land Use and General Plan Consistency) should definitely be included. However, it is inappropriate to exclude the following from the draft EIR focus:

- 1) Population and Housing
- 2) Risk of Upset
- 3) Recreation/Safety
- 4) Hazards/Public Safety
- 5) Transportation/Circulation
- 6) Mandatory Finding of Significance --

The "Cumulative effects" should not only be "discussed," but "analyzed" as equally well as the other areas of focus.

Please include analysis of the question, "Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?"

In addition to the above listed topics, analysis should also include the following:

- 7) Aesthetics

Impacts to the residents, not just "Visual Resources" in terms of the people driving down the Boulevard.

Light & Glare - Vehicle light/glare, as well as, street lighting.

8) Blight and ramifications thereof (e.g., crime, graffiti on sound wall & impact on visual entry into community).

9) Financial Impact/property values

Local homeowners have the same sentiments previously expressed by the representative from Serrano in terms of impacts from the project -- homeowners also expect to be "made whole."

10) Sequence of Mitigation Implementation

The sequence of mitigation was discussed at a Board of Supervisors hearing. The mitigation measures (e.g. wall, berm, landscaping) should be implemented prior to construction. Many of the adjacent residents are elderly people who are home during the day.

C.A.R.E. does not agree that the Board of Supervisors approved the "S curve" configuration as the proposed project in order to only "minimize traffic related impacts on the nearby townhomes.." The Board specifically recognized that the "S curve" could have less impacts on individual property owners (compared to the suggested DOT preferred alternative - which has far greater impacts). The "individual property owners" include single family residents in Park Village, Crescent Ridge, as well as, the townhomes. The townhomes are an integral part of Park Village. C.A.R.E. is an organization of El Dorado Hills homeowners which include Board members from Park Village and Crescent Ridge.

This memorandum may not be fully inclusive of the topics appropriate for analysis. The issues previously submitted for public record (e.g., At public hearings, Board of Supervisors meetings and/or through correspondence to a county department; or as part of the Community Intensive) should be included for topics for analysis.

The NOP states, "As required under the State CEQA Guidelines, the draft EIR will discuss alternatives to the proposed project and focus on those alternatives capable of avoiding or substantially lessening the significant environmental effects of the proposed project." C.A.R.E. will be submitting a letter regarding the scope and content of alternatives to be analyzed.

cc: Supervisor Bradley

C.A.R.E. Board Memorandum (cont..)



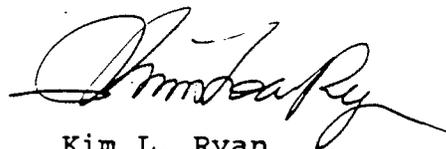
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Treasurer

January 27, 1997

Ms. Hilary Krogh, Vice President
El Dorado Hills Townhouses Association
3941 Park Drive, Suite 20 - 110
El Dorado Hills, CA 95762

RE: U.S. Highway 50/El Dorado Hills Boulevard - Latrobe Road Interchange
Negative Declaration
Capital Improvement Project No. 71318

Dear Ms. Krogh:

At your request, Korve Engineering, Inc. (KORVE) has reviewed the findings associated with the draft mitigated negative declaration for the U.S. Highway 50/El Dorado Hills Boulevard - Latrobe Road Interchange. KORVE's review is based upon the data provided in the traffic analysis report prepared for HDR Engineering, Inc. and the County of El Dorado by Fehr & Peers Associates in August of 1996. This letter presents KORVE's conclusions.

Setting

The townhouses are located west of El Dorado Hills Boulevard and north of Saratoga Way and Highway 50. Access for half of the units is via Mammoth Way and access for the remaining units is via Arrowhead Drive. Both Mammoth Way and Arrowhead Drive are two-lane residential roadways and have curb-to-curb widths of approximately 30 feet. Saratoga Way is a two-lane roadway that is about 40-feet wide and currently serves as a park-and-ride facility with on-street parking on both sides. El Dorado Hills Boulevard has traffic-signal-controlled intersections with Saratoga Way, Park Drive, and Lassen Lane as well as the westbound Highway 50 ramps. The distance between each of these intersections is about 1,000 feet except for the Highway 50 ramps which are about 150 feet south of Saratoga Way.

El Dorado Hills Boulevard is the only arterial roadway directly accessible to area residents. It can be reached either by traveling north on Mammoth Way and then about 250 feet east on Park Drive, or by following Arrowhead Drive south to Saratoga Way and then going roughly 250 feet east. Either route is approximately 500 feet from the townhouse driveway to El Dorado Hills Boulevard.

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El Dorado Hills Townhouses Association
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Circulation Impacts

The proposed interchange configuration and the realignment of Saratoga Way would have negative impacts on residents of the El Dorado Hills Townhouses Association and other residents of the neighborhood on the west side of El Dorado Hills Boulevard. These impacts would include, but not be limited to, issues of traffic circulation and safety.

The most direct impact would be due to the loss of a direct connection between Mammoth Way and El Dorado Hills Boulevard via Park Drive. The result of this would be that residents would have to travel a more circuitous route to reach El Dorado Hills Boulevard. For those residents currently using Mammoth Way, the new route would be to follow Mammoth Way to Arrowhead Drive and then to Saratoga Way, which would wind around behind the proposed commercial development before reaching El Dorado Hills Boulevard. The length of this proposed route is roughly one-half mile, which is five times the distance of the current access route to El Dorado Hills Boulevard. The potential negative impacts beyond the inconvenience of the increased travel time include air quality impacts, greater energy consumption, greater traffic volumes on Mammoth Way and Arrowhead Drive, and increased safety hazard on these residential streets in a single family neighborhood.

Under the proposed plan, the only access to Saratoga Road for townhouse residents would be from Arrowhead Drive. This intersection would be located along a curved section of Saratoga Way just before it reaches the planned commercial development. Although there is currently almost no visual obstruction at this intersection, the realignment would place the intersection much closer to existing structures, which could restrict the available sight distance around the curve, particularly given that Arrowhead Drive is on the inside of the curve. Such a configuration has the potential to be a safety hazard and would increase the risk of accidents at this intersection, especially since a greater number of vehicles from the neighborhood would have to use this intersection for access to area homes.

Suggested Alternatives

Given the issues raised above, it may be appropriate to consider additional alternatives to the proposed plan for the interchange. Particular benefits to the El Dorado Hills Townhouses Association, as well as to the County, could include continued direct access to El Dorado Hills

Ms. Hilary Krogh, Vice President
El Dorado Hills Townhouses Association
January 27, 1997
Page 3

Boulevard, possible cost savings from reduction of the Saratoga Road extension, and increased land availability for the commercial land use and landscaping between the townhouses and El Dorado Hills Boulevard.

A possibility that may be worth considering would simply modify the recommended configuration. Instead of having Saratoga Way located between the townhouses and the commercial development, the alignment could be moved so that Saratoga Way would be immediately adjacent to El Dorado Hills Boulevard. In this configuration Saratoga Way would serve as a frontage road to El Dorado Hills Boulevard, separated by appropriate landscaping or other form of glare control.. A variety of alternatives could be used for connecting Saratoga Way to El Dorado Hills Boulevard. Specific details would have to be resolved regarding this connection. Depending on the details, realignment of Saratoga Way as a frontage road to El Dorado Hills Boulevard would have the advantage of maintaining good access for townhouse residents and avoid the potential sight distance hazards that would exist at the intersection of Arrowhead Drive and Saratoga Way. Another advantage would be that the nearest signalized intersection to the ramps would still be 1,000 feet away, which would be in compliance with General Plan Policy 3.1.2.2.

The county may also wish to give serious consideration to an interchange configuration that was not included in the original set of alternatives. A Single Point Urban Interchange (SPUI) is a variation which combines the two separate intersections of a diamond interchange, into one intersection. In addition to simplifying coordination of traffic on El Dorado Hills Boulevard, and potentially reducing congestion at the interchange, such a design also has the specific benefit of not using loop ramps, which would allow Saratoga Way to retain its current alignment. A SPUI would also move the signalized ramp intersection farther south, increasing the spacing between it and Saratoga Way. In addition, it would reduce by one the number of signalized intersections on El Dorado Hills Boulevard as well as retaining optimal access for townhouse residents and avoiding potential sight distance hazards at the intersection of Saratoga Way and Arrowhead Drive. Another benefit would be that not building the extension of Saratoga Way would increase the availability of land for commercial use or landscaping adjacent to the townhouses.

Ms. Hilary Krogh, Vice President
El Dorado Hills Townhouses Association
January 27, 1997
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Conclusion

Given the impacts of the currently proposed plan and the potential for improvement by consideration of other alternatives, KORVE would suggest that further consideration be given to other alternatives such as those mentioned above. By doing so, we believe that a more equitable solution could be reached with the potential for benefits to all concerned parties.

Sincerely,

KORVE ENGINEERING, INC.



Farid Javandel, P.E.
Transportation Engineer

Design Features

There are several distinguishing design and operational features about a SPUI that give its name and nature. The SPUI is a grade-separated two-level diamond interchange well suited for restricted urban rights-of-way. A conventional overpass SPUI recently opened to traffic is shown in Figure 1. As an indication of scale, the single-span overpass bridge is about 220 ft long. The principal operational feature of the SPUI is that it has only one signalized intersection through which all four left turns operate. As found at a conventional high-type intersection, all opposing left turns operate inside one another.

Geometry is also greatly influenced by the high-speed single-signal operations of the left turns. To provide adequate visibility and efficient direct left-turn operations, the SPUI uses large left turning radii on the order of 150 to 300 ft for the off-ramps from the high-speed mainline facility. Consequently, a clear center span of 200 ft or more is needed over the intersection of a single-span overpass. Both single-span and multispan bridges are used in SPUI design with both overpass and underpass mainline grade separations. While most SPUIs do not have frontage roads, a few do. When the freeway goes under the cross street, a wide two-span platform bridge is normally used having a median supporting pier. The thinner two-span overpass promotes retaining the existing cross street grade line which minimizes difficulties in alignment design and reduces project costs. The total cost of a SPUI interchange may range from \$8 million to 14 million, or more, depending on the size of the interchange, and on local right-of-way and construction costs.

The following section presents a brief history of the SPUI in the United States. Personal interviews, correspondence, and relevant literature were used as data sources for preparing this section.

Historical Context

The field survey indicates that the SPUI was first proposed in the United States as a design alternative in the mid-1960s almost simultaneously, but independently, by at least two prominent American civil engineering firms (2, 3). Both of these proposed designs were later built in the 1970s. One SPUI was in Clearwater, Florida (2, 4) and the other was in Moline, Illinois (3, 5). In addition, an early commitment about this same time was also made to use several SPUIs along one major arterial in Huntsville, Alabama, which now has one-way frontage roads.

Other sources provide additional insight and perspective on early developments of the SPUI. One reference suggests that prior to the above actions, Caltrans had proposed an innovative "inside-left turn" interchange design for Palo Alto, California, in 1960 (6). Interchanges similar to the SPUI have been built in Germany (7) and Greece (8), to name a few. The German SPUI was built in Cologne near the Rhine River by 1975 (7). Several are programmed for construction in Edmonton, Alberta, Canada. As noted earlier, the 1990 AASHTO highway design policy does not mention the single-point urban interchange as being a viable interchange design type (1). Recent implementation and operational experience strongly suggest that the SPUI should be considered in future editions of the Green Book. This research should provide useful guidance to that effort.

The first SPUI built in the United States was completed in

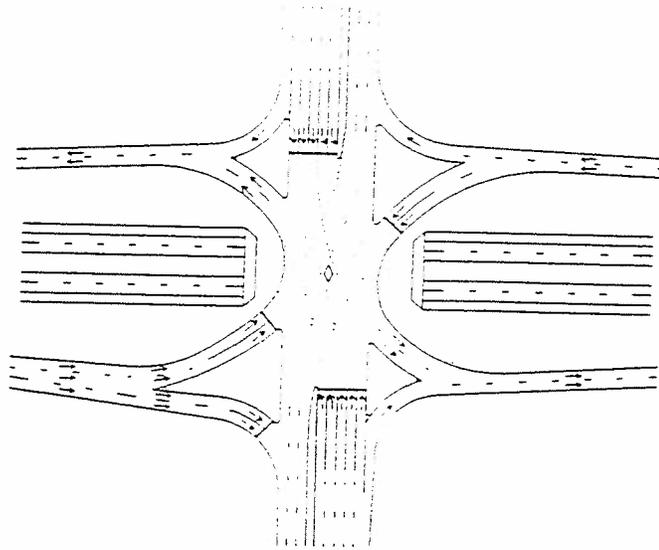
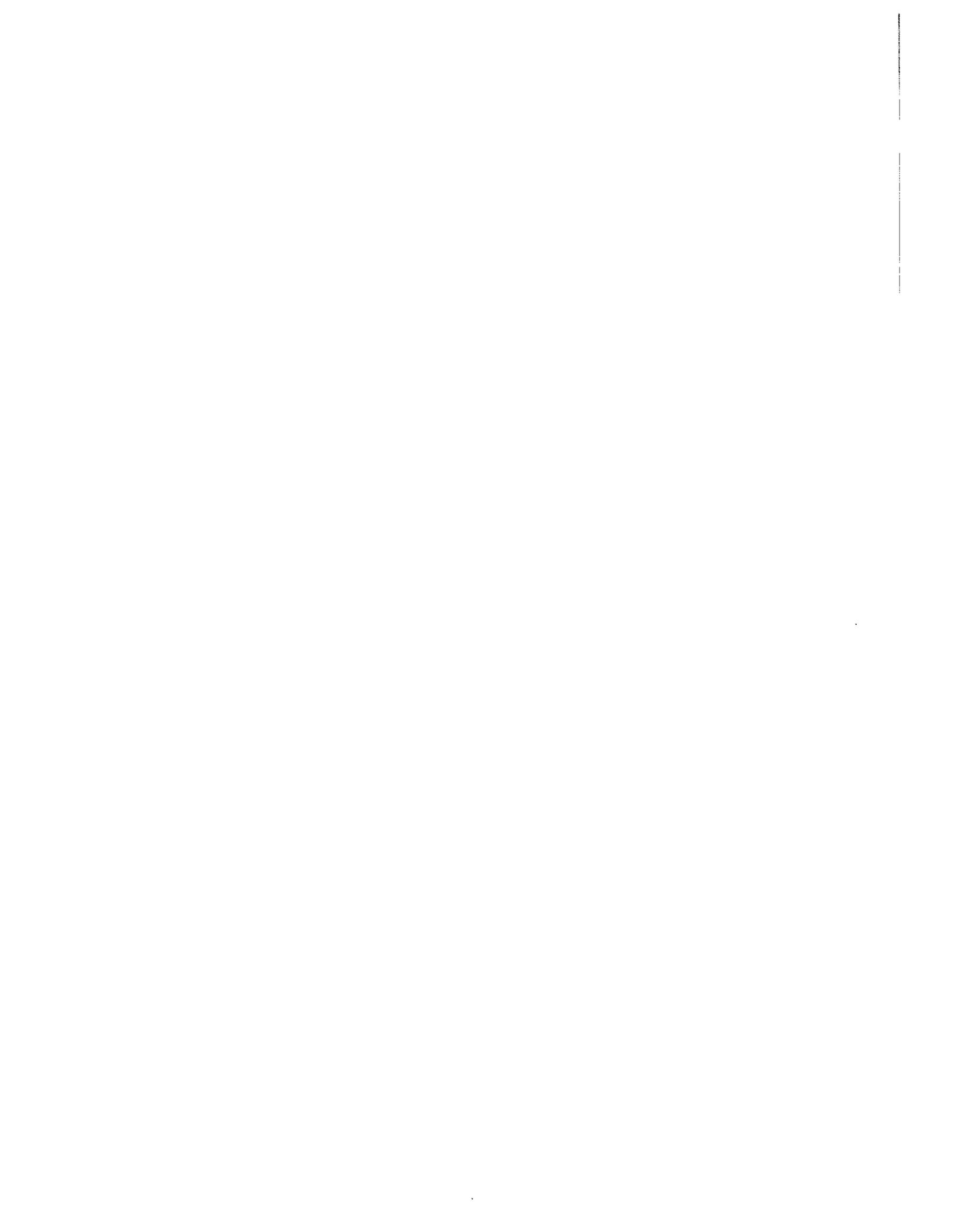


Figure 1. Overpass single-point urban interchange.

Clearwater, Florida, February 25, 1974. This interchange was designed by Greiner Engineering of Tampa, Florida. Greiner also proposed the added use of airport runway lights embedded in the pavement to clearly delineate the left-turn paths of vehicles at the Clearwater site. Greiner called this SPUI interchange an "Urban Interchange" (2, 4).

The term "urban interchange" is used by many engineers to describe the SPUI. This is mainly because of the national effort by Greiner to inform engineers about the features of the urban interchange. Other terms for the SPUI are used by state agencies, such as a "single-signal diamond," a "single-point diamond," and an "urban traffic interchange." Greiner gave a pioneering presentation on the features of their "urban interchange" to a Florida highway design conference held in Gainesville, Florida, on March 11, 1970. They also gave a similar presentation to a regional meeting of the AASHTO Committee on Highway Design held later that year in Houston, Texas, on November 11, 1970.

Attending the AASHTO design conference was the Illinois DOT district engineer from Dixon, Illinois, responsible for construction plans being prepared for the SPUI to be built in Moline,



November 19, 1997

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To Whom It May Concern:

I have represented the property at 3881 Scenic Court, El Dorado Hills, California, since August 1, 1997. In that time we had one accepted offer that was agreeable to all parties. The buyer was informed that there were proposed changes to the El Dorado Hills Boulevard-Highway 50 interchange being discussed. The buyer was given several names and phone numbers to call and get further information regarding this issue and its possible impact on the home he was interested in purchasing. Though no one could give him a definitive answer, he decided that the prospect of an unknown traffic problem affecting the home down the road was enough to make him decide not to purchase the home.

Other agents with buyers have also brought up this issue as a problem severe enough to not pursue an offer even though this is one of only three condos in El Dorado Hills offered for sale at this time.

In my professional opinion (based on 16 years experience in Real Estate), the interchange proposals are indeed affecting my sellers' ability to sell their property at fair market value in a timely manner.



Erin Ulrici-Ross
Lyon & Associates
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2220 Douglas Blvd., Suite #150
Roseville, CA 95661
(916) 784-1500
Fax (916) 784-1578

ROBERTSON OFFICE
2201 J Street
Roseville, CA 95616
(916) 447-7878
Fax (916) 447-4051

AMERICAN RIVER OFFICE
11220 Gold River Ct., Ste. 100
Gold River, CA 95620
(916) 853-7700
(916) 982-0819
Fax (916) 982-7744

INSURANCE DIVISION
2518 American River Dr., Suite 200
Sacramento, CA 95833
(916) 974-7880
Fax (916) 974-8129

DAVIS OFFICE
401 2nd Street
Davis, CA 95618
(916) 758-0700
Fax (916) 752-5764

EL SACRAMENTO OFFICE
4402B Rouse Blvd.
El Sacramento, CA 95818
(916) 753-8881

TAMICE-HUNTERWOOD
5820 Hunt Club Blvd
Hunterswood, CA 95718
(916) 321-7389

AUBURN OFFICE
1915 Grass Valley Highway
Suite 100
Auburn, CA 95603
(916) 888-1828
Fax (916) 828-7608

ELK GROVE OFFICE
9370 W. Greystone Blvd., Ste. 100
Elk Grove, CA 95758-4012
(916) 683-8800
Fax (916) 683-8544

F. DORADO HILLS OFFICE
Village Center
679 Empressway Dr. Suite 4
El Dorado Hills, CA 95762
(916) 988-8900
Fax (916) 988-1333

REAR'S CORNER
38 W Park Ct., Suite 10
El Dorado Hills, CA 95762
(916) 828-8301
Fax (916) 828-8306

November 12, 1997

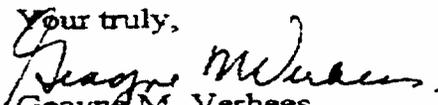
To Whom It May Concern

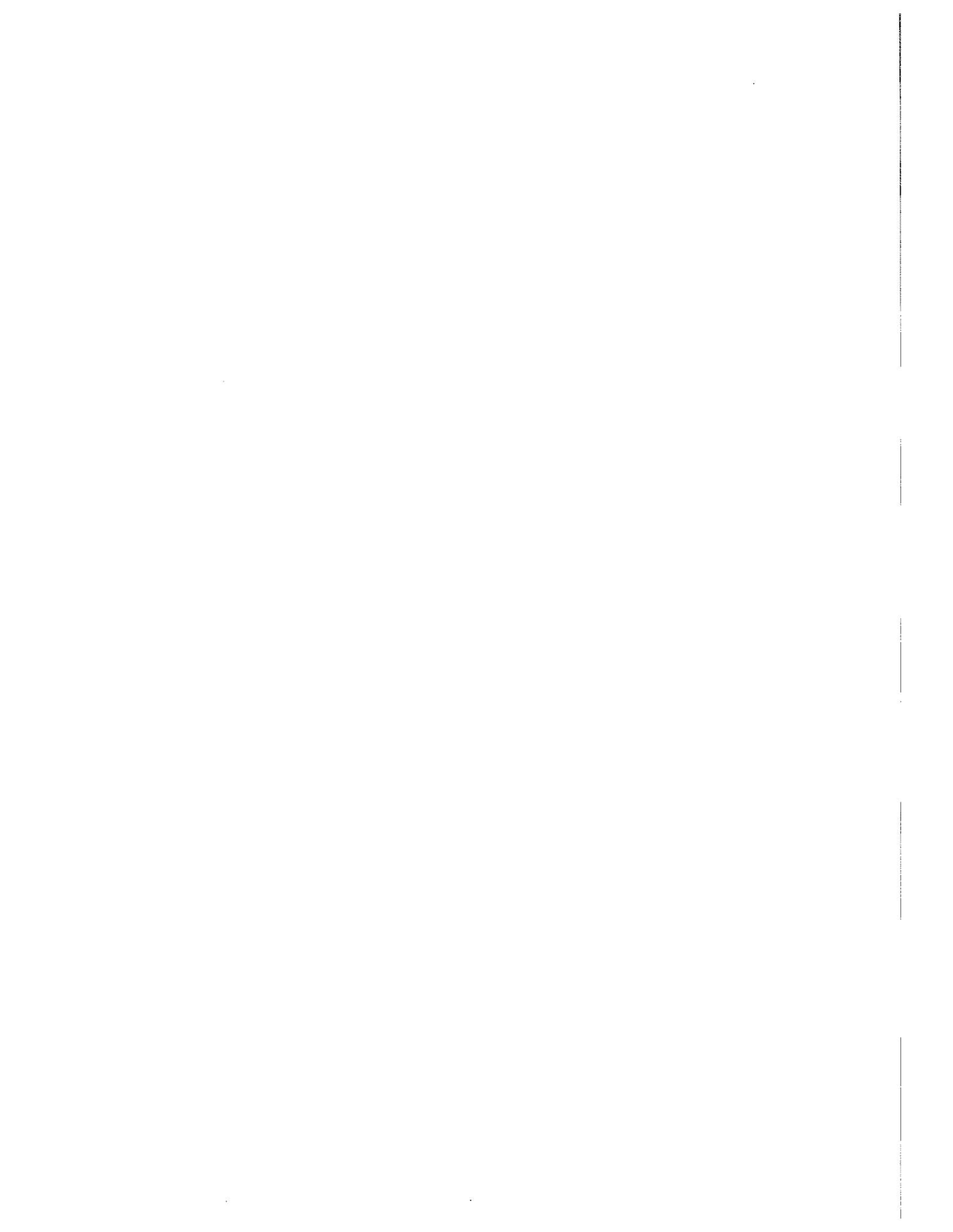
Re: 3884 Scenic Court
El Dorado Hills, CA 95762

On September 27, 1997 I represented a buyer in writing an offer for the above property. It was disclosed that there was a proposal for a new interchange at Highway 50 and El Dorado Hills Boulevard that could have an impact on the subject property.

Before signing a generous counteroffer from the sellers, the buyer took almost two weeks to research what he felt would be the impact of a new interchange on the value of his future investment. I know that he talked with the President of the EDH Townhouse Assoc., an engineer for the Department of Transportation, a local developer and an El Dorado Hills property investor that he knew.

The buyer said that his decision not to buy the townhouse was based on the information he gathered regarding the potential negative affect of the proposed interchange.

Your truly,

Geayne M. Verhees
Sales Associate



JUL 27 '98 11:46 FROM:

T-974 P 02/02 F-052



July 27, 1998

El Dorado County Board of Supervisors
Department of Transportation

Attn: Kris Payne

Dear Mr. Payne;

I am the current listing agent for a property located at 3881 Scenic Ct., El Dorado Hills. I have had this property listed since February 23, 1998. It has continually been advertised and is the best value and the lowest priced home on the market in El Dorado Hills. I have received several calls on my advertising and the property has been shown repeatedly.

The strongest negative, and why the property has not sold as of this date is the fact that all potential buyers are concerned about the impact that the Saratoga road realignment will have on the subject property.

In my opinion this is a major problem in selling this listing and will definitely affect the market value of the entire subdivision.

If you have any questions, please don't hesitate to call me.

Sincerely,

A handwritten signature in cursive script that reads "Debi Ambroff". The signature is written in dark ink and is positioned above the typed name.

Debi Ambroff
Coker & Cook Real Estate
El Dorado Hills, CA

MAKE THE RIGHT MOVE™

2221 Francisco Drive
El Dorado Hills, CA 95762
916-933-1400 930-677-7800
Fax: 916-933-2156
www.cokercook.com
email: cecon2@cokercook.com

3907 Arrowhead Drive
El Dorado Hills, CA 95762
August 14, 1998

Kris Payne,
Department of Transportation
County of El Dorado

Dear Mr. Payne;

Please include this letter in the responses to the Environmental Impact Report scope document for the proposed Eldorado Hills/Highway 50 Interchange project.

The scope of the Environmental Impact Report should include the categories of Population and Housing.

1. As described in the County of El Dorado description, the Population section of an EIR addresses the question "Will the proposal alter the location, distribution, density, or growth rate of a human population of an area?". Other draft EIR's (Valley View) specify the US Highway 50 Interchange project as a measure necessary to mitigate significant impacts resulting from proposed housing and commercial projects. Improving the transportation infrastructure is a key requirement for future development and specific projects such as Valley View and, as such, directly impacts growth rate and distribution of human populations. The County of El Dorado has incorrectly estimated the significance of the impact on Housing as No Impact (page 10, item 11).

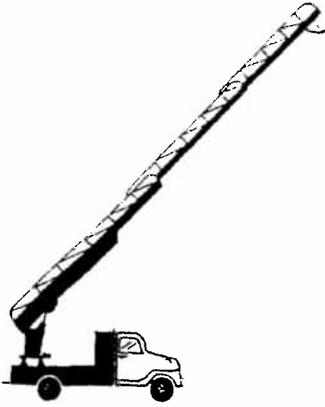
2. The Housing section of the EIR considers the question "Will the proposal affect existing housing or create a demand for additional housing?" The significance of this impact has also been estimated as No Impact. (Page 10, item 12) . This is incorrect for the same reason as item 11, other housing projects cite this project as a necessary mitigation measure and can't go forward without it. Improving the transportation infrastructure is likely to concentrate demand for housing in an area that is already overburdened with the effects of development and will enable future growth at the expense of existing communities.

One cannot create traffic pollution and noise in one area and dump it in adjacent neighborhoods. California law precludes this practice. This project is a mitigation measure for other projects that enables future growth at the expense of existing communities.

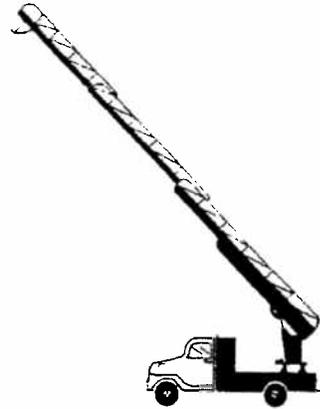
In addition: Other environmental professionals have identified significant individual and cumulative impacts upon air quality and traffic (Valley-View EIR) while the county has provided estimates that are lower in severity and may be under-stated. I hope that the proposed EIR will be thorough and comprehensive in its investigation of these effects as well as those already described.

Sincerely,

Andrew Dunham



MILLS ELECTRIC, INC.
SIGN REPAIR & MAINTENANCE
P.O. BOX 5455
EL DORADO HILLS, CA 95762
SACRAMENTO (916) 933-0961
PLACERVILLE (530) 642-1433
FAX (916) 933-0996
CA LIC # 664187



DATE: August 13, 1998

TO: El Dorado County Office of Transportation

FROM: Scott E. Mills
Owner
3901 Hills Ct.
El Dorado Hills, CA 95762

RE: Notice of Preparation of an Environmental Impact Report (NOP) - Highway 50 / El Dorado Hills Blvd. Interchange.

Dear Sirs,

I attended the NOP meeting on July 15, 1998. Kris Payne informed me that he would send a copy of the blueprints for the proposed realignment configurations for Saratoga Way (due to the fact that the realignment of Saratoga Way would be right behind my home). I still have not received these copies to this date (I need the blueprints to see what additional impacts this will have on my home).

Several El Dorado Hills Townhouse Association residences never received notification of the public scoping meeting held on July 15, 1998. Here are some of the impacts I have found without the proposed realignment of Saratoga Way.

1. Impact Focus #2c, dismisses the impact of air movement and climate even though in #2a the quality of air is listed as possibly changed significantly if not mitigated.
2. Impact Focus #7, suggests that the introduction of increased lighting for the area is less than significant. There is no consideration for the type and density of lighting fixtures that will be introducing considerably larger amounts of light and the 5:30 rush hour traffic.
3. Impact Focus #8, states that there will be less than significant change in the use of the land. I cannot see how having vastly increased traffic in itself will not change the land use since the land now serves as a buffer area for community activities in which children are significantly involved. Changing a relatively quiet residential street to a main thoroughfare with as much as triple the traffic will severely limit the possible uses of the surrounding land.
4. Impact Focus #10 and #17, ignore the risk of asbestos release during earth movement activities in known local serpentine outcroppings as well as the release of MTBEs to the air, soil and ground water from vehicle emissions when they state that no health hazard will be created.
5. Impact Focus #11 and #12, consider that traffic increase in the area is less than significant although it will alter the mixture type of development in this area from residential to commercial, causing homes to sit vacant and become urban blight.
6. Impact Focus #13, dismisses the effect of traffic hazards even though the ability of residents to cross El Dorado Hills Blvd. will be severely limited with major changes to the traffic patterns and volume to traffic as proposed causing the surrounding communities to be isolated from one another. No pedestrian bridges or other pedestrian supplementation fixtures have been suggested.

7. Impact Focus #14 and #19, indicate that schools and parks within 1/2 a mile of the project will not be impacted in their ability to provide governmental services or recreation. Just the ability to get to these facilities will be greatly altered and their ability to function according to their purpose will be diminished by increased traffic and possible traffic hazards.
8. Impact Focus #21d addressed the cumulative effects of the project with a conclusion that little or no effect will occur. Given the impacts suggested above it is not reasonable to expect that this is a correct conclusion. The entire area will lose its character and ability to sustain the current residential standard of living with loss of populous and physical blight directing attributable to the massive increase and redirection of traffic and its resultant effects.

In addition to these direct observations, I am also asking the Project Consultant and Supervising Engineer to include in the EIR scope how adjacent developments such as The Promontory will direct into this project the release of substantial traffic onto Saratoga Way through the proposed Russell Ranch Rd. thereby creating new egress routes from El Dorado Hill to Folsom. There is no discussion for impact abatement on the El Dorado Hills Blvd./Hwy 50 Interchange Project by the expansion and extension of Town Center Blvd. in lieu of the proposed changes to Saratoga Way. None of these projects are unto themselves and need to be integrated not isolated.

Gary and Loretta Richards
970 Kings Canyon Drive
El Dorado Hills, CA 95762
(916) 933 3189
13 August 1998

El Dorado County
Department of Transportation
Attention: Chris Payne
2850 Fairlane Court
Placerville, CA 95667

1. Reference your memorandum "Notice of Preparation of an Environmental Impact Report", announcing the preparation of an Environmental Impact Report for the U.S. Highway 50/El Dorado Hills Boulevard - Latrobe Road Interchange Project.

2. The following comments are provided to be included in the CEQA process.

a. Saratoga Road is to remain a two lane street as stipulated by the Supervisors of El Dorado County.

b. Saratoga Road is to remain as far south as possible from the single family residence that it currently borders.

c. Construction activity must be mitigated by:

(1) Spraying water frequently to prevent as much dust as possible.

(2) Frequent monitoring to insure there is no fryable absestos fibers in the air.

(3) Weekly cleaning of the residence bordering the construction to mitigate against dust (to include absestos) particles that are a hazard for those with breathing problems.

d. Construction of a sound barrier consisting of a earthern berm and concrete block wall. The exact height of the barrier is to be determined by sound studies.

e. Landscape the sound barrier on both sides.

f. Install double pane windows in the homes adjacent to Saratoga.

g. Compensate the property owners for any loss of property value because of the project.

3. Additionally, this project has been listed as a mitigating factor in a number of previous CEQA documentations for projects. These projects have a cumulative impact and must be considered together. Consequently, this or a separate master environmental impact report to discuss the consequences of (1) this project, (2) Carson Creek, (3) Springfield Ranch, (4) Valley View, (5) West Valley Village, (6) East Ridge Village, (7) Marble Valley East, (8) Marble Mountain, (9) Serrano/El Dorado, (10) Prommentory, (11) Town Centre, and further expansion of El Dorado Hills Business Park. Of specific concerns are:

a. Previously either negative declarations or project environmental impact reports have been accomplished or are planned individually for the projects listed in 3, above. A common error made in California Environmental Quality Act compliance is the piecemealing and improper definition of the project. You have failed to foresee future components and allowed each project to be looked at individually. Consequently, your attempt to comply with CEQA is legally inadequate. To resolve this error a master Environmental Impact Report for all the projects is required.

b. There will be significant impact caused in the following environmental issue areas by this project and the multitude of other projects.

(1) Land Use. Building the massive amount of homes will change the area from rural to suburban. No generally accepted mitigation measures such as set-backs, buffer zones, or residential relocations have been specified.

(2) Visual Quality and Aesthetics. The current rolling hills populated by horses and other animals will be lost. This public viewshed sets the tone for the rest of El Dorado County and should be preserved.

(3) Traffic and Transportation. The increase in traffic will degrade air quality, increase noise levels and increase congestion. No adequate design measures to separate pedestrian, bicycle and vehicular traffic to avoid safety conflicts have been incorporated. It is likely that the projects will concentrate vehicle related emissions in a localized area which could cause a violation of air quality standards. The volume of traffic will create a public nuisance condition. The totality of the projects will cause a tremendous increase in ambient noise and vibration levels which will be perceptible to humans living in the vicinity of the road networks. Construction of the project will also cause a further temporary increase in ambient noise and vibration levels. The mitigation measures required to lessen the impacts must be accomplished the cost is irrelevant.

(4) Utilities and Infrastructure. The water supply is inadequate for the amount of residents that will live in the impacted area. Has El Dorado Irrigation District determined that they have sufficient water supply treatment facilities to meet the requirement? Currently wastewater and sewer systems are not large enough to handle the volume of discharge that will occur. What is the plan to comply with wastewater pretreatment standards?

(5) Public Services. El Dorado County does not have sufficient law enforcement personnel (sheriffs) to maintain acceptable service levels. The response times will become unacceptable. The volume of the planned developments will require additional staff and equipment to maintain acceptable levels of service for the volunteer fire department(s).

4. When the Environmental Impact Report has been prepared and public comments are appropriate please notify us. We desire to review the document and comment on it's contents.


Loretta R. Richards

Sincerely,


Gary D. Richards

DATE: August 10, 1998

TO: El Dorado County Office of Transportation

FROM: Liz Davis
Owner, 3916 Hills Ct.
El Dorado Hills, CA 95762

RE: Notice of Preparation of an Environmental Impact Report (NOP) – Highway 50 / El Dorado Hills Blvd. Interchange

Dear Sirs,

My letter intends to address issues excluded from the scope of the draft EIR as outlined in the NOP, July 15th, 1998.

My first issue is the notification of impacted residents. Although Kris Payne stated that he had requested addresses from the County for all those residences within 1000 ft of the project, many of the owners of homes in the immediate area, even those in the El Dorado Hills Townhouses, never received notification of the public scoping meeting held July 15th, 1998. The attendance, therefore, was not representative of the community interest. My suggestion is that a revised notification list is drawn up and the time limit for response to the scope and content of the EIR is extended past the August 14th, 1998 date. Alternatively, if the date cannot be change, then the scope should be able to be amended at a later date if germane comments are received after August 14th.

Secondly, I do not feel that the impact of many issues was adequately considered. As example, please review:

- 1) Impact Focus #2c, dismisses the impact of air movement and climate even though in #2a the quality of air is listed as possibly changed significantly if not mitigated.
- 2) Impact Focus #7, suggests that the introduction of increased lighting for the area is less than significant. There is no consideration for the type and density of lighting fixtures that will be introducing considerably larger amounts of light.
- 3) Impact Focus #8, states that there will be less than significant change in the use of the land. I cannot see how having vastly increased traffic in itself will not change the land use since the land now serves as a buffer area for community activities in which children are significantly involved. Changing a relatively quiet residential street to a main thoroughfare with as much as triple the traffic will severely limit the possible uses of the surrounding land.
- 4) Impact Focus #10 and #17, ignore the risk of asbestos release during earth movement activities in known local serpentine outcroppings as well as the release of MTBEs to the air, soil and ground water from vehicle emissions when they state that no health hazard will be created.
- 5) Impact Focus #11 and #12, consider that traffic increase in the area is less than significant although it will alter the mixture type of development in this area from residential to commercial, causing homes to sit vacant and become urban blight.
- 6) Impact Focus #13 dismisses the effect of traffic hazards even though the ability of residents to cross El Dorado Hills Blvd. will be severely limited with major changes to the traffic patterns and volume of traffic as proposed causing the surrounding communities to be isolated from one another. No pedestrian bridges or other pedestrian supplementation fixtures have been suggested.
- 7) Impact Focus #14 and #19 indicate that schools and parks within ½ a mile of the project will not be impacted in their ability to provide governmental services or recreation. Just the ability to get to these facilities will be greatly altered and their ability to function according to their purpose will be diminished by increased traffic and possible traffic hazards.
- 8) Impact Focus #21d addresses the cumulative effects of the project with a conclusion that little or no affect will occur. Given the impacts suggested above it is not reasonable to

expect that this is a correct conclusion. The entire area will lose its character and ability to sustain the current residential standard of living with loss of populous and physical blight directing attributable to the massive increase and redirection of traffic and its resultant effects.

In addition to these direct observations, I am also asking the Project Consultant and Supervising Engineer to include in the EIR scope how adjacent developments such as The Promontory will direct into this project the release of substantial traffic onto Saratoga through the proposed Russell Ranch Rd. thereby creating new egress routes from El Dorado Hills to Folsom. There is no discussion for impact abatement on the El Dorado Hills Blvd/Hwy 50 Interchange Project by the expansion and extension of Town Center Blvd. in lieu of the proposed changes to Saratoga. None of these projects are unto themselves and need to be integrated not isolated.



El Dorado Irrigation District

In Reply Refer To: E0898-308

August 11, 1998

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

Subject: Notice of Preparation of EIR for
Reconstruction of the El Dorado Hills Blvd.
Latorobe Road Interchange on Hwy. 50
EID File No. 201-1403.26

Dear Mr. Payne:

Thank you for the opportunity to review the above notice and environmental checklist.

We have no environmental comment on these documents at this time. With regard to this project, water and sewer infrastructure exist in the project area. Our agency must be involved in the planning. Please initiate a coordination meeting by contacting Brian Cooper, of this office, at your earliest convenience.

Sincerely,

A handwritten signature in cursive script that reads "Lewis W. Archuletta".

Lewis W. Archuletta
Support Services Planner

LA:mg

c: Brian Cooper, Support Services Engineer
Robbie Creamer, Drafting Supervisor

ENVIRONMENTAL MANAGEMENT DEPARTMENT

ENVIRONMENTAL HEALTH DIVISION

AIR POLLUTION CONTROL DISTRICT

SOLID WASTE & HAZARDOUS MATERIALS DIVISION

COUNTY OF
L DORADO



MAIN OFFICE
2850 Fairlane Court
Placerville, CA 95667
(530) 621-5300

SOUTH LAKE TAHOE OFFICE
3368 Lake Tahoe Blvd. #303
South Lake Tahoe, CA 96150
(530) 573-3450

August 13, 1998

Mr. Kris Payne, Supervising Civil Engineer
Department of Transportation
2850 Fairlane Court
Placerville, CA 95667

SUBJECT: Project Application: NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT FOR U.S. HIGHWAY 50/ EL DORADO HILLS BOULEVARD - LATROBE INTERCHANGE PROJECT dated July 2, 1998

Dear Mr. Payne:

The El Dorado County Air Pollution Control District (District) has been asked to express comments which identify our concerns regarding the proposed project: **NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT FOR U.S. HIGHWAY 50/ EL DORADO HILLS BOULEVARD - LATROBE INTERCHANGE PROJECT** dated July 2, 1998. The project involves reconstructing the El Dorado Hills Boulevard-Latrobe Road interchange on Highway 50, improving the vertical and horizontal alignment of the interchange on- and off-ramps, widening El Dorado Hills Boulevard-Latrobe Road underneath the existing under crossing structure from 4 to 6 lanes to provide dual left-turn lanes at the eastbound and westbound on-ramp intersections, and realigning Saratoga Way to intersect with Park Drive to address the existing spacing problem between the westbound on-ramp and the Saratoga Way/El Dorado Hills Boulevard intersection. The project location is at U.S. Highway 50/El dorado Hills Boulevard - Latrobe road interchange is on U.S. Highway 50 in western El dorado county, approximately 1.6 kilometers (about one mile) east of Sacramento county line between Folsom and Placerville.

El Dorado County violates the state and federal ambient air quality standard for the criteria pollutant ozone at the Western Slope area of the county. As of June 1, 1995, El Dorado County nonattainment area classification status for ozone has been reclassified from a "serious" to a "severe" ozone nonattainment area (40 CFR [Code of Federal Regulations] Part 81 CFR Update Service). Monitoring data from the California Air Resources Board have indicated the town of "Cool" to have the highest ozone concentration in the Sacramento Metro area. The county violates state ambient air quality standard for the criteria pollutant fine particulate matter (PM10) at both the Western Slope and South Lake Tahoe area of El Dorado County. The California Clean Air Act of 1988 requires the state's air pollution control program meet the state's ambient air quality standards. The efforts of the District are focused primarily on attainment of state and federal ambient air quality standards for criteria air pollutants.

The District has completed it's review of the **NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT FOR U.S. HIGHWAY 50/ EL DORADO HILLS BOULEVARD - LATROBE INTERCHANGE PROJECT**. The District provided a list of issues and concerns in a previous letter dated December 31, 1996 and should be considered in the preparation of the environmental impact report. Implementation of the proposed project may significantly impact the District's ability to meet and maintain State and Federal ambient air quality standards.

Mr. Payne
EDC DOT
August 13, 1998
Page two

The District would like additional information to determine that the application is complete. The mitigating effects of the project will not be realized without detailed guidelines and standards to protect and enhance air quality. Therefore, the project must include the additional information in order for an environmental impact report to accurately identify and quantify the significance of the project's impacts:

1. If federal monies are involved, the project operator must comply with any applicable requirements of District Rule 503 Transportation Conformity.
2. The project construction may involve the application of architectural coating which shall adhere to District Rule 215 Architectural Coatings.
3. It is the District's goal to strive to achieve and maintain ambient air quality standards established by the U.S. Environmental Protection Agency and the California Air Resources Board and to minimize public exposure to toxic or hazardous air pollutants and air pollutants that create unpleasant odors. The following are measures used to reduce construction-related impacts on air quality:
 - o Use low-emission on-site mobile construction equipment.
 - o Maintain equipment in tune per manufacturer's specifications.
 - o Retard diesel engine injection timing by two to four degrees.
 - o Use reformulated, low-emission diesel fuel.
 - o Use catalytic converters on gasoline-powered equipment.
 - o Substitute electric and gasoline-powered equipment for diesel-powered equipment where feasible.
 - o Do not leave inactive construction equipment idling for prolonged periods (i.e., more than two minutes).
 - o Schedule construction activities and material hauls that affect traffic flow to off-peak hours.
 - o Configure construction parking to minimize traffic interference.
 - o Develop a construction traffic management plan that includes, but is not limited to: Providing temporary traffic control during all phases of construction activities to improve traffic flow; Rerouting construction trucks off congested streets; and provide dedicated turn lanes for movement of construction trucks and equipment on- and off-site.
 - o Re-establish ground cover on construction sites through seeding and watering for dust control.

Mr. Payne
EDC DOT
August 13, 1998
Page three

The above District rules are found in the El Dorado County Air Pollution Control District Rules and Regulations. A copy of District rules and regulations can be ordered by contacting this office. If you have any questions regarding these comments, please call our office at (530) 621-6662.

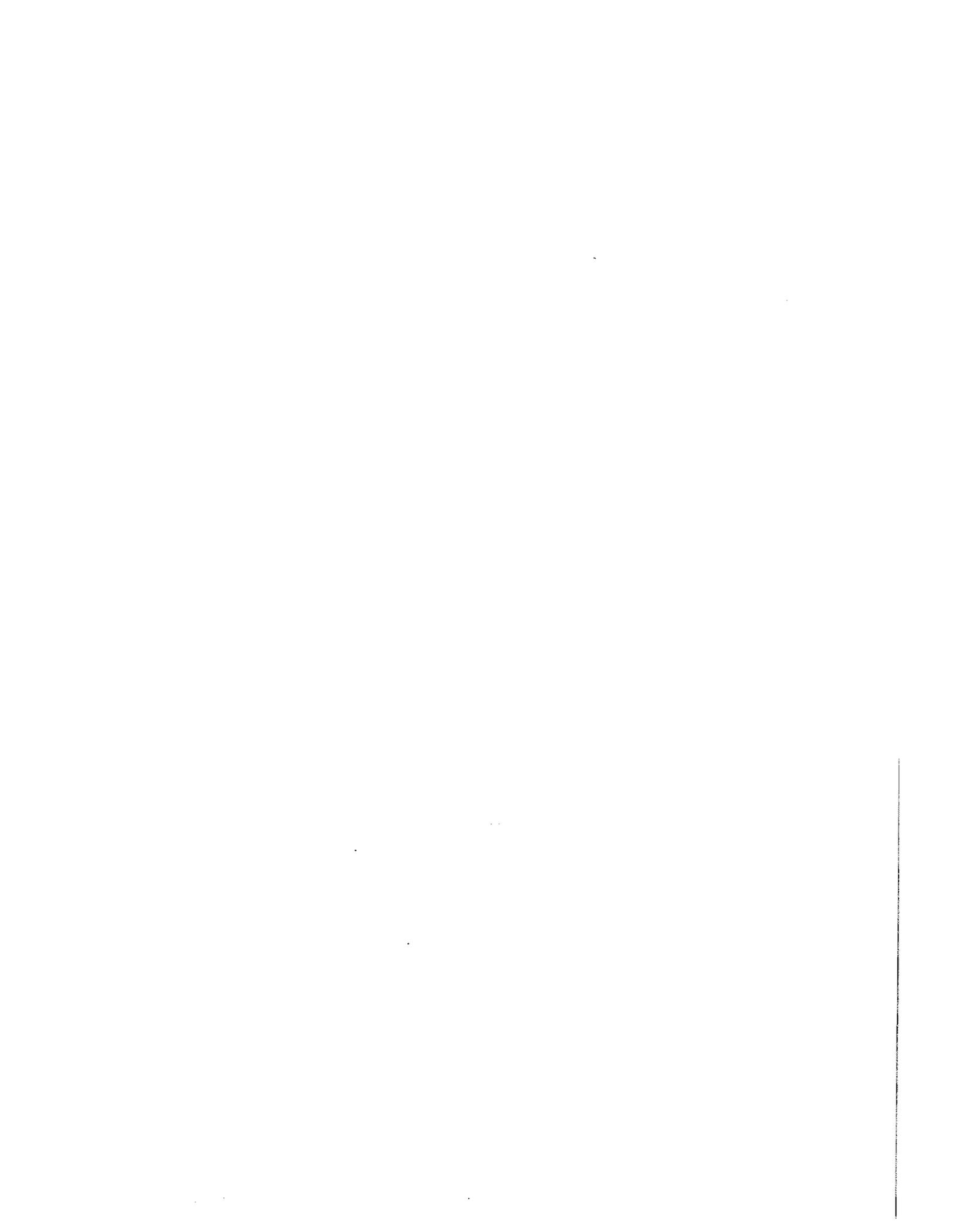
Respectfully,

Dennis Otani, Program Manager
Air Pollution Control District



Michael O. Donnelly, Senior Air Quality Specialist; REHS #5501
Air Pollution Control District
MD:md

hwy50latrobe898



August 12, 1998

Mr. Payne,

I am submitting several documents for the EIR regarding the US 50 Interchange and El Dorado Hills Blvd.

Thank you in advance for your assistance.

Douglas Dickinson *Dick*
703 Platt Circle
El Dorado Hills, CA 95762

March 3, 1997

Chairman Walter L. Shultz and Supervisors
El Dorado County Board of Supervisors
330 Fair Lane
Placerville, CA 95667

Issue: U.S. Highway 50/El Dorado Hills Boulevard - Latrobe Road Interchange

Thank you in advance for reviewing my input on the above issue.

I live in the Crescent Ridge subdivision, at 703 Platt Circle. I am approximately 2 football fields away from the East bound US 50. Between my home and US 50 is undeveloped property and Saratoga Way. At this moment I am sitting and viewing (and these ain't cheap seats), without any obstruction, the traffic activity East and West bound traffic on US 50.

I purchased my home in late December 1996. I was not informed on any major changes (interchange) taking place. Yet, I was informed by my realtor (because I asked) that the property to the South of my home was zoned for commercial use and that there was a possibility that Saratoga Way would be expanded. No other details were provide to me.

One of my major concerns with this issue is the widening of Saratoga Way into a four lane road. This would widen and relocate Saratoga Way closer to the my property. This relocation would bring in closer the already existing issues of noise and exhaust pollution generated by vehicles, resulting in a deterioration in the quality of life. Additionally, this could result in a decrease in property value. I am not in favor of this.

Another concern is the proposed mitigation of noise with a wall (Initial Study, U.S. Highway 50/El Dorado Hills Boulevard - Latrobe Road Interchange Project by Michael Brandman Associates, May 7 1996, page 3-12 and 3-13). Not only is a wall confining to those that were not previously exposed to it, but it is esthetically unpleasant and it will undoubtedly lead to random tagging. The random tagging of the wall will require continuous monitoring and maintenance. Tagging, if not removed promptly, will not only invite additional tagging but will result in a visual welcome which I do not think our community would find acceptable. I don't think we want this type of billboard! Additionally, there is a cost to maintaining the wall as it gets tagged. I am not in favor of this.

Another concern I have is the additional vehicular traffic which the proposed Westside Commercial Center would bring onto Saragota Way and other community roadways.

I estimate from the tentative parcel map 107-041-09 (tract 9 rs 16-147) approx. 178 vehicle spaces are being projected for the Westside Commercial Center. This commercial complex will increase the amount of traffic, noise and pollution to the local area and its residents. Have any of the reports by county staff consultants taken this under consideration? If so, is the data available for review? During peak times the Saratoga Way/Park Drive/El Dorado Hills Blvd. is bound to lead to safety issues and congestion. I am not in favor of this.

page 2

If Alternative 3 - Modified L-8 is accepted, how effectively will vehicular traffic from Westside Commercial Center, Park Oaks Village, Mammoth Way, Arrowhead Drive, Saratoga Way be dumped onto Park Drive/El Dorado Hills Boulevard be managed? It seems that the Saratoga Way relocation would relocate a " future problem " from its' current location (Saratoga Way to El Dorado Hills Blvd.) to a real problem at the Park Drive/El Dorado Hills Blvd. intersection. I am not in favor of this.

I will present additional issues in bullet point form so as not to make the reading so laboring.

- **Issue Notification:**

I did not learn of this important local issue until a local activist came to my door.

- **Recommendation:**

Notify affected (possibly 500 yard radius) individuals (residents and businesses) by mail, continue to notify via local publications and post at local shops (supermarket, post office, video store, etc.).

- **New resident Notification:**

Having come from out of the area, I did not learn of this important local issue until a local activist came to my door.

- **Recommendation:**

Inform all potential residents through their realtor the plans for their general area.

- **Noise level during construction:**

I feel that should construction occur (I continue to oppose it) that the hours of construction activities should be limited to 8am - 4pm, Monday through Friday, and no construction performed on Saturday, Sunday or federal holidays.

In summation: I would like to request this to be a **NO PROJECT!**

Thank you for hearing me out. If you have any questions please contact me:

Douglas Dickinson
703 Platt Circle
El Dorado Hills, CA 95762
916-933-3781

cc: Irene Itamura, District Director, Department of Transportation
Michael Forgn, Chief, Special Funded Projects
Jodi Lonergan, Regional Environmental Planning Chief

March 16, 1997

Chairman Walter L. Shultz and Supervisors
El Dorado County Board of Supervisors
330 Fair Lane
Placerville, CA 95667

Issue: U.S. Highway 50/El Dorado Hills Boulevard - Latrobe Road Interchange

It is Sunday morning and I am viewing the activity on the U.S. Highway 50 and the traffic is sparse. The noise level is apparent yet tolerable. Suddenly, a large truck or a chopper (motorcycle) passes by and the tolerance becomes shock, you suddenly become aware... an it is only Sunday morning... what happens when Monday, Tuesday, etc... come around? These increasing sudden changes will undoubtedly affect our quality of life in El Dorado Hills.

Those of us that currently live in the surrounding area have felt they were buying into something that was what it seemed to be... We do not want to subject ourselves to any additional adverse disturbances such as noise, air or esthetic pollution.

Last night I was sitting at the traffic signal at Saratoga Way (Raley's side) waiting for it to change so I could cross El Dorado Hills Boulevard to West Saratoga Way. There were no other vehicles waiting at the surrounding traffic signals as I observed the arrow on El Dorado Hills to Saratoga Way West change to green, to allow whom to proceed??

Why does the current traffic management system control vehicles to stop at traffic signals when there are no other vehicles awaiting traffic signal changes?

Gentlemen, my point is, can we not make this traffic sector (now and for the future) more intelligent? With an advanced traffic management systems you should be capable of moving traffic intelligently and without tremendous cost and without causing resident agony. I believe that with the amount of money it would take to construct loops, overpasses, move asphalt and the inevitable cost of labor, a semi sophisticated form of traffic management system could effectively move the future traffic demands more fluidly at a tremendous cost savings. A cost savings not only in expenses but more so in the decreased agony to the local residents affected by this proposed project. I believe that some sort of sensory system located in the pavement of all roadways extending back several hundred feet from the traffic signal controlled by a computer system could efficiently regulate the flow of traffic. The computer would sense were the traffic was in real time and allocate traffic passage according.

As I mentioned in my last letter to the board (March 3, 1997) a noise wall will provide minimal protection to the lower level of our home and nothing for the upper level. Yet, this mitigation wall will indeed provide a canvas for taggers. If you want to see an example of this, check out the wall on U.S. 50 West of the Church of the Foothills in Cameron Park. Tagging is sporadic and constant maintenance is essential.

I continue to appeal for this propose project to be classified as: **NO PROJECT!!**

If you have any questions please contact me:

Douglas Dickinson
703 Platt Circle
El Dorado Hills, CA 95762
916-933-3781

cc: Irene Itamura, District Director, Department of Transportation
Michael Forga, Chief, Special Funded Projects
Jodi Lonergan, Regional Environmental Planning Chief

August 16, 1997

Subj: El Dorado Hills Blvd/US 50 Interchange

Supervisor Sam Bradley,

I just received your notice of August 11, 1997 regarding the DOT needing further direction from the Board of Supervisors on the above issue. I am concerned that with such constituent interest that this issue has taken, it doesn't seem to be very fair to those constituents that this meeting be taking place at 10am. As you well know a great many interested individuals typically work at that time of day. Attendance by the constituents will be lower than if it were held in the evening. Does the Board of Supervisors find this strategy in the best interest of their constituents? Why is this issue not being taken up at a 7pm meeting time? Wouldn't 7pm be more appropriate for the constituents especially on this particular issue?

A thought on the closing off of Saratoga Way and realigning it further North across from Park Drive: The vehicles exiting Saratoga from Raley's, Shell, Taco Bell, etc. will continue to require traffic signal control, therefore, continuing to cause vehicular queuing on El Dorado Hills Blvd. moving both North and South. Queuing will continue to occur as vehicles coming from Saratoga Way (Raley's, Taco Bell, etc.) merge onto the El Dorado Hills Blvd. heading onto the US 50 West. As the area South of the US 50 (Latrobe Road) continues to expand and populate there will be more vehicles moving through the interchange corridor causing queuing. This is not being addressed. All this presents some real safety concerns.

To think that the realignment of Saratoga Way and the introduction of a loop will resolve the perceived traffic issues over the next 20 years is someone's fantasy.

Leave it be as it is

If a project Environmental Impact Report (EIR) is approved, I would like to request that all correspondence regarding this El Dorado Hills Blvd/US 50 Interchange issue be presented to the the responsible group.

Douglas Dickinson
703 Platt Circle
El Dorado Hills, CA 95762

Pacific Gas and Electric Company
Building and Land Services

343 Sacramento Street
Auburn, CA 95603

August 10, 1998

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



Re: N.O.P. of E.I.R. FOR U.S. HIGHWAY 50/EL DORADO HILLS
BOULEVARD - LATROBE ROAD INTERCHANGE PROJECT.

Attn: Kris Payne

Gentlemen:

Thank you for the opportunity to respond to the request for the above named project.

PG&E has no objection to this proposed N.O.P. of E.I.R..

If you have any questions, please contact me at (530) 889-3163

Sincerely,

A handwritten signature in cursive script that reads 'Frank L. Forgey'. The signature is written in black ink and is positioned above the printed name.

Frank L. Forgey
Land Agent

August 11, 1998

TO WHOM IT MAY CONCERN:

We are residents with our back fence line facing Hwy. 50 in Crescent Village. We have a few concerns about the proposed widening of Saratoga.

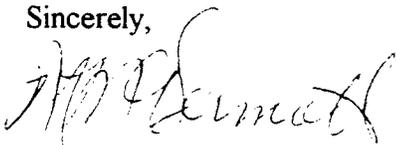
First, the noise level is already so unbearable that we cannot open our windows on that side of the house already. Will this only increase the problem? Will my windows be retro-fitted?

Second, will the lots zoned for commercial right behind our home become home to a convenience store/gas station because it is the first possible place to put one entering El Dorado Hills from Folsom? This newly created venue for thousands of cars will certainly increase that likelihood.

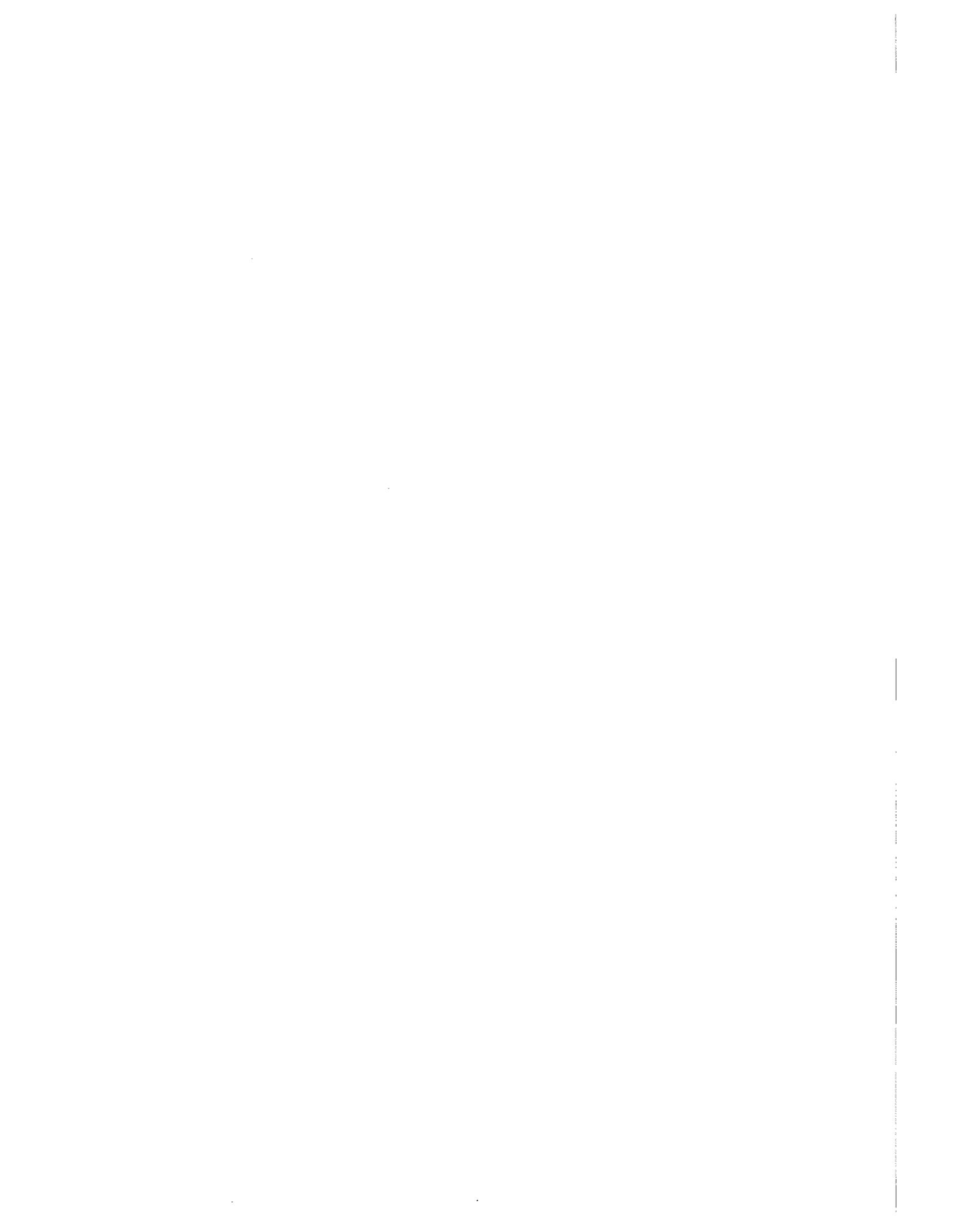
Third, if the Hwy. 50 on-ramp proposed at Silva Valley Parkway were built first, would there even be a need for a clover-leaf interchange at El Dorado Hills Blvd. and Hwy. 50? More than half of El Dorado Hills residents would be closer to that interchange!

We certainly hope that El Dorado Hills is too precious to even spoil one acre with poor planning.

Sincerely,



Reed and Mechell McDermott
365 Platt Circle
El Dorado Hills, Ca 95762
933-6001



8/7/98

County of El Dorado
Dept. of Transportation
2850 Fairlane Ct.
Placerville, Ca. 95667

Re Notice of preparation Environmental
Impact Report.

Enclosed is a letter I sent to Cal
Trans, in answer to their Initial Study /
Environmental Impact Report, US 50 to
Seneca Blvd Lane Project. Please apply it
as part of your scope for US 50 / El Dorado Hills
Blvd Lane Rd. Project.

Eleanor Miller
956 King Canyon
El Dorado Hills, Ca
95762

Attn: Jim Nett
California District 3

Initial Study / Environmental Assessment
for the proposed V-50 Service Blvd, to
El Dorado Hills Blvd lanes project.

The Dept EITC admits the noise on
King Canyon is way above the 60 dB
level in the El Dorado Hills general plan
you have not added the cumulative effect
of the widening of El Dorado Hills Blvd,
the new planned Highway 50 interchange
and a potential four lane highway in
back of King Canyon connecting into Tabernash.

The County of El Dorado has already
suggested compensation for the \$15000
we have already lost due to the
general plan proposed for Sacramento.
It seems by any logic if the air quality
and the sound are that significant of
a problem for King Canyon that the state
should get together with the county
to offer the residents of King Canyon a
buyout of the eight houses on King Canyon.

The original general plan stated that
the island in back of King Canyon would be
a green belt. No one thought here with
the idea they would have a four lane
highway and an interchange in their
backyard. We were not even informed.

When the area was rezoned commercial
Is the state going to work with the
County to solve the situation on King
Canyon as required by EITC? The noise
level from Tabernash entry said even a 20' barrier
would not bring it down to sound level.

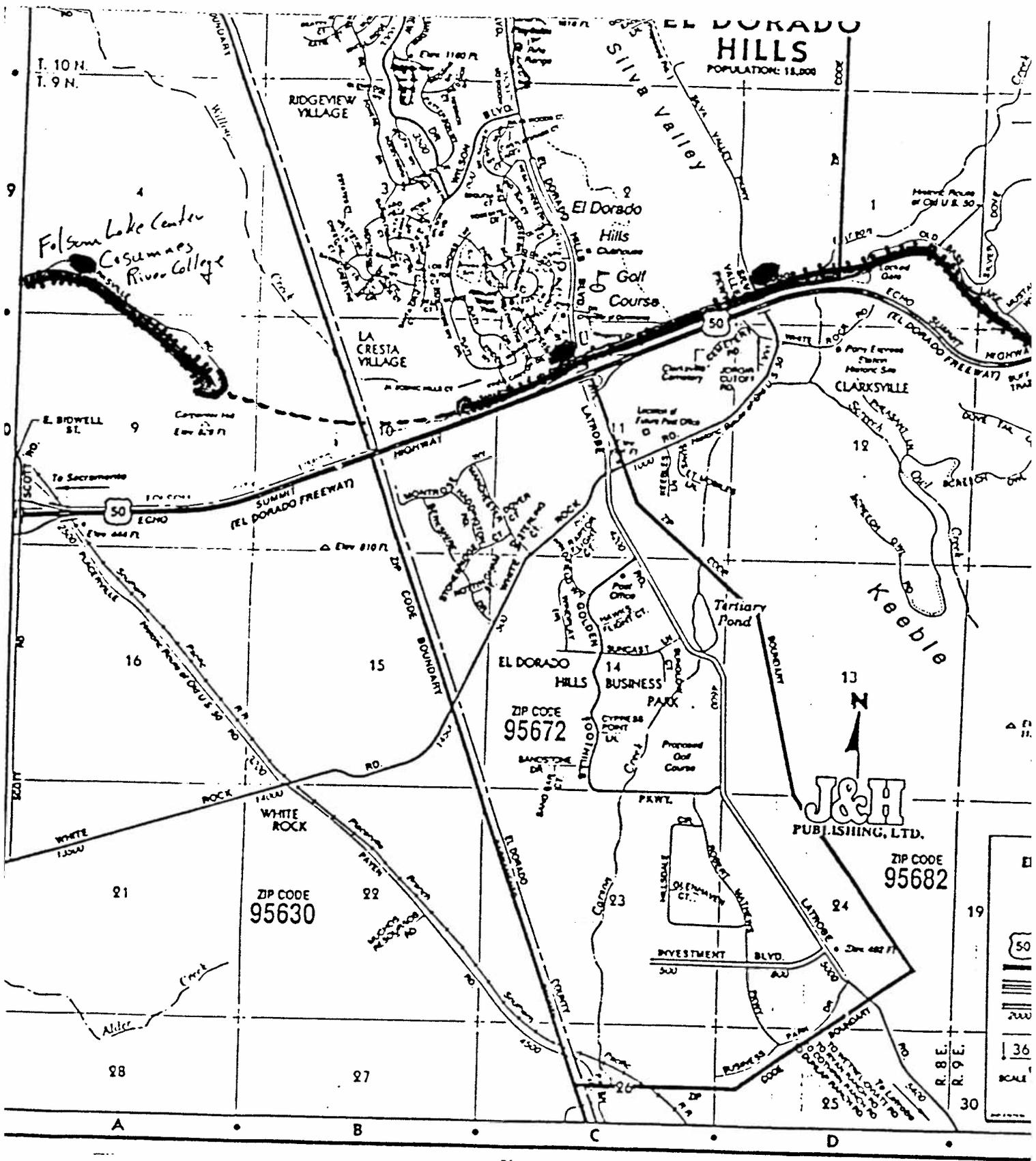
Our next door neighbor has already let his house go back to the bank, He could not sell his house for the balance due on his loan due to the decrease in value of his property.

If it is impossible to correct the ground levels for Kings Canyon residents shouldn't the county and state get together and purchase the homes on Kings Canyon.

Even with no project the noise is way over the limit and cannot be mitigated.

To cut air pollution and noise a viable alternative may be heavy rail as proposed by S.M.U.D. a map of route is enclosed.

Eleanor Miller



● Station Locations

▨ Double track electrified track route

--- tunnel route

25,000 volt AC of overhead caten

8/7/98

Board of Supervisors, El Dorado County
I am enclosing a letter I sent on the
Environmental Assessment for the proposed
V.S. 50 Sunrise Blvd to El Dorado Hills Blvd
Tape Project. You discussed compensation
for the residents effected by the interchange
Project. From the knowledge we now have
we believe you better contact the state
and arrange funding between the County and
state to buy us out or face a lawsuit
over the damage to the people and property
on King Canyon Dr. Between the freeway noise
and your proposed project our properties
will be virtually worthless.

Cleaver Miller

956 King Canyon Dr.

El Dorado Hills, Ca, 95762

8/7/98

County of El Dorado
Dept of Transportation
2850 Fairlane Ct.
Placerville, Ca. 95667

Re Notice of preparation Environmental
Impact Report.

Enclosed is a letter I sent to Cal.
Trans in answer to their Initial Study/
Environmental Impact Report, US 50 to
Service Blvd Lane Project, please app'it
as part of your scope for US 50 / El Dorado Hills
Blvd Future Rd. Project.

Elena Miller

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

Re: Notice of Preparation of an
Environmental Impact Report

Comments on the scope of the Environmental Impact Reprt for the
U.S. Highway 50/El Dorado Hills Blvd.-Latrobe Road
Project.

The California Environmental Quality Act imposes rules for
the conduct of all Environment Impact reports and, when
appropriate Negative Declarations. Pursuant to CEQA Article 1
Section 15000 "These Guidelines are binding on all public
agencies in California."

Yet, inspite of the stringent rules formulated to foster
confidence (see Art.1 Sec 15003 (d)) in an apprehensive
citizenry that the agency has, in fact, analyzed and
considered the ecological implications of it's action are
placing a spin on the environmental documents which avoids
the obligation to protect the environment as required by
CEQA.

A fine illustration of this phenomena is the previous
Negative Declaration which sought to avoid a finding
of significant impacts to air quality by not considering
in the study facts that would have made that finding
unavoidable.

We have received information which leads us to believe
this is also true of other Negative declaratios and
Environmental Impact Reports. And in at least one EIR
contractors employed to prepare these reports may have
been instructed to ignore the cumulative effects required
by CEQA Art.5 Sec. 15065 c.

In this case I suggest you lock your spin doctors in thier
kennels and do a comprehensive and complete EIR as is
mandated by CEQA. The California State Legislature has seen
fit not to appoint a State of Local Agency as a law enforcement
watch dog, and has instead left CEQA enforcement to the
victims. The victims at last have been aroused and are willing
to fulfill thier obligations to the limits of thier
resources and various abilities.

(2)

We do not agree that the scope of your initial Focus for the EIR is adequate. Nor with your assessments of the significance of various segments of your environmental Impacts. I can see the initial spin is not one of complete disclosure of significant environmental impacts. So! Let me discuss the issues in the cynical expectation that a reasonable man (or agency) may be persuaded by a reasonable argument.

Focus of the EIR:

We must respectfully disagree with counties decision to eliminate focusing on Population and housing.

The main purpose of the counties to improve the U.S. 50 El Dorado Hills Blvd. Interchange is to facilitate the orderly flow of traffic through the Interchange. This then is a growth enhancing project which would fall directly into CEQA Art. 9 sec. 15126 (C) (f).

CEQA requires the studying of Growth Inducing Impacts. Population and Housing certainly falls within this category.

Most certainly future growth in the area is dependant upon the improvements to the Interchange allowing an improved flow of traffic to negotiate the interchange in a safe, orderly and efficient time saving manner.

CEQA Art.5 sec. 15065 (c) requires the cumulative impacts be fully assessed and disclosed.

Cumulative Impacts would of course include but not necessarily be limited to NOISE, Air Quality and Traffic . It is our intent to include in the EIR the Growth Inducing potential of the interchange and it's cumulative effect upon the environment.

In addition you might want to consider the Cal-Trans HOV Lanes ending adjacent to the Interchange. It seems to us that when three lanes merge to two lanes you are creating a bottle neck severely affecting the flow of traffic onto or off of the freeway as well as on the freeway itself. But that would be included under traffic, wouldn't it.

Risk of Upset: this should be included in the EIR as there is a probability at some future date of heavy trucks transporting toxic materials to the industrial area south of the interchange dumping their loads on one of our loop off ramps. This would have a major impact on the environment and possibly the fire dept. should be consulted to see if plans have been made to contain such an environmental disaster or if trucks can negotiate the loop or other off ramps at a reasonable speed. This scenario should be explored prior to such a happening not after.

II. Environmental Impacts

2. Air. Will the proposal result in:
 - a. Substantial air emissions or deterioration of ambient air quality?
Here you have marked "Potentiall Significant unless mitigation incorporated.

Question? If the air quality coming into El Dorado County is classified Severe non-compliance with State and Federal guidelines for air quality. And SMAQMD states that air quality coming from the Bay Area Sacramento and all points in between, piles up when it reaches the foothills at Folsom and spreads into El Dorado Hills Folsom lake and Auburn. And El Dorado County encourages development of housing and industry in the El Dorado Hills. As well as improvement to the interchange to bring more pollution producing vehicles into the area at any given moment. What mitigations do you employ to reduce air quality to a less than significant level?

Answer! You put a spin on it. You use this art of Semantics elevated to the 10th degree and state "even though the air quality still don't meet State and Federal Guide lines and we have added tons of pollution to it with our residential and industrial development in the area the mitigation for this poor air quality is the U.S. 50/El Dorado Hills Blvd. Interchange.

It is true however that the Freeway interchange has mitigated only a tiny bit of the air quality and there still remains the biggest part of the pollution we have in fact mitigated it to a Significant Unavoidable level from a potentiall significant unless mitigation incorporated.." And you must never admit that you have the potential to mitigate the problem even further or that YOU ARE REQUIRED TO MEET State and Federal Guide lines for air Quality by the year 2005 but are in fact adding pollution to the area hand over fist.

(3a)

2. Air cont.

A review of EIR's submitted for projects in the El Dorado Hills area are flawed to the extent of being irrelevant to the projects being modeled.

The topography of the land from west of Bass lake Road to the El Dorado County Line with Sacramento County shows that the land slopes toward the proposed interchange from the north, the east and from the west forming a bowl open only on the south.

Into this bowl the polluted air from the west, generated from as far away as the San Francisco Bay area and points in between pour into the Folsom area and this bowl.

The data used in the EIR's has traditionally been collected from Placerville, Folsom, Citrus Heights and other points further west in Sacramento County.

Placerville monitoring station is some 19 miles east of the project site and several hundred feet in elevation higher than the project site and could conceivably show irrelevant data to the El Dorado Hills Interchange area. nor the magnitude of degradation to the air quality imposed on the project area.

The Placerville monitoring station does not monitor Nitrogen Dioxide which could be a huge factor in the project bowl.

The Folsom monitoring station does not monitor Carbon Monoxide.

Consequently these figures have been BORROWED from other monitoring stations even more remote from the El Dorado Hills bowl. And to make things more confusing the Placerville monitoring station exceeded State and Federal levels for Particulate Matter (PM10) in both 1995 and 1996.

According to S.M.A.Q.M.D. air quality blowing east to west stacks up on the hills around Folsom and pours over into our bowl.

As monitoring air quality for this project in areas remote from the scene of the project are irrelevant to our unique problem. This DATA should be measure at the scene.

Again atmospheric conditions unique to El Dorado Hills compounds the problem.

10. Risk of upset.

This has been discussed before. We are not convinced that the Risk is less than significant. Toxic chemicals HAVE A GREAT POTENTIAL for destruction of property and loss of life at the interchange which is surrounded on three sides by hills and acts as a catch basin for gases.

6. Noise.

Noise is certainly one of the most important issues of concern for the residents of the northwest quadrant of the interchange. We would like to direct your attention to the El Dorado County General Plan, Volume I, Chapter 6, Table 6-1 on page 114. This is a table describing the Maximum Allowable Noise Exposure For Transportation Noise Sources.

For Residential Land use, Outdoor activity Areas the maximum allowable noise level is 60 Ldn/CNEL, dB.

Note 1, states (in part) In Communities and Rural Centers where the location of outdoor activity areas is not clearly defined, the exterior noise level standard shall be applied to the property line of the receiving land use. For residential uses with front yards facing the identified noise source, an exterior noise level criterion of 65 dB Ldn shall be applied at the building facade, in addition to a 60 dB Ldn criterion at the outdoor activity area.

The noise study done for Cal-Trans on the U.S. 50 HOV Lanes establishes the noise level for our back yard at 67 Ldb dB's. And this level does not include the cumulative effects of present or future projects in the area, nor does it include a study of homes across the street from our home on Kings Canyon Dr.

If the maximum allowable noise exposure for our home is 60 dB Ldn then theirs would be 65 dB Ldn. We are quite sure that the noise level at 958 Kings Canyon Dr. is at or near that level at the present time, and no consideration has been made for this phenomena.

Like wise, Having consulted experts in the field, we are advised that atmospheric conditions play a big roll in the volume levels of noise in this area.

We strongly urge El Dorado County Dept. of Trans. to include into the NOISE Study for the U.S. Highway 50/El Dorado Hills Blvd.-Latrobe Road EIR the following items;

1. Noise levels on the homes at the north side of Kings Canyon Drive.
2. Cumulative effects of noise generated by past, present and future projects as mandated by Art. 5 sec. 15065 (c) of the California Environmental Quality Act.
3. The effects of noise caused by various atmospheric conditions as they may occur in the affected area upon noise and the effect it may have on residents .

(5)

4.Noise levels of residences adjoining the U.S. 50/Saratoga Way Project. Bearing in mind the appropriate noise levels mandated by Table 6-1 of the general plan.

5.MITIGATIONS must really reduce the noise levels and not achieve short-term goals to the disadvantage of long term goals.

8. Land Use

Will the proposal result in a substantial alteration of the present or planned land use of an area?

Since the U.S. 50/ El Dorado Hills Blvd.-Latrobe Rd. Interchange is a growth Enhancing project and will no doubt facilitate uses not yet planned, we find that the project may have potentially significant effects upon the environment.

Potentially, the present and planned uses of the land affected by the construction of the Interchange could catch hold and sell rapidly (Developers have bet Millions on this) thus encouraging further developments within the Interchanges sphere of influence. In Which case the present Interchange configuration would be inadequate.

11.Population

Will the proposal alter the location, distribution, density or growth rate of a human population of an area?

Your finding is NO IMPACT? How So? The interchange is a growth inducing project. And in fact is considered a mitigation for several of the environmental prolems induced by these developments. Many Building Permits may depend on the construction of this interchange.

Fees have been paid or will be to assist in the construction which will facilitate present plans to alter the location, density or growth rate of the area affected by the interchange. The cumulative effects of an expanding population on the environment must be understood in order to inteligently plan an interchange which is adequate for the year 2020.

12. Housing

Will the proposal affect existing housing, or create a demand for additional housing?

The proposal will affect existing houseing in an environmentally negative way. (see above).

The proposal itself may contribute to the creation of growth rate of the human population in the area.
(see #11 above.)

13. Transportation/Circulation.

Will the proposal result in:

- a. Generation of substantial additional vehicle movement?

The U.S. 50/ El Dorado Hills Blvd. Interchange will facilitate additional vehicles on and near the Interchange and is INTENDED to enhance the movement of vehicles from and to the numerous present or future projects in the El Dorado Hills sphere of influence. As such it became growth inducing and will indirectly generate substantial additional vehicular movement.

- d. Alterations to present patterns of circulations or movement of people and or goods?

(see a above) The relocation on Saratoga Way to exit onto Park Way thence to El Dorado Hills Blvd. will alter significantly the present pattern of circulation or movement of people, as will the loop off ramp and west bound on ramp from El Dorado Hills Blvd. to and from U.S. 50. The west bound on ramp from El Dorado Hills Blvd. to U.S. 50 will move heavy trucks closer to residents in the northwest quadrant.

14. Human Health.

Will the proposal result in:

- a. Creation of any health hazard or potential health hazard (excluding mental health)? NO IMPACT?

- b. Exposure of people to potential health hazards?
POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATED?

Now you've put an interesting spin on this one!
If Adolph Hitlaer ordered the execution of 100 people in a gas chamber. And then at the last minute ordered that only enough gas would be used to kill 75, would he be a villian for having killed 75? or a hero for having saved 25?

Air Quality in the El Dorado Hills area is at SEVERE NON-ATTAINMENT of State and Federal Guidelines for Air Quality. El Dorado County Then approves the building of literally thousands of homes in the El Dorado Hills area. Which in turn brings in huge populations with thousands of motor vehicles. Homes and vehicles pouring out daily tons of polluted Air. Along comes Adolph declaring that he will improve the interchange and this will mitigate the poor air quality. Knowing full well that the interchange can only mitigate a tiny little bit of the degraded air quality. And that health threatening pollution will remain. Is Adolph a Hero for mitigating the tiny bit of air quality he can?

or a villain for allowing the additional pollution further degrade the air quality?

Did the proposal create any health hazard? Well! It creates additional lanes to allow more cars on the Interchange at any given moment! Does this create more pollution in the area which is potentially hazardous to people's health? As a growth inducing element to the cumulative picture Yes the proposal will result in the creation of a potential health hazard.

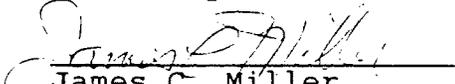
This project has the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals.

Under current traffic and population conditions the interchange may have a positive effect of improving the air quality somewhat. Under project traffic conditions for the year 2020 it is a booby trap.

21. Mandatory findings of significance.

The SPIN you have put on this section is absolutely amazing. How you can maintain, in the face of facts to the contrary that your responsibility begins and ends with the Interchange project only, and that air quality, traffic, noise etc. that you need be concerned with is that generated by the interchange only flabbergast's us. Please go back and read the California Environmental Quality Act. Pay special attention to Art 1 sec. 15000, and sec. 15003, and art. 5 sec. 15065 with special attention to subsection (c).

Sincerely


James C. Miller
956 Kings Canyon Dr.
El Dorado Hills, CA. 95762

916-933-2230

CITY OF FOLSOM

Parks & Recreation Department

50 Natoma Street

Folsom, California 95630

(916) 355-7285

Fax (916) 351-5931



July 16, 1998

Mr. Kris Payne
El Dorado County Department of Transportation
2850 Fairlane Court
Placerville, CA 95667

Dear Mr. Payne:

Wanted to thank you for the opportunity to comment on the Notice of Preparation for the U.S. Highway 50/El Dorado Hills Boulevard-Latrobe Road Interchange Project. The following is a list of comments.

Had a concern on how bicycle access will be accommodated in this project. The Environmental Impacts Checklist #13 Transportation/Circulation, Item f. says there is less than significant impact on bicycle circulation. The problem of providing safe bicycle access over and under freeway interchanges has become a major safety issue along the Highway 50 corridor. The City of Folsom is currently updating our Bikeway Master Plan and one of the high priority areas is bicycle access through Freeway interchanges.

Latrobe Road/El Dorado Hills Blvd. is a major bicycle route and opportunities for crossing Highway 50 are limited in this area.

For these reasons more emphasis should be given to providing safe bicycle circulation through this interchange.

Thank you again for the opportunity to comment and if you have any questions please contact me at 351-3516.

Sincerely,

A handwritten signature in black ink that reads "Jim Konopka".

Jim Konopka
Trail Development Coordinator

Aug. 6/98

Kris Payne
To: DOT, El Dorado County

RE: U.S. Highway 50/ El Dorado Hills Blvd
Latrobe Road Interchange project.

We are homeowners at 3911 Hills Court, which parallels Highway 50. We are absolutely opposed to your project plan for the following reasons:

≠ 7. Light and glare.

If you were to live in our townhouses as we did for one year, you would not call the light + glare "less than significant." Especially in our extreme Sun-filled Sacramento Valley environment the glare from the light glancing off of car windows + bodies is extremely significant. These townhouses have sliding glass doors + also fairly broad windows facing Highway 50. Here and

faster movement of cars will only exacerbate the existing glare.

#6. Noise

No matter how much lip service you at the DOT give to the efficiency of sound barriers, etc., we all know that a freeway going closer to your back doors + windows will not be daunted by a simple barrier. We bought our townhouse, in its convenient but tranquil environment, with the idea of retiring there later in life. Your freeway plan will change the tranquil environment into just another ugly + noisy highway environment.

#8. Land Use.

The proposal will certainly result

in a substantial alteration of the present land use. The proposal seems designed solely to accommodate the land developers of commercial & industrial sites. They & the travel on Hwy. 50 will be the only ones to benefit from your plan. Our question is = Why do the Bd. of Supervisors & the DOT seem to routinely lean toward helping developers make money, even when, in this case, the homeowners were there first? Between your two entities, you are bent on ruining the lovely rural atmosphere of EDI #12 Housing

This will certainly decrease the desirability of our townhouse

as a place to live. In fact, we believe that your proposal will make our townhouse almost unlivable.

#13. Transportation/Circulation

The circulation of cars will certainly be made more efficient however, must that be our most pressing goal of modern life? It is not as if the employed people will benefit from your plan. It will only benefit those who wish to profit from commerce + industry + somehow seem to be able to accomplish their goals to the disadvantage of those who live in the area. Why is it necessary to take that part of

EDIT + make it ugly + noisy,
just to accommodate outsiders
~~what we have~~ now accommodates workers
#17. Human Health

The effect of this freeway on
our townhouse will be similar to
a situation in Los Gatos, CA. After
a large freeway was built nearby,
the people in the house ^(known to us) had to
keep their doors + windows tightly
+ permanently closed on the street
side + could no longer sleep in
the two front bedrooms because
the air became a health hazard to
the owners. - On your project
plan you note that there would
be "no impact" on human health!
Amazing! How you at DOT never

heard of auto emissions + how
the state is constantly trying to
reduce them to avoid adverse
effects on human health! That
truly astounded us as we read
your report!

#18 Aesthetics

This is not worth writing about.
Does any Californian exist who
does not think a freeway is
aesthetically offensive — especially
right beside your back door! And
you call that "potentially significant
- amazing!"

#21 d. This would just be a
recap of what is already
noted in this letter. In

Conclusion, we would just
say that we know that you
at DOT are just a tool
in providing highways for us
all — but it would certainly
be helpful if you made even a
small attempt to think of us
homeowners + residents of EDH
not just the influential developer
Nowhere is it written that no stone
must be left unturned to turn
lovely + tranquil EDH into a place
made undesirable by poor choice
I'm sure the developers go home
at night to their lovely + tranqu

homes which haven't been blighted
by freeways which are not
needed.

Truda & Lee Nelson
3222 Kensington Dr.
El Dorado Hills, CA 95762

Clayton A. Littman
962 Kings Canyon Drive
El Dorado Hills, CA 95762

3 August 1998

Kris Payne, Supervising Civil Engineer
El Dorado County Dept. of Transportation
2850 Fairlane Court
Placerville, CA 95667

Reference: Notice of Preparation of EIR - U.S. 50/El Dorado Hills Blvd.

Dear Mr. Payne,

Thank you for the opportunity to comment on the notice of preparation of an Environmental Impact Report (EIR) for the U.S. Highway 50/El Dorado Hills Boulevard. Since I am a resident who will be directly impacted by the project, I have actively participated in the community outreach meetings on the proposal for the last year or so. However, because of schedule conflicts, I was unable to attend the public scoping meeting held on 15 July 1998.

I am not personally against the project. I am an educated person with a B.S. in Engineering and an M.S. in Project and Systems Management. I understand the need for the project and I am anxious for it to be completed. However, it is very important to me that adequate mitigating measures are taken to negate the potential impacts caused by the project.

My home is the second house on the left when turning onto Kings Canyon Drive from Arrowhead. I have lived at this location for ten years and traffic (and associated noise) has greatly increased on U.S. 50 and Saratoga Way since that time. When I purchased my home, I anticipated that U.S. 50 would probably be widened to accommodate traffic as it increased. My thought at the time was that the noise from the increased traffic would probably be mitigated when the commercial property behind my home was developed and a sound proof wall was

installed to separate the residential area from the commercial area. However, as you are aware, the property has never been developed. I did not anticipate that the U.S. 50 interchange would be significantly changed/enlarged and that Saratoga Way would be widened and moved much closer to my house. Because of this, I have several concerns that I would like to have addressed in the EIR.

I have listed my concerns and proposed mitigating measures below.

- **Noise** - Even now, at times, the combined noise from the current traffic on U.S. 50 and Saratoga Way is too loud for me to be able to have my windows open or sit and enjoy my back deck. My concern is that relocation of the Westbound off ramp to the North West corner of the interchange, and the relocation of Saratoga Way closer of my home will greatly increase the traffic noise that I currently experience.

Mitigations - Construct a landscaped berm/masonry wall of between 12 to 14 feet high behind the single family homes on Kings Canyon Drive that will cause noise levels at project completion to be significantly less than current values. In addition, windows in the single family homes should be replaced with double or triple pain windows

- **Light pollution** - The relocation of the westbound off ramp to the North West corner of the interchange will cause an increase in glare and light pollution from cars and street lights in the North West quadrant at night. Also, since the new configuration will be a loop type off ramp, headlights will probably shine at the homes as cars round the curve to the signal light. In fact, if traffic on the off ramp were to back up for any reason, some homes may have headlights aimed directly at them for some time.

Mitigation - Construct a landscaped berm/masonry wall of between 12 to 14 feet high behind the single family homes on Kings Canyon Drive that will help to reduce the effects of light pollution at night.

- **Construction Damage** - The soil conditions in the subject area, as well as, the existing home sites are very rocky. Since rock transmits vibration forces very efficiently, vibrations caused by heavy equipment or basting to remove large boulders may be carried to the nearby dwellings, potentially causing damage to the homes.

Mitigation - Restrict the use of explosives during the construction project. If construction damage effects can not be adequately mitigated, home owners should be compensated for any damage and inconvenience caused by the construction.

- **Aesthetic Effects** - Relocation of roads and traffic closer to the residents will cause undesirable visual effects. In addition, construction of a sound wall, if not constructed aesthetically, could have negative visual effects.

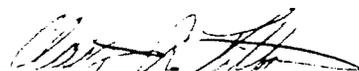
Mitigation - Construct a landscaped berm/masonry wall of between 12 to 14 feet high behind the single family homes on Kings Canyon Drive. A berm/wall landscape combination similar to that used on U.S. 50 just west of Hazel Ave. would have acceptable aesthetic value.

- **Property Devaluation** - I am concerned that my property value will be negatively effected by the construction which is scheduled to take place over a time period of several years, and the increased traffic noise after the project has been completed.

Mitigation - Construction of an aesthetically effective berm/wall landscape combination, before project construction begins, would look nice, reduce noise pollution, and physically separate the residents from the construction site. At project completion, it is possible that property values may even increase if traffic noise has been significantly mitigated even below current noise levels. However, if property values are negatively effected at project completion as compared to 1996 adjusted values (prior to public announcement of the project), the effected residents should be compensated for their losses.

Thank you for your time and consideration in evaluating my concerns and proposed mitigations for incorporation into the EIR. Working together, I am sure that we, the stakeholders, can make this project a win/win situation for all concerned.

Sincerely,


Clayton A. Littman

Ursula A. Smith
3789 Arrowhead Court
El Dorado Hills, CA 95762

July 27, 1998

Kris Payne, Supervising Civil Engineer
El Dorado County Department of Transportation
Placerville, CA 05667

Re: EIR for US 50/ED Hills Blvd. Interchange

Dear Sir,

Although my residence is not within the 500 feet (actually 1000 feet in this case) notification range, I have in the past attended meetings on the interchange because I expect to be affected by this project.

To wit: It will bring traffic and its accompanying noise and air pollution closer to my residence. Also, I expect more local traffic in my immediate neighborhood.

It seems to me that any suggestion for a more sensible solution to alleviate congestion has been disregarded by the planners in the past.

Sensible solution # 1: Start immediately on the extension of Silva Valley Road and build an interchange there - before that area is developed and built out. Thus Serrano-originating traffic could bypass EDH Boulevard, as well as traffic coming from numerous subdivisions north and south of Green Valley Road east of El Dorado Hills Boulevard.

Sensible Solution # 2: Widen White Rock Road to four lanes. That would divert the Business Park traffic. It is my understanding the Business Park is only about 20 percent built out. A four- or five-fold increase in truck traffic alone will be horrendous.

One more comment: You can build the most grandiose interchange (a la Prairie City?) but the morning commute traffic still would access just two westbound lanes of Highway 50, and believe me the westbound gridlock on many mornings starts well EAST of El Dorado Hills.

While the City of Sacramento is diverting traffic away from downtown residential areas, El Dorado County wants to do just the opposite -- bringing it closer, and in the process, condemning parts of Park Village to become the next Rancho Cordova. Those of us who are long-time residents aren't looking forward to that.

Sincerely,

Ursula A. Smith

INVESTORS CAPITAL

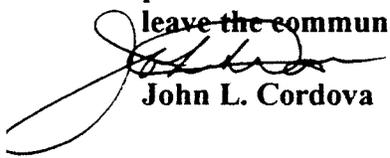
**895 Embarcadero Dr. Suite 204 El Dorado Hills, Ca. 95762
916-933-6854**

Dear Mr. Payne,

My name is John Cordova and I live at 2563 Pendleton Dr. El Dorado Hills. I am opposed to your new plan for the Highway 50 and Saratoga Way interchange. You have already devastated the area with the current construction of Greenvalley and Francisco Dr. You have not completed a realistic environmental impact on the use of the land being subdivided or the impact of the traffic on the environment. Allowing the interchange to be built will create a benefit for future development and a disadvantage to current homeowners. The area is already overbuilt and the current infrastructure cannot support what has been built. Providing an incentive for future development only increases the taxes for current residents and reduces the property values of existing homes. The only people to benefit from your new proposal are new developers.

Secondly and addressing my concerns with the effect on our immediate environment issue. You realize that rain water is not absorbed by asphalt. It runs off asphalt. The more asphalt you place down the more run off that never reaches our natural aquifer. The run off winds up in the lake with it's unfiltered residue and contributes to an already degrading lake. Not a nice picture.

Finally, the noise and carbon by products thrown off by cars exiting the interchange is a hazard to anyone living close. Who wants this community to become like Laguna and Elk Grove? Certainly not me. You should do your homework and provide the correct reports to the community before building more roads. Let's leave the community intact.


John L. Cordova



SERRANO

August 17, 1998

Kris Payne
Senior Engineer
El Dorado County
715-4650 Fairlane Court
Placerville, CA 95667

Re: Notice of Preparation, El Dorado Hills/Highway 50 Interchange

Dear Kris:

Thank you for the opportunity to suggest areas of inquiry for the EIR to be prepared for the El Dorado Hills Blvd interchange with Highway 50. The Serrano Partners would request the following:

1. An analysis of the placement of the road along the west side of APN 107-041-03 within the following parameters:
 - ▶ Back of curb a minimum of 17 feet from the west property line of APN 107-041-03.
 - ▶ Six foot sidewalk at back of curb with the remaining 11 feet improved as follows: 9.25 feet landscape area and 1.75 feet of wall footing area.
2. A map indicating noise contours in 2 decibel increments emanating from the proposed right of way for each alternative including #1 above.
3. An estimate of the annual sales tax revenue lost due to relocation of the Saratoga Road extension. (Due to reduced commercial square footage.
4. A cross section of the point at which El Dorado Hills Blvd, on ramp and Saratoga nearly touch.
5. An estimate of the additional road construction and right of way acquisition costs when compared to the base case of the original design as a two lane road.

Thanks for the opportunity to comment.

Sincerely,

Sam Miller
Director of Planning

SERRANO PARTNERS

4525 SERRANO PARKWAY EL DORADO HILLS, CALIFORNIA 95762-7510
916-939-4060 FAX 916-939-4116 e-mail: marketing@serranoeldorado.com



State of California

GOVERNOR'S OFFICE OF PLANNING AND RESEARCH

1400 TENTH STREET
SACRAMENTO 95814

PETE WILSON
GOVERNOR

PAUL F MINER
DIRECTOR

DATE: July 14, 1998
TO: Reviewing Agencies
RE: US 50/EL DORADO HILLS BLVD. - LATROBE ROAD INTERCHANGE
PROJ.
SCH# 98072050

Attached for your comment is the Notice of Preparation for the US 50/EL DORADO HILLS BLVD. - LATROBE ROAD INTERCHANGE PROJ. draft Environmental Impact Report (EIR).

Responsible agencies must transmit their concerns and comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of this notice. We encourage commenting agencies to respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

KRIS PAYNE
EL DORADO COUNTY, DEPARTMENT OF TRANSPORTATION
2850 FAIRLANE COURT
PLACERVILLE, CA 95667

with a copy to the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the review process, call Kristen Derscheid at (916) 445-0613.

Sincerely,

ANTERO A. RIVASPLATA
Chief, State Clearinghouse

Attachments

cc: Lead Agency

sent by agency
X = sent by SCH

Resource Agency

 **Nedell Gayou**
Resources Agency
1020 Ninth Street, Third Floor
Sacramento, CA 95814
916/327-1722 Fax 916/327-1648

 **Nicole Leiria**
Dept. of Boating & Waterways
1629 S Street
Sacramento, CA 95814
916/445-6281 916/327-7250

 **Elizabeth A. Fuchs**
California Coastal Commission
45 Fremont Street, Suite 1970
San Francisco, CA 94105-2219
415/904-5200 Fax 415/904-5400

 **Reed Holderman**
State Coastal Conservancy
1330 Broadway, Suite 1100
Oakland, CA 94612
510/286-1015 Fax 510/286-0470

 **Keren Yorell**
Dept. of Conservation
801 K Street, MS-24-02
Sacramento, CA 95814
916/445-8733 Fax 916/324-0948

 **Allen Robertson**
Dept. of Forestry & Fire Protection
1416 Ninth Street, Room 1516-24
Sacramento, CA 95814
916/657-0300 Fax 916/653-8957

 **Hans Krenzberg**
Office of Historic Preservation
P.O. Box 942896
Sacramento, CA 94296-0001
916/653-9107 Fax 916/653-9824

 **Environmental Review**
Dept. of Parks and Recreation
P.O. Box 942896
Sacramento, CA 94296-0001
916/653-0538

 **Environmental Review**
Reclamation Board
1416 Ninth Street, Room 1623
Sacramento, CA 95814
916/557-1531 Fax 916/527-1600

 **Steve McAdam**
S.F. Bay Conservation & Dev't Comm.
30 Van Ness Avenue, Room 2011
San Francisco, CA 94102
415/557-3686 Fax 415/557-3767

 **Nedell Gayou**
Department of Water Resources
1020 Ninth Street, Third Floor
Sacramento, CA 95814
916/327-1722 Fax 916/327-1648

Fish and Game - Regional Offices

 **Richard L. Elliott, Regional Manager**
Department of Fish and Game
601 Locust
Redding, CA 96001
916/225-2363 Fax 916/225-2381

 **Ryan Brodrick, Regional Manager**
Department of Fish & Game
1701 Nimbus Road, Suite A
Rancho Cordova, CA 95670
916/338-2900 Fax 916/558-2912

 **Brian Hunter, Regional Manager**
Department of Fish and Game
P.O. Box 47
Yountville, CA 94599
707/944-5518 Fax 707/944-5563

 **George Nokes, Regional Manager**
Department of Fish and Game
1234 East Shaw Avenue
Fresno, CA 93710
209/445-6152 Fax 209/445-6607

 **Environmental Services**
330 Golden Shore, Suite 50
Long Beach, CA 90802
310/590-5132 Fax 310/590-5192

Independent Commissions/Agencies

 **California Energy Commission**
1516 Ninth Street, MS-15
Sacramento, CA 95814
916/654-3944

 **Native American Heritage Comm.**
915 Capitol Mall, Room 364
Sacramento, CA 95814
916/653-4082 Fax 916/657-5190

 **Andrew Bunnisdale**
Public Utilities Commission
505 Van Ness Avenue
Sacramento, CA 95814
415/703-2011 Fax 415/703-1965

 **Betty Silvan**
State Lands Commission
100 Howe Avenue, Suite 100-S
Sacramento, CA 95826
916/574-1872 Fax 916/574-1885

 **Gerald R. Zimmerman**
Colorado River Board
770 Fairmont Avenue, Suite 100
Glendale, CA 91203-1035
818/543-4676 Fax 818/543-543-4685

 **Environmental Planning**
Department of Planning
P.O. Box 1038
Zephyr Cove, NV 89448
702/588-4347 Fax 702/588-4527

 **John Rowden, Manager**
Office of Emergency Services
11030 White Rock Road, Ste. 110
Rancho Cordova, CA 95670
916/464-1014

 **Debbie Eddy**
Delta Protection Commission
P.O. Box 530
Walnut Grove, CA 95690

Department of Transportation District Contacts

 **Linda Evans**
Caltrans, District 1
1656 Union Street
Eureka, CA 95501
707/445-6412 Fax 707/445-5869

 **Local Development Review**
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 **Robert Rubak**
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 **Ed Fenwick**
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 **Lee Salazar**
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 **Aileen Kennedy**
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Santa Ana, CA 92705
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 **Alice Humaker**
California Highway Patrol
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Planning and Analysis Division
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Sacramento, CA 95818
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 **Ron Helgeson**
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 **State and Consumer Services**

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 **California Environmental Protection Agency**

 **Mike Tollstrap**
Air Resources Board
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Sacramento, CA 95815
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 **Jeanie Blahoske**
Calif. Waste Management Board
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Sacramento, CA 95826
916/255-4164 Fax 916/255-4071

 **Wayne Hubbard**
State Water Resources Control Board
Division of Clean Water Programs
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Sacramento, CA 94244-2120
916/227-4408 Fax 916/227-4549

 **Phil Zentner**
State Water Resources Control Board
Division of Water Quality
P.O. Box 944213
Sacramento, CA 94244-2130
916/657-0912 Fax 916/657-2388

 **Mike Falkenstein**
State Water Resources Control Board
Division of Water Rights
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Sacramento, CA 95814
916/657-1377 Fax 916/657-1485

 **Dept. of Toxic Substances Control**
CEQA Tracking Center
400 P Street, Fourth Floor
P.O. Box 806
Sacramento, CA 95812-0806
916/324-3119 Fax 916/324-1788

Regional Water Quality Control Board

 **NORTH COAST REGION (1)**
5550 Skyline Blvd., Suite A
Santa Rosa, CA 95403
707/576-2220 Fax 707/523-0135

 **SAN FRANCISCO BAY REGION (2)**
2101 Webster, Suite 500
Oakland, CA 94612
510/286-1255 Fax 510/286-1380

 **CENTRAL COAST REGION (3)**
81 Higuera Street, Suite 200
San Luis Obispo, CA 93401-5427
805/549-3147 Fax 805/543-0397

 **LOS ANGELES REGION (4)**
101 Centre Plaza Drive
Monterey Park, CA 91754-2156
213/266-7556 Fax 213/266-7600

 **CENTRAL VALLEY REGION (5)**
3443 Router Road, Suite A
Sacramento, CA 95827-3098
916/255-3000 Fax 916/255-3015

 **Fresno Branch Office**
3614 East Ashland Avenue
Fresno, CA 93726
209/445-5116 Fax 209/445-5910

 **Redding Branch Office**
415 Knollcrest Drive
Redding, CA 96002
916/224-4845 Fax 916/224-4857

 **LAHONTAN REGION (6)**
2501 Lake Tahoe Boulevard
South Lake Tahoe, CA 96150
916/542-5400 Fax 916/544-2271

 **Victorville Branch Office**
15428 Civic Drive, Suite 100
Victorville, CA 92392-2359
619/241-6583 Fax 619/241-7308

 **COLORADO RIVER BASIN REGION (7)**
73720 Fred Waring Drive, #100
Palm Desert, CA 92260-2364
619/346-7491 Fax 619/341-6820

 **SANTA ANA REGION (8)**
3737 Main Street, Suite 500
Riverside, CA 92501-3339
714/782-4130 Fax 909/781-6288

 **SAN DIEGO REGION (9)**
9771 Clairemont Mesa Blvd., Suite B
San Diego, CA 92124-1331
619/467-2952 Fax 619/571-6972

 **OTHER:**

 **OTHER:**

Kris Payne
El Dorado County of Transportation
2850 Fairlane Court
Placerville CA 95667

8/6/98

Dear Mr. Payne

You may not remember me but I spoke with you a couple of times over the telephone last year about the Highway 50 / El Dorado Hills / Latrobe Road proposed interchange.

I encourage you to do an environmental impact report, and to include the impact of any and all traffic, at the proposed interchange site, during the evening hours as well as daytime hours.

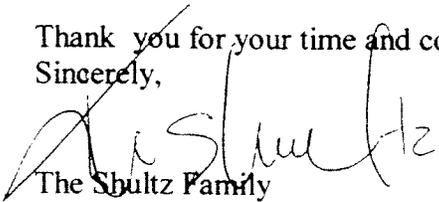
I am particularly concerned about the Saratoga / Park Drive realignment. Currently, there seems to be very minimal traffic on Arrowhead and I am strongly against any plan that would put more traffic on Arrowhead. Please consider whether motorists would use Arrowhead as some sort of short-cut, it is not a busy street now and I am alarmed by the fact that it could become one with the future plan.

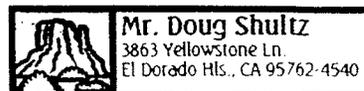
Our family lives in Park Village and all issues regarding the realignment concern us, including: noise, pollution, excess traffic and the change in landscape. I realize that the current owner of the vacant property on the corner of Saratoga and El Dorado Hills Blvd. has an interest in the project for you to consider, however for those of us homeowners who *actually reside* next to this intersection I encourage you to listen to their voices too. History has clearly shown that the DOT sometimes has to purchase land to "get the job done." Why can't the DOT purchase that parcel of vacant land in a good faith effort toward existing community concerns? One of which, I believe, is having the area jammed packed with a road, several buildings and a parking lot (which would very obviously impact nearby residents).

It seems as though your department is stuck between a rock and hard place. I know that you will make every effort to come to a compromise with area residents as you have assured me in the past. At this point in time, it seems there is no easy resolution, but I honestly believe there needs to be a VERY SERIOUS RE-EVALUATION of preserving the vacant lot for it's owner use... how does the saying go, "the needs of the many should out-weigh the needs of the few." Perhaps maybe some sort of deal could be struck with the owner of the lot? I'm sure area residents would be happy with anything that could be worked out as opposed to the "here it is, this is the way it is, no other option" type of mentality that some homeowners believe they are faced with now.

Buy that vacant lot, put the road realignment closer to the boulevard, plant some noise and pollution stopping trees - Redwoods perhaps??? (instead of an "ugly wall") and, think long and hard about the Park Drive access, Arrowhead short-cut situation that will get Park Village residents to and from the Raley's shopping center.

Thank you for your time and consideration,
Sincerely,


The Shultz Family



Appendix B. Noise Technical Information

B-1. Background Information on Environmental Acoustics

BACKGROUND INFORMATION ON ACOUSTICS

Sound Terminology

Sound travels through the air as waves of minute air pressure fluctuations caused by some type of vibration. In general, sound waves travel away from the sound source as an expanding spherical surface. The energy contained in a sound wave is consequently spread over an increasing area as it travels away from the source. This results in a decrease in loudness at greater distances from the sound source. The following terms are commonly used in acoustics.

Decibel

Sound-level meters measure the pressure fluctuations caused by sound waves. Because of the ability of the human ear to respond to a wide dynamic range of sound pressure fluctuations, loudness is measured in terms of decibels (dB) on a logarithmic scale. This results in a scale that measures pressure fluctuations in a convenient notation and corresponds to our auditory perception of increasing loudness.

A-Weighted Decibels

Most sounds consist of a broad range of sound frequencies. Because the human ear is not equally sensitive to all frequencies, several frequency-weighting schemes have been used to develop composite decibel scales that approximate the way the human ear responds to sound levels. The "A-weighted" decibel scale (dBA) is the most widely used for this purpose. Typical A-weighted sound levels for various types of sound sources are summarized in Figure F-1.

Equivalent Sound Level

Time-varying sound levels are often described in terms of an equivalent constant decibel level. Equivalent sound levels (L_{eq}) are used to develop single-value descriptions of average sound exposure over various periods of time. Such average sound exposure values often include additional weighting factors for annoyance potential attributable to time of day or other considerations. The L_{eq} data used for these average sound exposure descriptors are generally based on A-weighted sound-level measurements.

Day-Night Average Sound Level

Average sound exposure over a 24-hour period is often presented as a day-night average sound level (L_{dn}). L_{dn} values are calculated from hourly L_{eq} values, with the L_{eq} values for the nighttime period (10:00 p.m.-7:00 a.m.) increased by 10 dB to reflect the greater disturbance potential from nighttime noises.

Community Noise Equivalent Level

The community noise equivalent level (CNEL) is also used to characterize average sound levels over a 24-hour period, with weighting factors included for evening and nighttime sound levels. L_{eq} values for the evening period (7:00 p.m.-10:00 p.m.) are increased by 5 dB, while L_{eq} values for the nighttime period (10:00 p.m.-7:00 a.m.) are increased by 10 dB. For given set of sound measurements, the CNEL value will usually be about 1 dB higher than the L_{dn} value. In practice, CNEL and L_{dn} are often used interchangeably.

Percentile-Exceeded Sound Level

The sound level exceeded during a given percentage of a measurement period is the percentile-exceeded sound level (L_x). Examples include L_{10} , L_{50} , and L_{90} . L_{10} is the A-weighted sound level that is exceeded 10% of the measurement period, L_{50} is the level exceeded 50% of the period, and so on. L_{90} is often considered to represent the ambient sound level.

Ambient Sound

Ambient sound is the all-encompassing sound associated with a given community site, usually being a composite of sounds from many sources, near and far, with no particular sound being dominant.

Equivalencies between Various Sound Descriptors

The L_{dn} value at a site calculated from a set of measurements taken over a given 24-hour period will be slightly lower than the CNEL value calculated over the same period. Except in situations where unusually high evening sound levels occur, the CNEL value will be within 1.5 dB of the L_{dn} value for the same set of sound measurements.

The relationship between peak hourly L_{eq} values and associated L_{dn} values depends on the distribution of traffic over the entire day. There is no precise way to convert a peak hourly L_{eq} value to an L_{dn} value. However, in urban areas near heavy traffic, the peak hourly L_{eq} value is typically 2-4 dB lower than the daily L_{dn} value. In less heavily developed areas, the peak hourly L_{eq} is often equal to the daily L_{dn} value. For rural areas with little nighttime traffic, the peak hourly L_{eq} value will often be 3-4 dB greater than the daily L_{dn} value.

Working with Decibel Values

The nature of the decibel scale is such that the individual sound levels for different sound sources cannot be added directly to give the combined sound level of these sources. Two sound sources producing equal sound levels at a given location will produce a composite sound level

that is 3 dB greater than either sound alone. When two sound sources differ by 10 dB, the composite sound level will be only 0.4 dB greater than the louder source alone.

Most people have difficulty distinguishing the louder of two sound sources if they differ by less than 1.5-2.0 dB. Research into the human perception of changes in sound level indicates the following:

- a 3-dB change is just perceptible,
- a 5-dB change is clearly perceptible, and
- a 10-dB change is perceived as being twice or half as loud.

A doubling or halving of acoustic energy will change the resulting sound level by 3 dB, which corresponds to a change that is just perceptible. In practice, this means that a doubling of traffic volume on a roadway, doubling the number of people in a stadium, or doubling the number of wind turbines in a wind farm will, as a general rule, only result in a 3-dB, or just perceptible, increase in noise.

Outdoor Sound Propagation

There are a number of factors that affect how sound propagates outdoors. These factors, described by Miller (1982), are summarized below.

Distance Attenuation

As a general rule, sound from localized or point sound sources spreads out as it travels away from the source and the sound level drops at a rate of 6 dB per doubling of distance. If the sound source is long in one dimension, such as traffic on a highway or a long train, the sound source is considered to be a line source. As a general rule, the sound level from a line source will drop off at a rate of 3 dB per doubling of distance. If the intervening ground between the line source and the receptor is acoustically "soft" (e.g., ground vegetation, scattered trees, clumps of bushes), an attenuation rate of 4.5 dB per doubling of distance is generally used.

Attenuation from Barriers

Any solid structure such as a berm, wall, or building that blocks the line of sight between a source and receiver serves as a sound barrier and will result in additional sound attenuation. The amount of additional attenuation is a function of the difference between the length of the sound path over the barrier and the length of the direct line of sight path. Thus, the sound attenuation of a barrier between a source and a receiver that are very far apart will be much less than the attenuation that would result if either the source or the receiver is very close to the barrier.

Molecular Absorption

Air absorbs sound energy as a function of the temperature, humidity of the air, and frequency of the sound. Additional sound attenuation on the order of 1 to 2 dB per 1,000 feet can occur.

Anomalous Excess Attenuation

Large-scale effects of wind speed, wind direction, and thermal gradients in the air can cause large differences in sound transmission over large distances. These effects when combined result in anomalous excess attenuation, which can be applied to long-term sound-level estimates. Additional sound attenuation on the order of about 1 dB per 1,000 feet can occur.

Other Atmospheric Effects

Short-term atmospheric effects relating to wind and temperature gradients can cause bending of sound waves and can influence changes in sound levels at large distances. These effects can either increase or decrease sound levels depending on the orientation of the source and receptor and the nature of the wind and temperature gradient. Because these effects are normally short-term, it is generally not practical to include them in sound propagation calculations. Understanding these effects, however, can help explain variations that occur between calculated and measured sound levels.

Guidelines for Interpreting Sound Levels

Various federal, state, and local agencies have developed guidelines for evaluating land use compatibility under different sound-level ranges. The following is a summary of federal and state guidelines.

Federal Agency Guidelines

The federal Noise Control Act of 1972 (Public Law 92-574) established a requirement that all federal agencies administer their programs to promote an environment free of noise that jeopardizes public health or welfare. EPA was given the responsibility for:

- providing information to the public regarding identifiable effects of noise on public health or welfare,
- publishing information on the levels of environmental noise that will protect the public health and welfare with an adequate margin of safety,

- coordinating federal research and activities related to noise control, and
- establishing federal noise emission standards for selected products distributed in interstate commerce.

The federal Noise Control Act also directed that all federal agencies comply with applicable federal, state, interstate, and local noise control regulations.

Although EPA was given major public information and federal agency coordination roles, each federal agency retains authority to adopt noise regulations pertaining to agency programs. EPA can require other federal agencies to justify their noise regulations in terms of the federal Noise Control Act policy requirements. The Occupational Safety and Health Administration retains primary authority for setting workplace noise exposure standards. The Federal Aviation Administration retains primary jurisdiction over aircraft noise standards, and the Federal Highway Administration (FHWA) retains primary jurisdiction over highway noise standards.

In 1974, in response to the requirements of the federal Noise Control Act, EPA identified indoor and outdoor noise limits to protect public health and welfare (communication disruption, sleep disturbance, and hearing damage). Outdoor L_{dn} limits of 55 dB and indoor L_{dn} limits of 45 dB are identified as desirable to protect against speech interference and sleep disturbance for residential, educational, and healthcare areas. Sound-level criteria to protect against hearing damage in commercial and industrial areas are identified as 24-hour L_{eq} values of 70 dB (both outdoors and indoors).

The FHWA has adopted criteria for evaluating noise impacts associated with federally funded highway projects and for determining whether these impacts are sufficient to justify funding noise mitigation actions (47 FR 131:29653-29656, July 8, 1982). The FHWA noise abatement criteria are based on peak hourly L_{eq} sound levels, not L_{dn} or 24-hour L_{eq} values. The peak 1-hour L_{eq} criteria for residential, educational, and healthcare facilities are 67 dB outdoors and 52 dB indoors. The peak 1-hour L_{eq} criterion for commercial and industrial areas is 72 dB (outdoors).

The U.S. Department of Housing and Urban Development has established guidelines for evaluating noise impacts on residential projects seeking financial support under various grant programs (44 FR 135:40860-40866, January 23, 1979). Sites are generally considered acceptable for residential use if they are exposed to outdoor L_{dn} values of 65 dB or less. Sites are considered "normally unacceptable" if they are exposed to outdoor L_{dn} values of 65-75 dB. Sites are considered unacceptable if they are exposed to outdoor L_{dn} values above 75 dB.

State Agency Guidelines

In 1987, the California Department of Health Services published guidelines for the noise elements of local general plans. These guidelines include a sound level/land use compatibility chart that categorizes various outdoor L_{dn} ranges into up to four compatibility categories (normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable) by land use. For many land uses, the chart shows overlapping L_{dn} ranges for two or more

compatibility categories.

The noise element guidelines chart identifies the normally acceptable range for low-density residential uses as less than 60 dB and the conditionally acceptable range as 55-70 dB. The normally acceptable range for high-density residential uses is identified as L_{dn} values below 65 dB, and the conditionally acceptable range is identified as 60-70 dB. For educational and medical facilities, L_{dn} values below 70 dB are considered normally acceptable and L_{dn} values of 60-70 dB are considered conditionally acceptable. For office and commercial land uses, L_{dn} values below 70 dB are considered normally acceptable and L_{dn} values of 67.5-77.5 are categorized as conditionally acceptable.

These overlapping L_{dn} ranges are intended to indicate that local conditions (existing sound levels and community attitudes toward dominant sound sources) should be considered in evaluating land use compatibility at specific locations.

The California Department of Housing and Community Development has adopted noise insulation performance standards for new hotels, motels, and dwellings other than detached single-family structures (24 CCR T25-28). These standards require that "interior CNELs with windows closed, attributable to exterior sources, shall not exceed an annual CNEL of 45 dB in any habitable room".

Caltrans uses the FHWA criteria as the basis for evaluating noise impacts from highway projects.

**B-2. Environmental Noise Analysis, El Dorado Hills
Boulevard/U.S. 50 Interchange Modification Project**

ENVIRONMENTAL NOISE ANALYSIS

**EL DORADO HILLS BOULEVARD/U.S. 50
INTERCHANGE MODIFICATION PROJECT**

El Dorado County, California

BBA Project No. 98-267

Prepared For

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Revised
January 13, 1999

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INTRODUCTION

The proposed El Dorado Hills Boulevard/U.S. 50 Interchange Modification Project is located within El Dorado County. The proposed project will modify the existing interchange to improve and increase the interchange capacity, improve operational deficiencies and reduce safety problems. Major features of the proposed project preferred alternative include improving the vertical and horizontal alignments of the interchange on- and off- ramps, widening El Dorado Hills Boulevard-Latrobe Road, reconfigurations of the eastbound off-ramp and westbound off- and on-ramps, and an "S" curve configuration/realignment of Saratoga Way.

Two alternatives were evaluated as a part of the analysis. The alternatives include the No Project Alternative and Alternative I. The No Project Alternative assumes that no interchange improvements would occur, and that Saratoga Way would remain in its current location. The Alternative I assumes that the interchange improvements would remain as in the Preferred Alternative. However, the realignment of Saratoga Way would be closer to adjacent residences, and would not include an "S" curve configuration.

The recommended alternative and alternatives are described in detail within the Project Study Report. This Environmental Noise Analysis will focus on the El Dorado Hills Boulevard/U.S. 50 change in traffic noise levels, and noise levels due to construction activities.

CRITERIA

Federal Highway Administration/Caltrans Criteria:

The criteria for evaluating noise impacts that are used by the Federal Highway Administration and Caltrans are contained in the Caltrans Traffic Noise Analysis Protocol (The Protocol). Based upon The Protocol, the proposed project is considered a Type 1 project. The project has also been determined to pass the screening procedures for determining the need for a Traffic Noise Impact Analysis, and is therefore required to perform a Traffic Noise Impact Analysis.

The Protocol establishes Noise Abatement Criteria (NAC) for various land uses which have been categorized based upon activity. Land uses in these documents are categorized on the basis of their sensitivity to noise. The Category B criterion applies to residences, hotels, motels, churches, schools, recreation areas, active sport areas and parks, and is an hourly exterior sound level that approaches (within 1 dB) or exceeds the hourly NAC of 67 dBA, L_{eq}^1 . The Category C criterion applies to commercially developed land uses, and is an hourly exterior sound level that approaches or exceeds 72 dB L_{eq} . The Category E criterion applies to residences, motels, hotels, schools, hospitals, and similar uses, and is an hourly interior sound level of 52 dB L_{eq} . The interior sound level criterion only applies in those situations where there are no exterior activities to be affected by the traffic noise. The Protocol also goes on to state that a noise increase is considered substantial when the predicted noise levels with the project exceed existing noise levels by 12 dBA, L_{eq} .

¹ For an explanation of these terms, see Appendix A: "Acoustical Terminology"

Under The Protocol, a traffic noise impact must be mitigated when the predicted noise levels “approach or exceed” the NAC or when the predicted noise levels substantially exceed existing noise levels and it is reasonable and feasible to mitigate.

Noise abatement feasibility involves many engineering considerations. A minimum 5 dBA noise reduction must be achieved to be considered feasible. However, feasibility may also be restricted by topography, access requirements, presence of local cross streets, other noise sources in the area and safety considerations.

Noise abatement reasonableness is stated within The Protocol as being more subjective in nature than the feasibility determination. The Protocol states that the reasonableness of noise abatement considers the cost of the abatement, absolute noise levels, changes in noise levels, noise abatement benefits, development along the highway, life cycle of the proposed noise abatement, environmental impacts of the proposed noise abatement, opinions of impacted residents, input from the reviewing public agencies and the social, economic, environmental, legal and technological factors.

The Protocol provides procedures for determining preliminary reasonableness for residential areas in Land Use Category B. This procedure will be described in this report if noise abatement is considered.

El Dorado County

For noise due to transportation-related noise sources, the El Dorado County General Plan Noise Element establishes an exterior noise level criterion on 60 dB L_{dn} at outdoor activity areas for residential uses. Where it is not possible to reduce noise in outdoor activity areas to 60 dB L_{dn} or less using a practical application of the best-available noise reduction measures, an exterior noise level up to 65 dB L_{dn} may be allowed.

Additional Criteria

Another means of determining a significant noise impact is by the expected change in ambient noise levels which will occur as a result of the project. Table I is based upon recommendations recently (August 1992) made by the Federal Interagency Committee on Noise (FICON) to provide guidance in the assessment of changes in ambient noise levels resulting from aircraft operations. Their recommendations are based upon studies that relate aircraft noise levels to the percentage of persons highly annoyed by the noise. Although the FICON recommendations were specifically developed to assess aircraft noise impacts, it has been assumed for this analysis that they are applicable to all sources of noise that are described in terms of cumulative noise exposure metrics such as the L_{dn} or CNEL. These metrics are generally applied to transportation noise sources, and define noise exposure in terms of average noise exposure during a 24-hour period with penalties added to noise that occurs during the nighttime or evening.

**TABLE I
SIGNIFICANCE OF CHANGES
IN CUMULATIVE NOISE EXPOSURE**

Ambient Noise Level Without Project (L_{dn} or CNEL)	Significant Impact
<60 dB	+5.0 dB or more
60-65 dB	+3.0 dB or more
>65 dB	+1.5 dB or more

Source: Federal Interagency Committee on Noise (FICON), as applied by Brown-Buntin Associates, Inc.

EXISTING NOISE ENVIRONMENT

Existing Land Uses

Noise levels in the project vicinity are dominated by traffic on U.S. 50 and associated ramps, and El Dorado Hills Boulevard. The primary concern regarding existing and future traffic noise levels is within the northwest quadrant of the interchange where existing and future residential uses are located.

Background Noise Levels

BBA conducted continuous hourly noise level measurements at four locations for a period of seven days. The measurement locations were selected on the basis of their proximity to the interchange and roadway improvements and represent the noise exposure from the most affected residential uses. Figure 1 shows the locations of the noise measurement sites. A description of each measurement site follows:

Site A - 3919 Hills Court

This site is at 3919 Hills Court. The sound level meter was placed on the balcony of the residence facing El Dorado Hills Boulevard. There is a privacy fence in the back yard which was found to provide no shielding of traffic noise. The measurement site was approximately 138 meters (442 feet) from El Dorado Hills Boulevard centerline, and 200 meters (656 feet) from the U.S. 50 mainline centerline. The primary noise source was traffic on El Dorado Hills Boulevard and the U.S. 50 mainline.

Site B - 956 Kings Canyon

This site is at 956 Kings Canyon. The sound level meter was in the middle of the back yard at a height of 5 feet above the ground. There was a clear unobstructed view of U.S. 50 and

the westbound on-ramp. The measurement site was approximately 175 meters (575 feet) from the U.S. 50 mainline centerline.

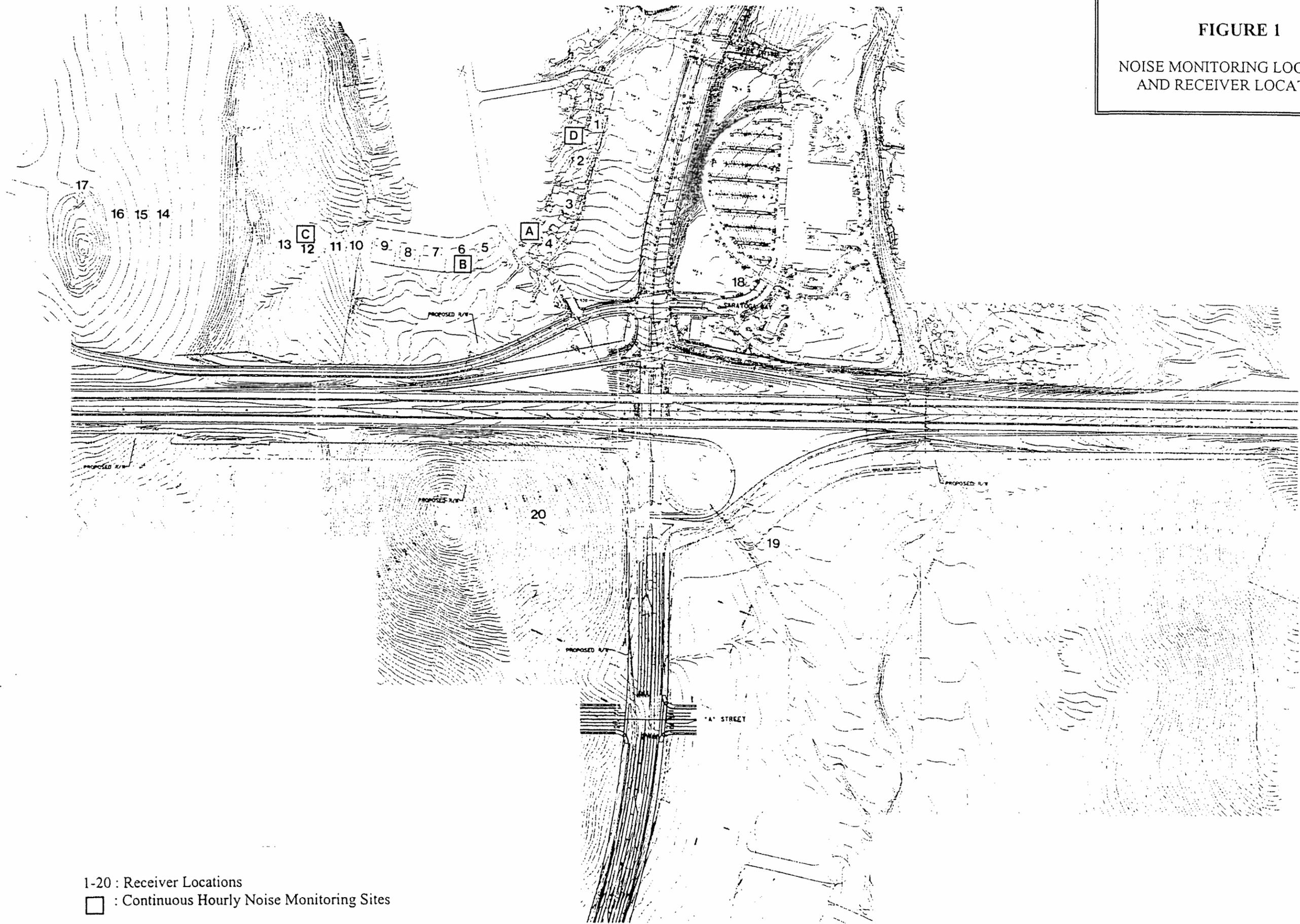
Site C - 707 Platt Circle

This site is at 707 Platt Circle. The sound level meter was in the middle of the back yard at a height of 5 feet above the ground. There was a clear unobstructed view of U.S. 50 and the westbound on-ramp. The measurement site was approximately 200 meters (656 feet) from the U.S. 50 mainline centerline.

Site D - 3883 Scenic Court

This site is at 3883 Scenic Court. The sound level meter was in the middle of the back yard at a height of 8 feet above the ground. There was a clear unobstructed view of El Dorado Hills Boulevard. The measurement site was approximately 100 meters (328 feet) from the El Dorado Hills Boulevard centerline.

FIGURE 1
NOISE MONITORING LOCATIONS
AND RECEIVER LOCATIONS



1-20 : Receiver Locations
□ : Continuous Hourly Noise Monitoring Sites

Sound measurement equipment consisted of Larson Davis Laboratories (LDL) Model 820 precision integrating sound level meters, which were equipped with B&K Type 4176 ½" microphones. The measurement equipment was calibrated immediately before and after use, and meets the pertinent specifications of the American National Standards Institute (ANSI) and the International Electrotechnical Institute (IEC) for Type 1 precision sound measurement systems.

Noise measurements were conducted in terms of the L_{eq} and other statistical descriptors. The noise level measurements were used to determine statistical trends in traffic noise levels throughout the day and nighttime periods, and to determine the peak hour traffic noise level and when the peak hour traffic noise level occurred. The measured peak hour traffic noise levels were later compared to values predicted by the Sound-32 model based upon existing conditions. Table II summarizes the results of the measured noise levels. Appendix B graphically shows the results of the continuous hourly noise level measurements.

**TABLE I
SUMMARY OF NOISE MEAS**

Site	Date	Day	Time of Peak Hour	Cor
A	8/7/98	Monday	11:00 a.m.	Par
	8/8/98	Tuesday	9:00 p.m.	Fu
	8/9/98	Wed.	8:00 p.m.	Fu
	8/10/98	Thurs.	6:00 a.m.	Fu
	8/11/98	Friday	6:00 a.m.	Fu
	8/12/98	Saturday	6:00 a.m.	Fu
	8/13/98	Sunday	12:00 p.m.	Fu
	8/14/98	Monday	6:00 a.m.	Par
B	8/7/98	Monday	7:00 p.m.	Par
	8/8/98	Tuesday	8:00 p.m.	F
	8/9/98	Wed.	8:00 p.m.	F
	8/10/98	Thurs.	6:00 a.m.	F
	2/14/98	Saturday	10:00 a.m.	F
	2/15/98	Sunday	10:00 a.m.	F
	2/16/98	Monday	2:00 p.m.	F
C	8/7/98	Monday	12:00 p.m.	Pa
	8/8/98	Tuesday	9:00 a.m.	F
	8/9/98	Wed.	10:00 a.m.	F
	8/10/98	Thurs.	6:00 a.m.	F
	8/11/98	Friday	6:00 a.m.	F
	8/12/98	Saturday	6:00 a.m.	F
	8/13/98	Sunday	7:00 a.m.	F
	8/14/98	Monday	7:00 a.m.	Pa
D	8/10/98	Thurs.	7:00 p.m.	Pa
	8/11/98	Friday	6:00 a.m.	
	8/12/98	Saturday	6:00 a.m.	
	8/13/98	Sunday	1:00 p.m.	
	8/14/98	Monday	7:00 a.m.	
	8/15/98	Tuesday	6:00 p.m.	
	8/16/98	Wed.	10:00 p.m.	
	8/17/98	Thurs.	10:00 a.m.	F

* = Not due to traffic.

N/A = Not Applicable due to a partial day of noise moni

Based upon the noise level measurement results contained within Table II, the peak hour of traffic noise is generally between the hours of 6:00 a.m. and 8:00 a.m. Therefore, the morning peak hour traffic volumes will be used for the analysis of peak hour traffic noise.

Existing Exterior Traffic Noise Levels

To describe projected noise levels due to traffic, BBA used the Sound-32 traffic noise prediction model. The Sound 32 model was developed to predict hourly L_{eq} values for free-flowing traffic conditions, and is considered to be accurate within 1.5 dB.

The Sound-32 Model is the Caltrans coded version of the Federal Highway Administration (FHWA) Traffic Noise Prediction Model. Sound-32 is the Caltrans version of the Stamina program. The current version of Sound-32 reports noise levels in L_{eq} . The Sound-32 Model was used for comparison to the FHWA and Caltrans noise level criteria.

Based upon the noise measurement data contained within Table II, the measured L_{dn} values were generally 1 dB higher than the measured morning peak hour traffic noise levels. Therefore, an offset of +1 dB is added to the modeled peak hour traffic noise levels to derive the L_{dn} values.

Traffic noise levels were calculated at 18 receiver locations. (See Figure 1 for locations of receivers). Table III provides the results of the traffic noise modeling. Traffic data for the analysis was provided by Fehr & Peers traffic consultants. Free flow travel speeds were assumed for all roadways and ramps.

The results of the analysis of existing peak hour traffic noise levels correlate very well with the measured existing peak hour traffic noise levels. There have been questions raised by residents who live in the northwest quadrant regarding the potential for accounting for increased traffic noise levels due to reflections of traffic noise off of the embankment located along a portion of the south side of U.S. 50. Based upon the fact that the predicted existing traffic noise levels correlate very closely with the measured noise levels indicates that any reflections of traffic noise are accounted for in the analysis. It is expected that this will also be true for the prediction of future traffic noise levels.

**TABLE III
EXISTING TRAFFIC NOISE LEVELS AT RECEIVER LOCATIONS**

Receiver	Location/Land Use	Predicted Existing Traffic Noise Levels	
		L _{dn} , dB	L _{eq} , dB
Northwest Quadrant			
1	Residential	64	63
2	Residential	65	64
3	Residential	66	65
4	Residential	67	66
5	Residential	67	66
6	Residential	67	66
7	Residential	67	66
8	Residential	67	66
9	Residential	67	66
10	Residential	67	66
11	Residential	67	66
12	Residential	67	66
13	Residential	67	66
14	Residential	64	63
15	Residential	64	63
16	Residential	64	63
17	Residential	64	63
Northeast Quadrant			
18	Commercial	68	67
Southwest Quadrant			
19	Vacant	69	68
Southeast Quadrant			
20	Commercial/Vacant	70	69

PROJECT IMPACTS

Year 2005 Exterior Traffic Noise Impacts

Using traffic data provided by the project traffic consultant, BBA once again employed the Sound 32 model to determine traffic noise levels at 18 receiver locations. (See Figure 1 for locations of receivers). Tables IV shows the results of the traffic noise modeling for the Year 2005 (Without Project and With Preferred Alternative) conditions.

The No Project condition assumes that the roadway ramp and mainline configurations will remain as they exist today. The No Project condition also assumes that the U.S. 50 HOV project will be constructed.

Predicted peak hour traffic noise levels utilize peak hour traffic volumes and free-flow travel speeds provided by the traffic consultant.

**YEAR 2005 TRAFFIC NO
Without Proj**

Receiver	Land Use
----------	----------

Northwest Quadrant

1	Residential Town Houses
2	Residential Town Houses
3	Residential Town Houses
4	Residential Town Houses
5	Residential Single Family
6	Residential Single Family
7	Residential Single Family
8	Residential Single Family
9	Residential Single Family
10	Residential Single Family
11	Residential Single Family
12	Residential Single Family
13	Residential Single Family
14	Residential Single Family
15	Residential Single Family
16	Residential Single Family
17	Residential Single Family

Northeast Quadrant

18	Commercial Fast Food
----	----------------------

Southeast Quadrant

19	Commercial Gas Station/V
----	--------------------------

Southwest Quadrant

20	Vacant
----	--------

Northwest Quadrant Traffic Noise Levels

There are a total of 24 first-line and second-line residential receivers which have been identified as potentially being affected by the project. Ten of the units are multifamily, and fourteen are single family. The residential receivers evaluated in the Sound 32 model represent the first and second row residential uses facing the project site. Based upon the analysis, future traffic in the year 2005 without implementation of the project will result in peak hour traffic noise levels ranging between 64 dB and 68 dB L_{eq} . The predicted L_{dn} values will range between 65 and 69 dB.

Future traffic after implementation of the Preferred Alternative will result in peak hour traffic noise levels ranging between 65 dB and 68 dB L_{eq} , and L_{dn} values ranging between 66 dB and 69 dB.

Based upon the analysis, the proposed project would not result in a significant increase in traffic noise levels based upon the Caltrans criteria or under CEQA requirements for determining a significant increase in noise levels. In no case does the project significantly increase traffic noise levels. Most residential uses adjacent to the project site will exceed or approach exceedance of the FHWA/Caltrans peak hour noise abatement criterion (NAC) of 67 dB L_{eq} . All residences will exceed the El Dorado County normally acceptable exterior noise level criterion of 60 dB L_{dn} , and the conditionally acceptable exterior noise level criterion of 65 dB L_{dn} .

Northeast Quadrant Traffic Noise Levels

Receivers in the northeast quadrant are generally not considered noise-sensitive, and include fast food restaurants, gas stations and other commercial uses. One receiver location representing the nearest fast food restaurant along Saratoga Way was chosen for the analysis. The analysis indicated that future traffic noise levels without implementation of the project would be 69 dB L_{eq} and 70 dB L_{dn} . Future traffic noise levels after construction of the Preferred Alternative would not change.

Southeast Quadrant Traffic Noise Levels

Receivers in the southeast quadrant are generally not considered noise-sensitive, and include fast food restaurants, gas stations and other commercial uses. One receiver location representing the nearest gas station along Latrobe Road was chosen for the analysis. The analysis indicated that future traffic noise levels without implementation of the project would be 69 dB L_{eq} and 70 dB L_{dn} . Future traffic noise levels after construction of the Preferred Alternative would increase traffic noise levels by approximately 1 dB.

Southwest Quadrant Traffic Noise Levels

There is no development in the southwest quadrant of the project site. Currently this is vacant land. One receiver location at approximately 200 meters (656 feet) from the U.S. 50 centerline was chosen for the analysis. The analysis indicated that future traffic noise levels without implementation of the project would be 70 dB L_{eq} and 71 dB L_{dn} . Future traffic noise levels after construction of the Preferred Alternative would not change.

Year 2020 Exterior Traffic Noise Impacts

Using traffic data provided by the project traffic consultant, BBA once again employed the Sound 32 model to determine traffic noise levels at 18 receiver locations. (See Figure 1 for locations of receivers). Tables V shows the results of the traffic noise modeling for the Year 2020 (Without Project and With Preferred Alternative) conditions.

The No Project condition assumes that the roadway ramp and mainline configurations will remain as they exist today. The No Project condition also assumes that the U.S. 50 HOV project will be constructed.

Predicted peak hour traffic noise levels utilize peak hour traffic volumes and free-flow travel speeds provided by the traffic consultant.

TABLE V
YEAR 2020 TRAFFIC NOISE LEVELS AT RECEIVER LOCATIONS
Without Project and With Preferred Alternative

Receiver	Land Use	Year 2020 No Project		Year 2020 Pref. Alt.	
		L _{dn} , dB	L _{eq} , dB	L _{dn} , dB	L _{eq} , dB
Northwest Quadrant					
1	Residential Town Houses	67	66	68	67
2	Residential Town Houses	67	66	68	67
3	Residential Town Houses	68	67	69	68
4	Residential Town Houses	69	68	70	69
5	Residential Single Family	69	68	70	69
6	Residential Single Family	70	69	70	69
7	Residential Single Family	69	68	70	69
8	Residential Single Family	70	69	70	69
9	Residential Single Family	69	68	69	68
10	Residential Single Family	69	68	69	68
11	Residential Single Family	69	68	69	68
12	Residential Single Family	69	68	70	69
13	Residential Single Family	70	69	70	69
14	Residential Single Family	67	66	67	66
15	Residential Single Family	67	66	67	66
16	Residential Single Family	67	66	67	66
17	Residential Single Family	66	65	66	65
Northeast Quadrant					
18	Commercial Fast Food	71	70	71	70
Southeast Quadrant					
19	Commercial Gas Station/Vacant	71	70	72	71
Southwest Quadrant					
20	Vacant	72	71	72	71

Northwest Quadrant Traffic Noise Levels

There are a total of 24 first-line and second-line resident potentially being affected by the project. Ten of the un family. The residential receivers evaluated in the Sound residential uses facing the project site. Based up implementation of the project will result in peak hour tra 69 dB L_{eq} . The predicted L_{dn} values will range between

Future traffic after implementation of the Preferred Alte levels ranging between 65 dB and 69 dB L_{eq} , and L_{dn} v

Based upon the analysis, the proposed project would noise levels based upon the Caltrans criteria or und significant increase in noise levels. In no case does th levels. Most residential uses adjacent to the project site FHWA/Caltrans peak hour noise abatement criterion exceed the El Dorado County normally acceptable ext the conditionally acceptable exterior noise level criter

In general, the proposed project is expected to increase L_{eq}/L_{dn} at the townhouses located between Mammo residences located along Kings Canyon Drive. Resider not expected to experience an increase in traffic noise

Northeast Quadrant Traffic Noise Levels

Receivers in the northeast quadrant are generally not food restaurants, gas stations and other commercial nearest fast food restaurant along Saratoga Way was cl that future traffic noise levels without implementation L_{dn} . Future traffic noise levels after construction of t

Southeast Quadrant Traffic Noise Levels

Receivers in the southeast quadrant are generally no food restaurants, gas stations and other commercial nearest gas station along Latrobe Road was chosen

future traffic noise levels without implementation of the project would be 70 dB L_{eq} and 71 dB L_{dn} . Future traffic noise levels after construction of the Preferred Alternative would not change.

Southwest Quadrant Traffic Noise Levels

There is no development in the southwest quadrant of the project site. Currently this is vacant land. One receiver location at approximately 200 meters (656 feet) from the U.S. 50 centerline was chosen for the analysis. The analysis indicated that future traffic noise levels without implementation of the project would be 71 dB L_{eq} and 72 dB L_{dn} . Future traffic noise levels after construction of the Preferred Alternative would not change.

Alternatives Analysis of Exterior Traffic Noise Levels

As discussed earlier, the Alternative I assumes that the interchange improvements would remain as in the Preferred Alternative. However, the realignment of Saratoga Way would be closer to adjacent residences, and would not include an "S" curve configuration. Table VI shows a comparison of the No Project, Preferred Alternative and the Alternative I analyses of traffic noise impacts for the Year 2005. Table VII shows a comparison of the No Project, Preferred Alternative and the Alternative I analyses of traffic noise impacts for the Year 2020

The results of the analysis indicate that the Alternative I traffic noise levels would not change from those predicted for the Preferred Alternative. In general, most residential uses adjacent to the project site will exceed or approach exceedance of the FHWA/Caltrans peak hour noise abatement criterion (NAC) of 67 dB L_{eq} . All residences will exceed the El Dorado County normally acceptable exterior noise level criterion of 60 dB L_{dn} , and the conditionally acceptable exterior noise level criterion of 65 dB L_{dn} .

It should be noted that although all noise levels are reported in whole numbers, the Sound 32 model predicts traffic noise levels in tenths of a dB. The actual traffic model results indicate that the four town homes facing toward El Dorado Hills Boulevard, in the northwest quadrant of the project site, will experience an increase in traffic noise levels between 0.1 dB and 0.3 dB L_{eq}/L_{dn} . However, due to the expected accuracy of the Caltrans Sound 32 Model, the Caltrans staff have requested that all traffic noise levels should be reported in whole numbers. A 0.3 dB increase in traffic noise levels is considered imperceptible.

TABLE VI YEAR 2005 TRAFFIC NOISE LEVELS AT RECEIVER LOCATIONS Comparison of Alternatives							
Receiver	Land Use	Year 2005 No Project		Year 2005 Pref. Alt.		Year 2005 Alt I	
		L _{dn} , dB	L _{eq} , dB	L _{dn} , dB	L _{eq} , dB	L _{dn} , dB	L _{eq} , dB
Northwest Quadrant							
1	Residential	65	64	67	66	67	66
2	Residential	66	65	67	66	67	66
3	Residential	67	66	68	67	68	67
4	Residential	68	67	69	68	69	68
5	Residential	68	67	69	68	69	68
6	Residential	69	68	69	68	69	68
7	Residential	69	68	69	68	69	68
8	Residential	69	68	69	68	69	68
9	Residential	68	67	68	67	68	67
10	Residential	68	67	68	67	68	67
11	Residential	68	67	68	67	68	67
12	Residential	69	68	69	68	69	68
13	Residential	69	68	69	68	69	68
14	Residential	66	65	66	65	66	65
15	Residential	66	65	66	65	66	65
16	Residential	66	65	66	65	66	65
17	Residential	65	64	66	65	66	65
Northeast Quadrant							
18	Commercial	70	69	70	69	70	69
Southeast Quadrant							
19	Commercial	70	69	71	70	71	70
Southwest Quadrant							
20	Vacant	71	70	71	70	71	70

TABLE VII
YEAR 2020 TRAFFIC NOISE LEVELS AT RECEIVER LOCATIONS
Comparison of Alternatives

Receiver	Land Use	Year 2020 No Project		Year 2020 Pref. Alt.		Year 2020 Alt I	
		L _{dn} , dB	L _{eq} , dB	L _{dn} , dB	L _{eq} , dB	L _{dn} , dB	L _{eq} , dB
Northwest Quadrant							
1	Residential	67	66	68	67	68	67
2	Residential	67	66	68	67	68	67
3	Residential	68	67	69	68	69	68
4	Residential	69	68	70	69	70	69
5	Residential	69	68	70	69	70	69
6	Residential	70	69	70	69	70	69
7	Residential	69	68	70	69	70	69
8	Residential	70	69	70	69	70	69
9	Residential	69	68	69	68	69	68
10	Residential	69	68	69	68	69	68
11	Residential	69	68	69	68	69	68
12	Residential	69	68	70	69	70	69
13	Residential	70	69	70	69	70	69
14	Residential	67	66	67	66	67	66
15	Residential	67	66	67	66	67	66
16	Residential	67	66	67	66	67	66
17	Residential	66	65	66	65	66	65
Northeast Quadrant							
18	Commercial	71	70	71	70	71	70
Southeast Quadrant							
19	Commercial	71	70	72	71	72	71
Southwest Quadrant							
20	Vacant	72	71	72	71	72	71

Evaluation of Interior Traffic Noise Levels

Typical facade construction in accordance with the code provides for a noise reduction of 20 dB to 25 dB. Buildings are typically exposed to exterior noise levels of 65 dB L_{dn} or a noise criterion of 45 dB L_{dn} . However, based upon the ambient noise levels in excess of 65 dB L_{dn} . Therefore, in accordance with the County General Plan 45 dB L_{dn} interior noise level

To judge compliance with the 45 dB L_{dn} interior noise level, it is necessary to determine the noise reduction provided by the building facade and interior absorption. The traffic noise reduction of the building facade including the construction materials, amount of window area, and the presence of any flanking paths which may all affect the noise reduction. Absorption within the rooms is based upon the gross floor surface areas within each room.

The only practical means of determining interior noise is to do a detailed analysis of exterior to interior noise at line receivers which have been identified as being sensitive.

Construction Equipment Noise Impacts

During the construction phases of the project, noise levels will increase the noise environment in the immediate area. Activity noise levels, as indicated in Table VIII ranging from 70 to 85 dB L_{dn} . Construction noise impacts could be significant, and construction equipment could result in annoyance or sleep disturbance.

Construction noise is regulated by Caltrans standards "Standard Specifications for Requirements". These requirements state that construction equipment must comply with applicable local, state and federal regulations and use adequate mufflers according to the manufacturer's specifications.

During construction, traffic noise generated by heavy equipment and a reduction in speed required by working road conditions. Traffic leaving the construction area would be slightly delayed.

effect of the accelerating and decelerating traffic upon noise would not be appreciable. The most important project-generated noise source would be truck traffic associated with transport of heavy materials and equipment. This noise increase would be of short duration and limited primarily to daytime hours, but such noise impacts could be significant.

TABLE VIII CONSTRUCTION EQUIPMENT NOISE	
Type of Equipment	Maximum Level, dBA at 50 feet
Scrapers	88
Bulldozers	87
Heavy Trucks	88
Backhoe	85
Pneumatic Tools	85

Source: Environmental Noise Pollution, Patrick R. Cunniff, 1977.

Construction Blasting Noise Impacts

Noise levels due to potential blasting during construction are also a concern. El Dorado County does not have noise level criteria for evaluating noise impacts associated with blasting activities. However, the following text provides an explanation of criteria which can be employed to determine potential noise impacts associated with project-related blasting noise levels.

Noise levels due to blasting activities are described as impulsive sound levels which are very low frequency, and of very short duration (generally less than 1 second). These noise levels are reported as linear "peak" noise levels, which represent the absolute maximum over pressure produced by a blast. According to researchers investigating public response to blasting, the threshold of persons becoming "highly annoyed" occurs where peak over pressures exceed about 122 dB. (G.W. Kamperman, "Human Response to Blasting Noise and Vibration", *Internoise 80* (1980)). About 10% of the people would be expected to become "highly annoyed" if peak overpressures exceeded 125 dB. There is very poor correlation of air blasts below 112 dB, and the percentage of people highly annoyed. Therefore it can be concluded that peak overpressures below 112 dB would generally not cause people to become annoyed. In fact, people would probably not be startled by such levels, and may not even notice them.

Since noise levels due to blasting are generally very low frequency (approximately 2 to 25 Hz), the human ear does not detect the total energy associated with the overall linear sound energy. The A-

weighted sound level de-emphasizes the very low frequency and very high frequency components of sound in a manner similar to the response of the human ear. Based upon research on typical fundamental frequency (the frequency where the majority of sound energy is located) for a blast is at the 20 to 25 Hz range. Based upon a typical correction from linear sound level weighted sound levels at the 25 Hz range, and noise level data collected by BBA for blasts, a 10 dB correction can be applied to measured peak overpressures to determine typical maximum noise levels.

The Model Community Noise Control Ordinance developed by the State of California recommends exterior maximum noise level criteria for noise sources such as those associated with blasting activities. The Model Noise Control Ordinance recommends that a maximum sound level (L_{max}) of 70 dBA should be used. This would result in a peak overpressure of approximately 112 dB, which corresponds to the research discussed above which indicates that there is a strong correlation of air blasts below 112 dB, and the percentage of people highly annoyed.

The resulting noise level due to blasting activities can be attributed to many variables, including the size of the explosive charge, the number charges, shot timing between charges, depth of the charges and the amount of overburden which is covering the charges.

An experienced blasting consultant can generally determine the effects of blasting activities on nearby structures to prevent structural damage or the potential for annoyance. In addition, it has been found that informing residents in advance of blasting activities, including the presence of the blasting will help to reduce the potential for startling individuals.

SUMMARY OF IMPACTS

Based upon the analysis, the proposed project would not require mitigation measures to meet CEQA requirements for determining a significant increase in noise levels. In no case would the project significantly increase future traffic noise levels.

Based upon the analysis, all residents are currently, and will continue to be exposed to traffic noise levels in excess of the El Dorado County General Plan exterior noise level criterion of 65 dB L_{dn} . In many cases residents are currently, and will continue to be exposed to traffic noise levels in excess of the El Dorado County General Plan exterior noise level criterion of 65 dB L_{dn} .

Based upon the analysis, many of the residents currently approach or exceed the California Noise Abatement Criteria (NAC) of 67 dB L_{eq} . An increased number of residents will approach or exceed the California NAC of 67 dB L_{eq} in the future. However, a preliminary determination of noise impacts is required.

reasonableness needs to be conducted, consistent with the Protocol. This procedure and discussion will be provided under the Mitigation Section of this report.

MITIGATION

Use of Barriers

Shielding by barriers can be obtained by placing walls or berms between the noise source and the receiver. The effectiveness of a barrier depends upon blocking line-of-sight between the source and receiver, and is improved with increases in distance the sound must travel to pass over the barrier as compared to a straight line from source to receiver. The difference between the distance over a barrier and a straight line between source and receiver is called the "path length difference," and is the basis for calculating barrier noise reduction.

Barrier effectiveness depends upon the relative heights of the source, barrier and receiver. In general, barriers are most effective when placed close to either the receiver or the source. An intermediate barrier location yields a smaller path length difference for a given increase in barrier height than does a location closer to either source or receiver.

BBA used the Sound-32 model and barrier profile analyses to determine appropriate barrier heights and barrier configurations which would mitigate traffic noise levels.

Based upon the Sound-32 analysis, barrier profile analyses, and the elevation cross-section information provided by HDR Engineering, barrier heights and configurations were evaluated. The barrier configurations which were evaluated were limited to the northwest quadrant.

U.S. 50 ROW and Westbound On-Ramp Barrier Configuration

The first barrier configuration which was analyzed included a barrier located along the right-of-way between the on-ramp and Saratoga Way, which extended from approximately Station 23+40 to approximately Station 20+25. Due to changes in topography, the barrier was then relocated to the hinge of the Westbound on-ramp at approximately Station 20+25, and extended to Station 19+00. This barrier configuration is expected to provide reductions in noise for residences along Kings Canyon and the eastern leg of Platt Circle. Due to the elevated backyards and residences on the western leg of Platt Circle (Receivers 14 through 17), there was little to no shielding of traffic noise levels at those residences. The results of the analysis are shown in Table IX.

TABLE IX
PREDICTED U.S. 50 ROW AND WESTBOUND ON-RAMP HINGE WALL
BARRIER EFFECTIVENESS
 (Year 2020 Preferred Alternative)

Receiver	Location	L_{eq}/L_{dn} , dB without barrier	Predicted L_{eq}/L_{dn} , dB		
			10' Barrier	12' Barrier	14' Barrier
R1	Scenic Court	67/68	67/68	67/68	67/68
R2	Scenic Court	67/68	67/68	67/68	67/68
R3	Hills Court	68/69	68/69	68/69	68/69
R4	Hills Court	69/70	68/69	67/68	65/66
R5	Kings Canyon	69/70	64/65	63/64	63/64
R6	Kings Canyon	69/70	63/64	62/63	62/63
R7	Kings Canyon	69/70	63/64	62/63	62/63
R8	Kings Canyon	69/70	63/64	62/63	62/63
R9	Kings Canyon	68/69	65/66	64/65	63/64
R10	Platt Circle	68/69	63/64	63/64	63/64
R11	Platt Circle	68/69	63/64	63/64	63/64
R12	Platt Circle	69/70	64/65	63/64	63/64
R13	Platt Circle	69/70	63/64	63/64	62/63

The analysis indicates that a barrier located at the right-of-way and along the on-ramp hinge could reduce traffic noise levels at residences along Kings Canyon and Platt Circle to less than the Caltrans/FHWA 67 dB L_{eq} noise level criterion, and to less than the El Dorado County 65 dB L_{dn} conditionally acceptable noise level criterion. A sound wall in excess of 14 feet would be required to reduce traffic noise levels to less than the County 60 dB L_{dn} normally acceptable noise level criterion. The specified barrier configuration would provide little benefit to the residences along Hills Court and Scenic Court. As stated earlier, no benefit is expected at residences along the western leg of Platt Circle. Figure 2 shows the location of the right-of-way and ramp barrier.

Property Line Barriers

The second barrier configuration which was reviewed was a property line barrier along the residences located on Hills Court, Scenic Court, Kings Canyon Way and eastern leg of Platt Circle. Table X provides the results of the analysis. The analysis was based upon the Year 2020 Preferred Alternative.

TABLE X
PREDICTED PROPERTY LINE BARRIER EFFECTIVENESS
 (Year 2020 Preferred Alternative)

Receiver	Location	L_{eq}/L_{dn} , dB without barrier	Predicted L_{eq}/L_{dn} , dB		
			8' Barrier	10' Barrier	12' Barrier
R1	Scenic Court	67/68	59/60	57/58	55/56
R2	Scenic Court	67/68	60/61	58/59	56/57
R3	Hills Court	68/69	61/62	59/60	57/58
R4	Hills Court	69/70	63/64	61/62	59/60
R5	Kings Canyon	69/70	62/63	61/62	59/60
R6	Kings Canyon	69/70	62/63	61/62	59/60
R7	Kings Canyon	69/70	62/63	61/62	59/60
R8	Kings Canyon	69/70	62/63	61/62	59/60
R9	Kings Canyon	68/69	62/63	61/62	59/60
R10	Platt Circle	68/69	62/63	60/61	59/60
R11	Platt Circle	68/69	62/63	60/61	59/60
R12	Platt Circle	69/70	63/64	62/63	60/61
R13	Platt Circle	69/70	63/64	62/63	60/61

Based upon the analysis contained within Table X, an 8 foot tall property line barrier is the minimum height required to break line of sight to all noise sources, and reduce traffic noise levels at residences along Hills Court, Scenic Court, Kings Canyon Way and the eastern leg of Platt Circle to less than the Caltrans/FHWA 67 dB L_{eq} noise level criterion, and to less than the El Dorado County 65 dB L_{dn} upper limit “conditionally acceptable” noise level criterion. A 10 foot tall property line barrier could reduce traffic noise levels at residences along Hills Court, Scenic Court, Kings Canyon Way and the eastern leg of Platt Circle to less than the Caltrans/FHWA 67 dB L_{eq} noise level criterion, and to less than the El Dorado County 65 dB L_{dn} upper limit “conditionally acceptable” noise level criterion. A 12 foot tall property line barrier could reduce traffic noise levels at residences along Hills Court, Scenic Court, Kings Canyon Way and the eastern leg of Platt Circle to less than the Caltrans/FHWA 67 dB L_{eq} noise level criterion, and to less than the El Dorado County 60 dB L_{dn} lower limit “generally acceptable” noise level criterion. Figure 3 shows the locations of the barriers.

FIGURE 2

**LOCATION OF RIGHT-OR-WAY
AND ON RAMP
PROPOSED BARRIER**

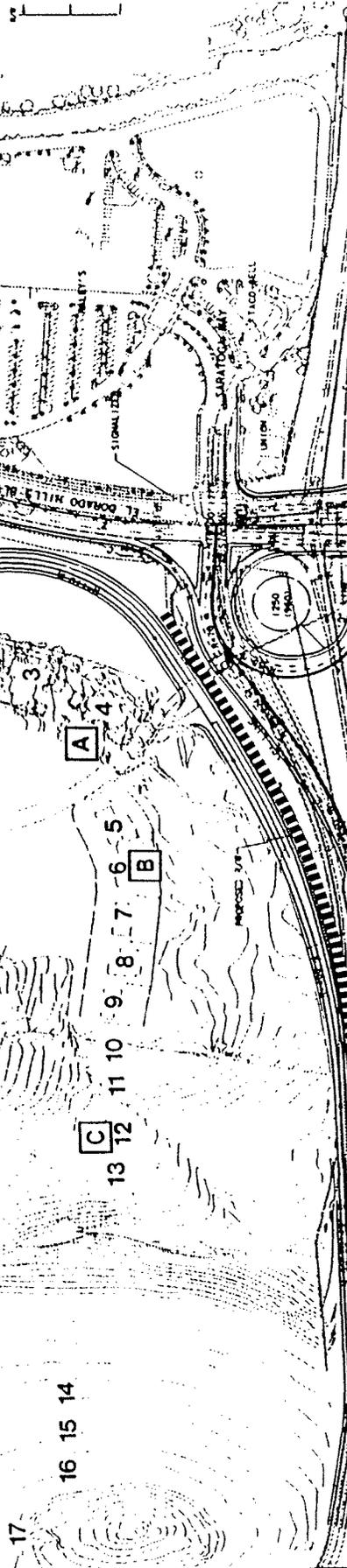
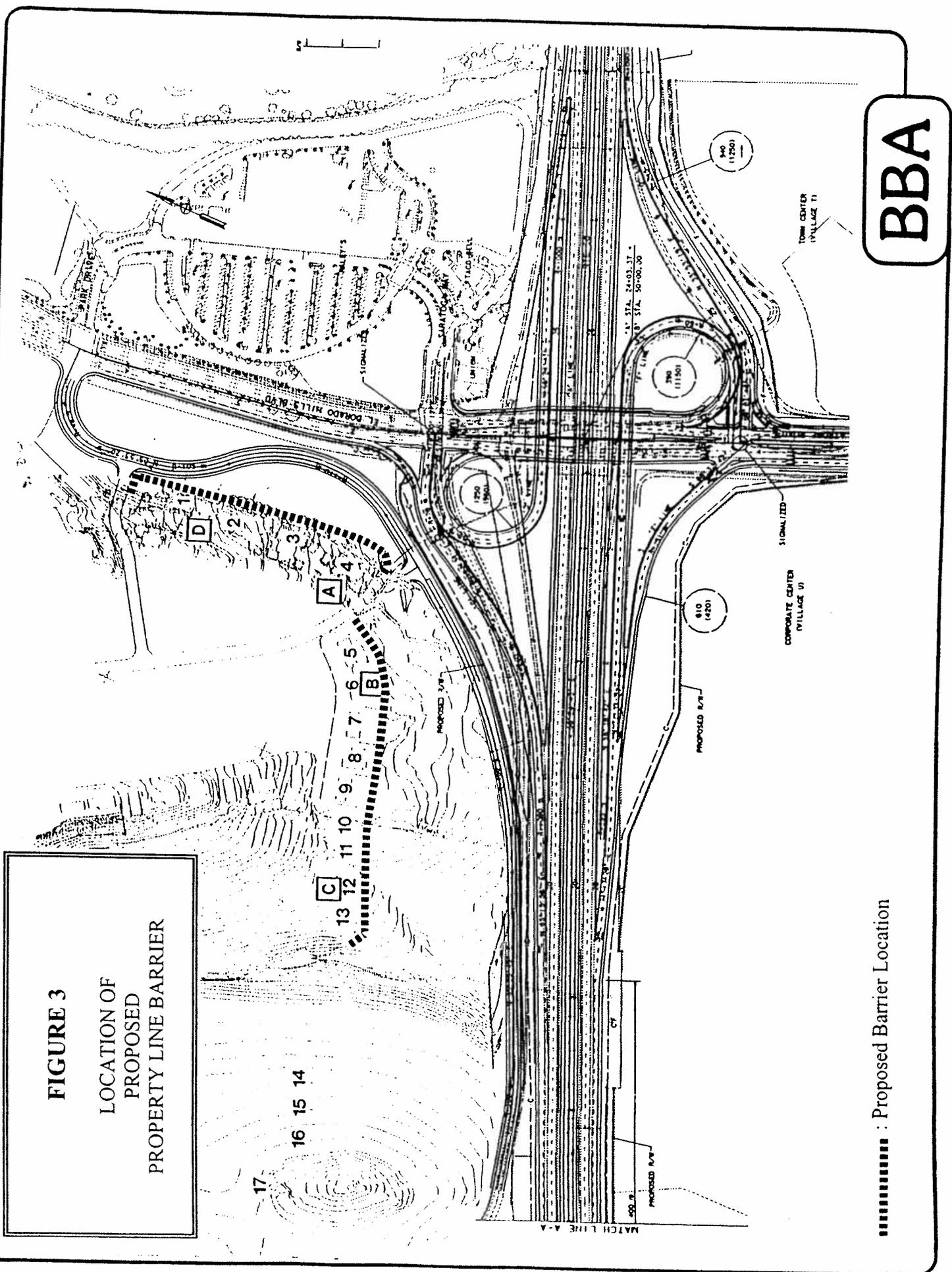


FIGURE 3

LOCATION OF
PROPOSED
PROPERTY LINE BARRIER



----- : Proposed Barrier Location

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Combined U.S. 50 ROW and Property Line Barrier Configuration

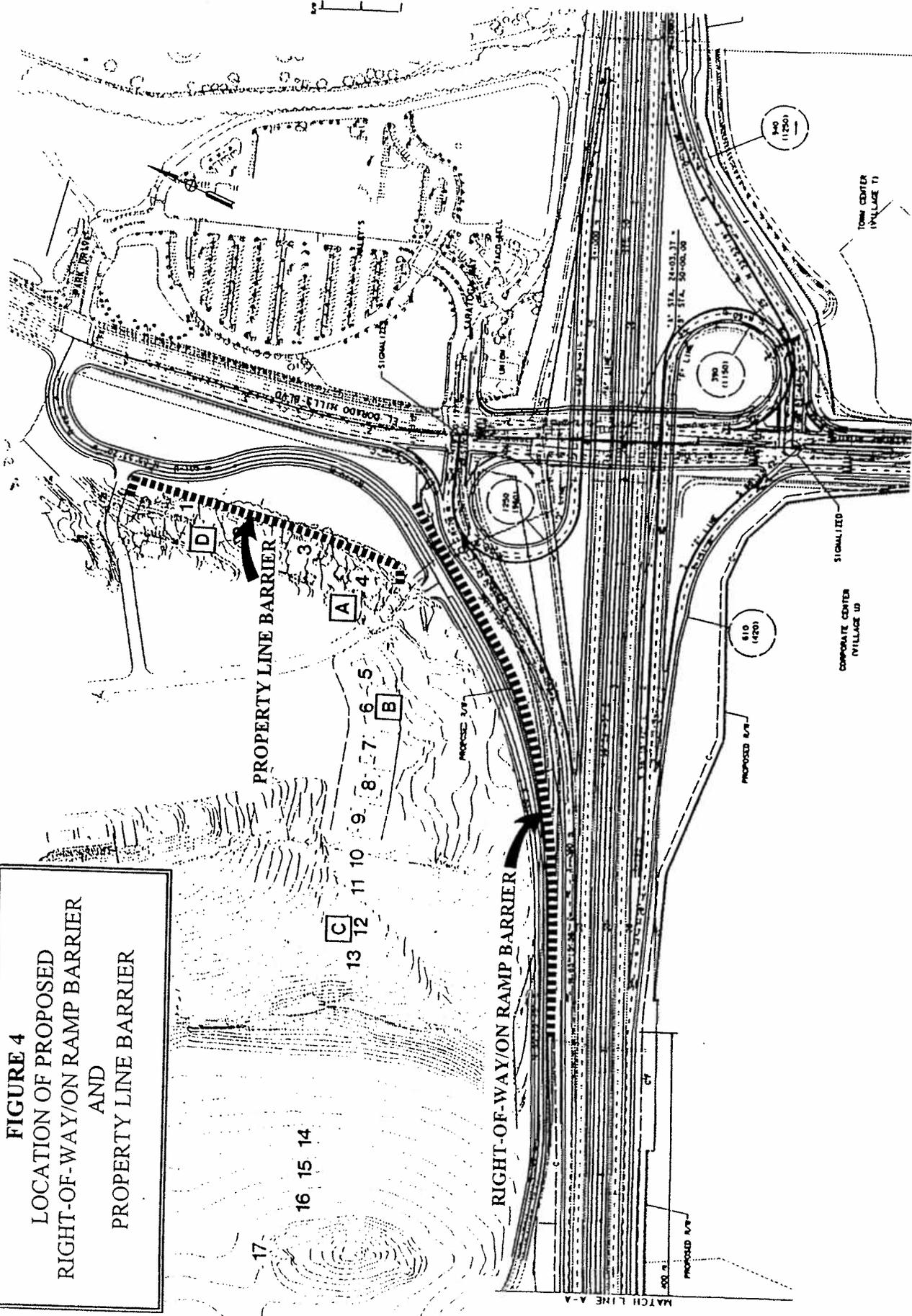
The third barrier configuration which was analyzed included a barrier located along the right-of-way between the on-ramp and Saratoga Way, which extended from approximately Station 23+40 to approximately Station 20+25. Due to changes in topography, the barrier was then relocated to the hinge of the Westbound on-ramp at approximately Station 20+25, and extended to Station 19+00. As a means of providing shielding to the condominiums along Hills Court and Scenic Court, a property line barrier was proposed for those residences. Table XI shows the results of this analysis. Figure 4 shows the locations of these barriers.

TABLE XI
PREDICTED COMBINED ROW/PROPERTY LINE BARRIER EFFECTIVENESS
 (Year 2020 Preferred Alternative)

Receiver	Location	L _{eq} /L _{dn} , dB without barrier	Predicted L _{eq} /L _{dn} , dB			
			8'/10' Barrier*		10' Barrier	12' Barrier
R1	Scenic Court	67/68	8'	59/60	57/58	55/56
R2	Scenic Court	67/68	8'	60/61	58/59	56/57
R3	Hills Court	68/69	8'	61/62	59/60	57/58
R4	Hills Court	69/70	8'	63/64	61/62	59/60
R5	Kings Canyon	69/70	10'	64/65	64/65	63/64
R6	Kings Canyon	69/70	10'	63/64	63/64	62/63
R7	Kings Canyon	69/70	10'	63/64	63/64	62/63
R8	Kings Canyon	69/70	10'	63/64	63/64	62/63
R9	Kings Canyon	68/69	10'	65/66	65/66	64/65
R10	Platt Circle	68/69	10'	63/64	63/64	63/64
R11	Platt Circle	68/69	10'	63/64	63/64	63/64
R12	Platt Circle	69/70	10'	64/65	64/65	63/64
R13	Platt Circle	69/70	10'	63/64	63/64	63/64

* Assumes an 8 foot tall barrier along the property lines and a 10 foot tall barrier along the right-of-way.

FIGURE 4
LOCATION OF PROPOSED
RIGHT-OF-WAY/ON RAMP BARRIER
AND
PROPERTY LINE BARRIER



BBA

.....: Proposed Barrier Location

Interior Traffic Noise Mitigation

Based upon the analysis, exterior traffic noise levels will exceed 65 dB L_{dn} . Therefore, interior traffic noise levels could exceed the 45 dB L_{dn} interior noise level criterion. A detailed acoustical analysis of the traffic noise reduction of the building facades of potentially affected residences should be conducted when the project roadway improvements have been completed, and barrier construction is completed. The analysis should include a sampling of at least 25% of the residences. The analysis should include simultaneous interior and exterior traffic noise measurements of second story rooms facing the roadway improvement project site. When the noise reduction of the building facades has been determined, the exterior to interior noise reduction should be applied to the predicted future traffic noise levels, and the future interior traffic noise levels can be calculated.

If interior noise levels are determined to exceed the 45 dB L_{dn} interior noise level criterion, facade construction improvements should be recommended to mitigate the interior noise levels to 45 dB L_{dn} . FHWA and Caltrans will not participate in the initial and/or maintenance costs of any insulation measures proposed. Therefore, this measure is a commitment of the County.

Blasting Mitigation

As a means of mitigating blasting noise impacts, a qualified blasting consultant should be retained. Advanced notice of blasting should be provided to nearby residents. In addition, noise levels due to blasting should be limited to a peak overpressure of 112 dB at the nearest inhabited building facade.

PRELIMINARY DETERMINATION OF REASONABLENESS

The Protocol provides worksheets for arriving at a "preliminary determination of reasonableness" for providing a barrier. This analysis is used solely for assessing the cost/benefit reasonableness as it relates to achieving the Caltrans/FHWA criterion of 67 dB L_{eq} . BBA utilized the methodology provided in the Protocol for a preliminary determination of reasonableness for each of the three barrier scenarios. The worksheets are provided in Appendix C.

Barrier 1 Configuration Preliminary Determination of Reasonableness

The first barrier which was evaluated is labeled **B1** (Barrier number 1), and is along the right-of-way between the on-ramp and Saratoga Way, which extended from approximately Station 23+40 to approximately Station 20+25. Due to changes in topography, the barrier was then relocated to the hinge of the Westbound on-ramp at approximately Station 20+25, and extended to Station 19+00. This barrier configuration is expected to provide reductions in noise for residences along Kings Canyon and the eastern leg of Platt Circle. This is a total of 11 residential units, including 2 second line receivers which are expected to benefit from the barrier. Based upon the analysis, a barrier

height of 10 feet would be required to achieve a minimum 5 dB reduction in traffic noise at identified receivers. The total length of the barrier is expected to be approximately 440 meters. Assuming a total cost of construction of \$151/m² (\$14/ft²), including costs of the wall, traffic control, drainage, modifying planting, miscellaneous items and a 10% contingency, the calculated total cost of the wall is \$202,020.

Based upon the Protocol worksheets, the reasonable allowance per benefited residence is \$319,000. Assuming that 11 residences would benefit from the sound wall, the reasonable allowance for the wall is \$319,000. Since the calculated actual cost of \$202,020 is less than the reasonable allowance of \$319,000, the sound wall is considered to be reasonable.

Barrier 2 Configuration Preliminary Determination of Reasonableness

The second barrier configuration which was evaluated is labeled **B2** (Barrier number 2) located along the property lines of residences located on Hills Court, Scenic Court, Kings Canyon Way and eastern leg of Platt Circle. These two separate barriers are expected to benefit 24 residences along each of the roadways mentioned above. This is a total of 24 residential units, including 24 line receivers. Based upon the analysis, a barrier height of 8 feet would be required to achieve a minimum 5 dB reduction in traffic noise at the identified receivers, and break line-of-sight between heavy truck stacks. The total length of both property line barriers is expected to be approximately 600 meters/1968 feet. Assuming a total cost of construction of \$151/m² (\$14/ft²), including costs of the wall, footings, traffic control, drainage, modifying planting, miscellaneous items and a 10% contingency, the calculated total cost of the wall is \$220,416.

Based upon the Protocol worksheets, the reasonable allowance per benefited residence is \$319,000. Assuming that 21 residences would benefit from the sound wall, the reasonable allowance for the wall is \$651,000. Since the calculated actual cost of \$220,416 is less than the reasonable allowance of \$651,000, the sound wall is considered to be reasonable.

Barriers 3 & 4 Configuration Preliminary Determination of Reasonableness

The third barrier configuration which was evaluated is labeled **B3 & B4** (Barrier number 3) and includes the combination of the 10 foot tall right-of-way barrier/on-ramp barrier (B3) located on Hills Court and Scenic Court. This combination of barriers is expected to benefit 24 residences along Hills Court, Scenic Court, Kings Canyon Way and eastern leg of Platt Circle. This is a total of 24 residential units. The total length of both barriers is expected to be approximately 690 meters/2,263 feet. The property line barrier is 250 meters/820 feet and the ROW/ramp barrier is 440 meters/1443 feet. Assuming a total cost of construction of \$151/m² (\$14/ft²), including costs of the wall, footings, traffic control, drainage, modifying planting, miscellaneous items and a 10% contingency, the calculated total cost of the wall is \$220,416.

miscellaneous items and a 10% contingency, the calculated total cost of the walls is \$293,860 (\$202,020 for the ROW/shoulder barrier, and \$91,840 for the property line barrier).

Based upon the Protocol worksheets, the reasonable allowance per benefited residence is \$29,000 for residences benefited from the ROW/shoulder barrier. Assuming that 11 residences would benefit from this sound wall, the reasonable allowance for the wall is \$319,000.

A reasonable allowance per benefited residence is \$31,000 for residences benefited from the property line barrier. Assuming that 10 residences would benefit from this sound wall, the reasonable allowance is \$310,000.

The cumulative reasonable allowance is \$629,000.

Since the calculated actual cost of both walls of \$293,860 is less than the reasonable allowance of \$629,000, the sound wall is considered to be reasonable.

CONCLUSIONS:

Traffic noise levels in the vicinity of the interchange are expected to exceed the FHWA/Caltrans noise level criteria at some residences. Traffic noise levels in the vicinity of the interchange are expected to exceed the El Dorado County noise level criteria at residences in the vicinity of the project site.

In general, it appears that traffic noise barriers could be effectively utilized as a mitigation measure. Specific recommendations for noise barrier heights and locations are described in previous sections of this analysis.

These conclusions are based on the best available information pertaining to existing and projected U.S. 50, associated ramps and El Dorado Hills Boulevard traffic conditions, both with and without the proposed improvements.

Respectfully submitted,

Brown-Buntin Associates, Inc.



Jim Brennan

Senior Consultant

APPENDIX A
ACOUSTICAL TERMINOLOGY

**AMBIENT
NOISE LEVEL:**

The composite of noise from all sources near and far. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location.

CNEL:

Community Noise Equivalent Level. The average equivalent sound level during a 24-hour day, obtained after addition of approximately five decibels to sound levels in the evening from 7:00 p.m. to 10:00 p.m. and ten decibels to sound levels in the night before 7:00 a.m. and after 10:00 p.m.

DECIBEL, dB:

A unit for describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the reference pressure, which is 20 micropascals (20 micronewtons per square meter).

L_{dn} :

Day-Night Average Sound Level. The average equivalent sound level during a 24-hour day, obtained after addition of ten decibels to sound levels in the night after 10:00 p.m. and before 7:00 a.m.

L_{eq} :

Equivalent Sound Level. The sound level containing the same total energy as a time varying signal over a given sample period. L_{eq} is typically computed over 1, 8 and 24-hour sample periods.

Note: L_{dn} represents the daily level of noise exposure averaged on an annual basis, while L_{eq} represents the average noise exposure for a shorter time period, typically one hour.

L_{max} :

The maximum sound level recorded during a noise event.

L_n :

The sound level exceeded "n" percent of the time during a sample interval. L_{10} equals the level exceeded 10 percent of the time (L_{90} , L_{50} , etc.)

BBA

APPENDIX A-2
ACOUSTICAL TERMINOLOGY

**NOISE
EXPOSURE
CONTOURS:**

Lines drawn about a noise source indicating constant levels of noise exposure. L_{dn} contours are frequently utilized to describe community exposure to noise.

SEL OR SENEL:

Sound Exposure Level or Single Event Noise Exposure Level. The level of noise accumulated during a single noise event, such as an aircraft overflight, with reference to a duration of one second. More specifically, it is the time-integrated A-weighted squared sound pressure level for a stated time interval or event, based on a reference pressure of 20 micropascals and a reference duration of one second.

SOUND LEVEL:

The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the response of the human ear and gives good correlation with subjective reactions to noise.

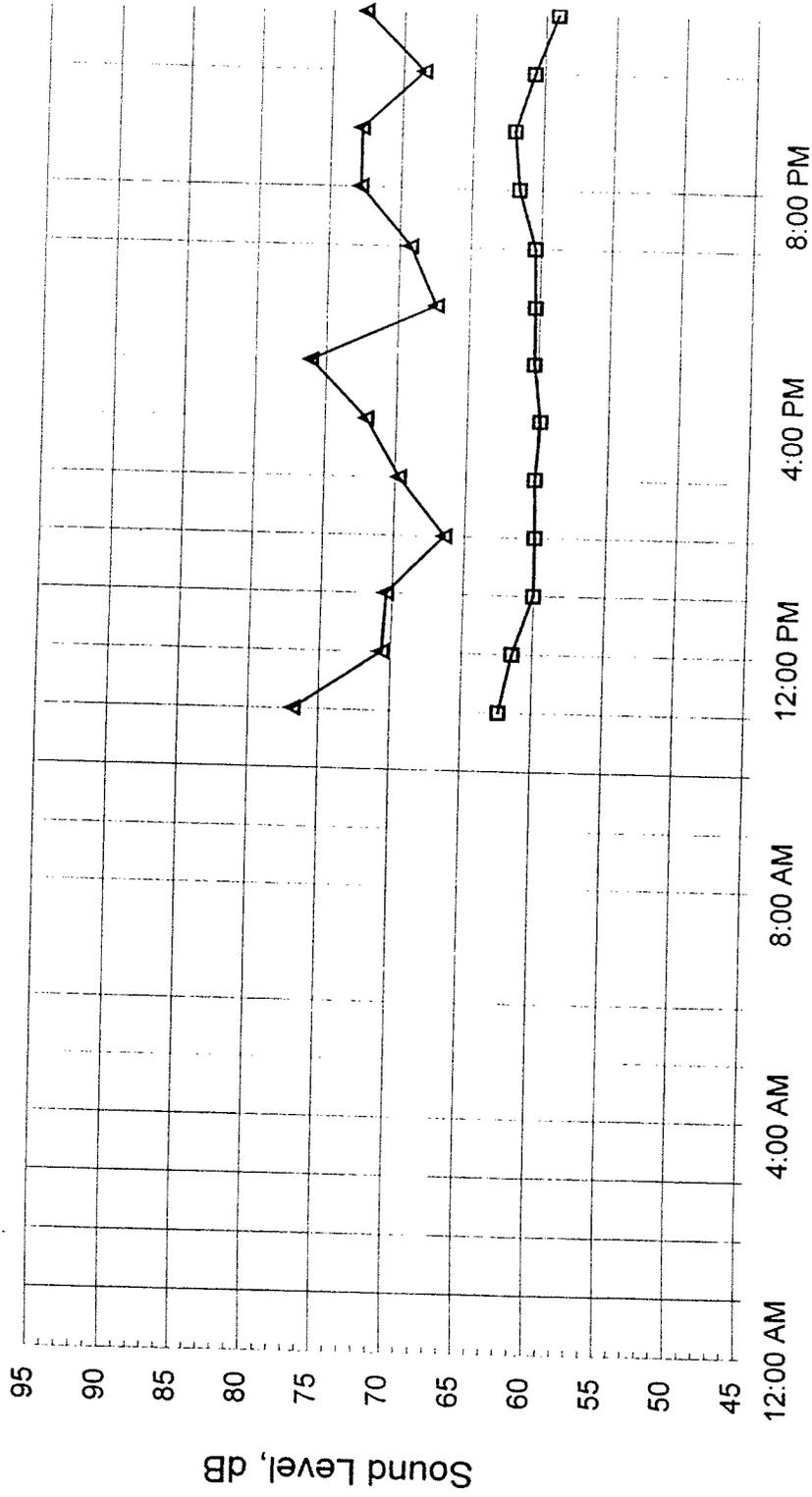
APPENDIX B

BBA

Measured Hourly Noise Level

3913 Hills Court - Site A

August 7, 1998



Hour of Day

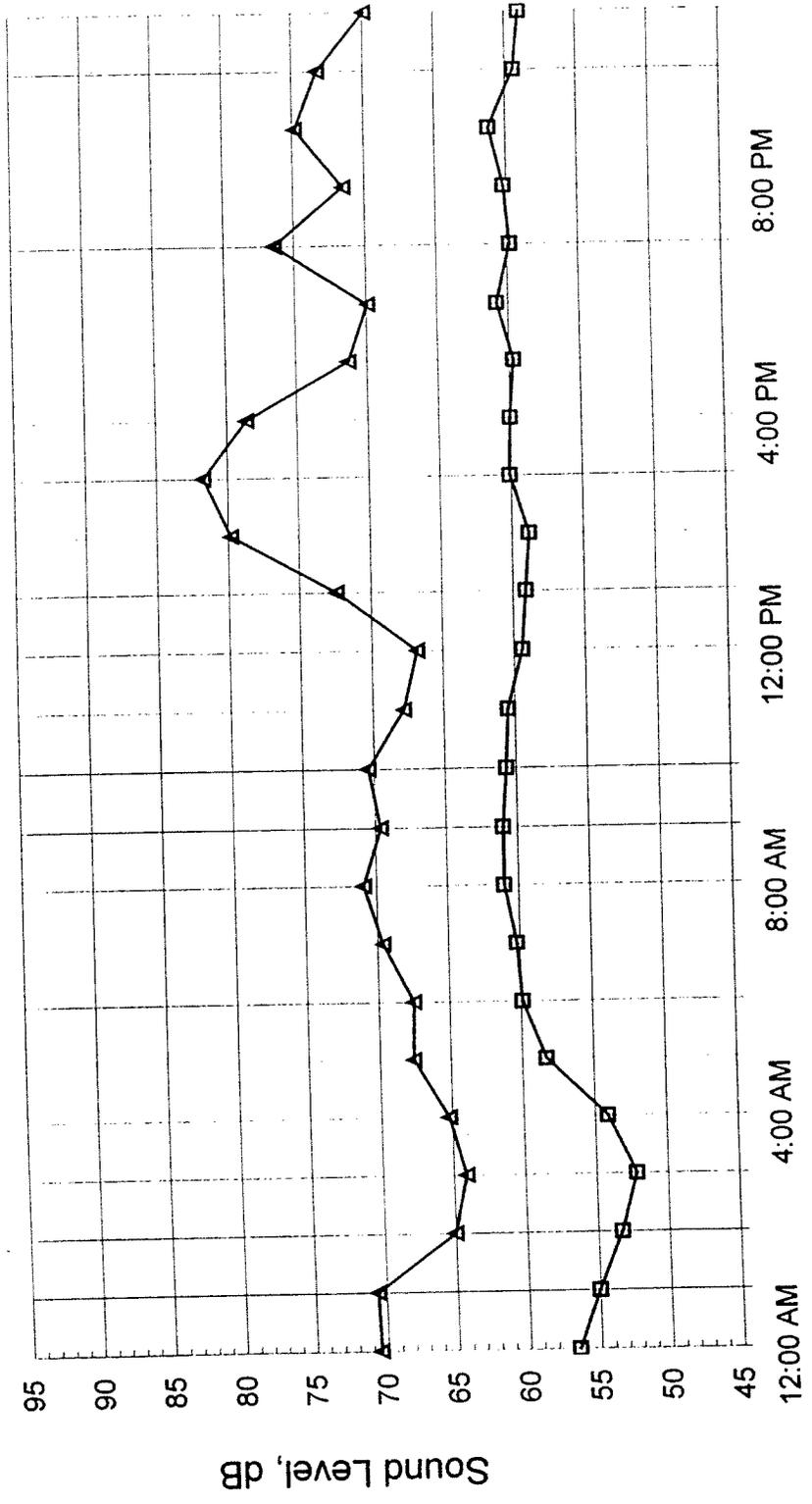
▲ Lmax ■ Leq

BBA

Measured Hourly Noise Level

3913 Hills Court - Site A

August 8, 1998



Hour of Day

—▲— Lmax —■— Leq

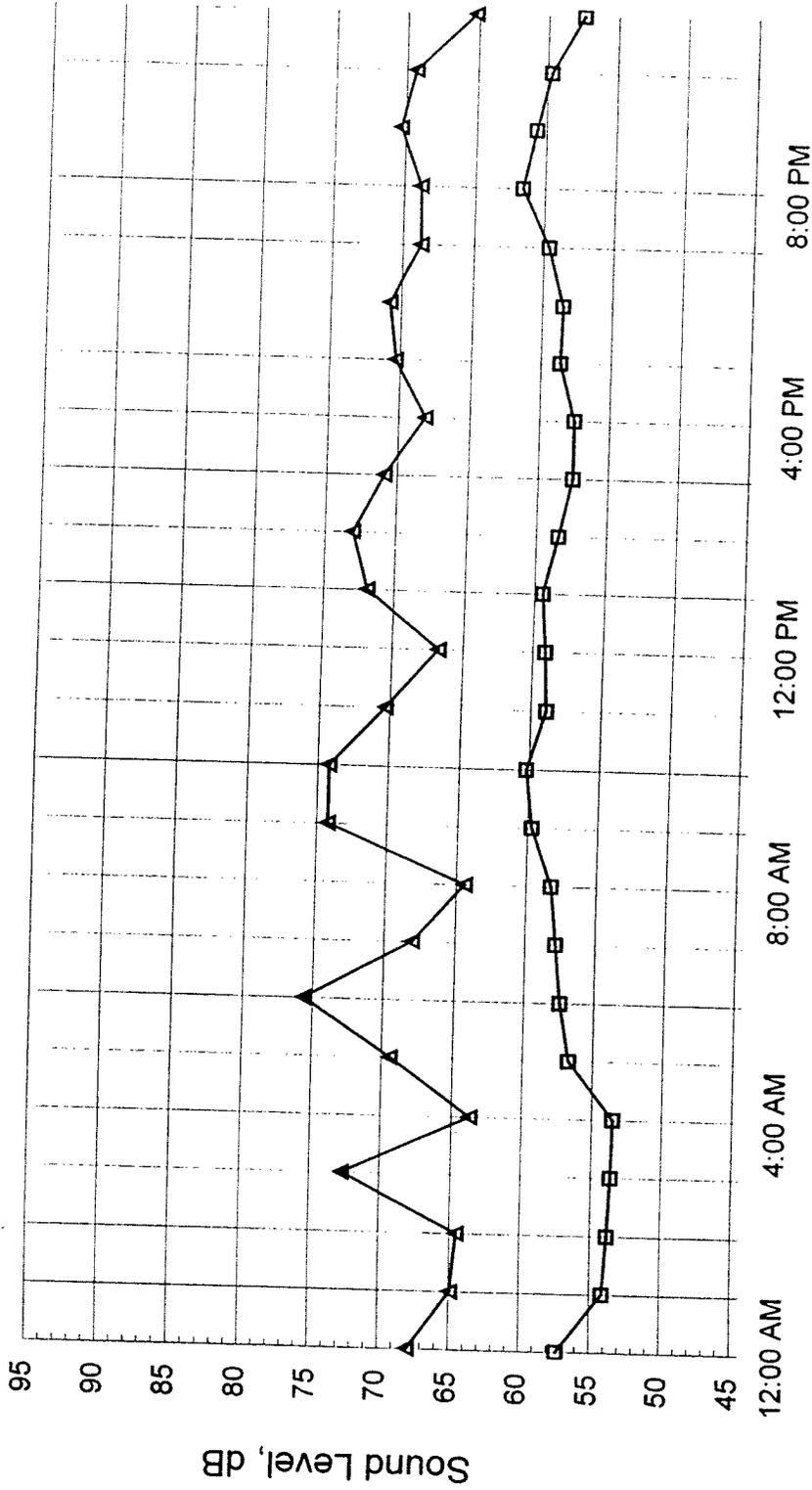
LDN= 64.2 dB



Measured Hourly Noise Level

3913 Hills Court - Site A

August 9, 1998



LDN= 63.4 dB

Hour of Day

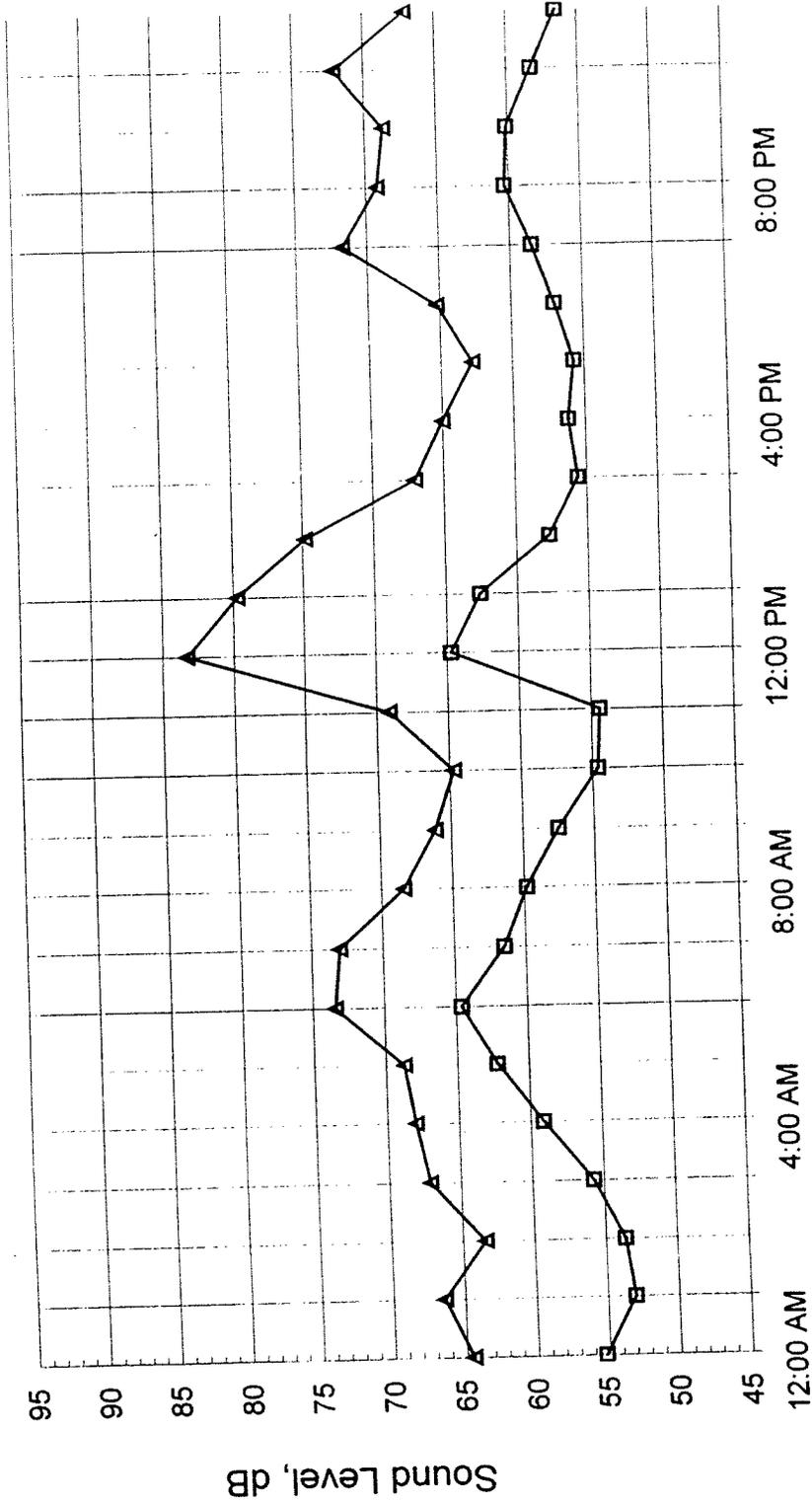
▲ Lmax ■ Leq

BBA

Measured Hourly Noise Level

3913 Hills Court - Site A

August 10, 1998



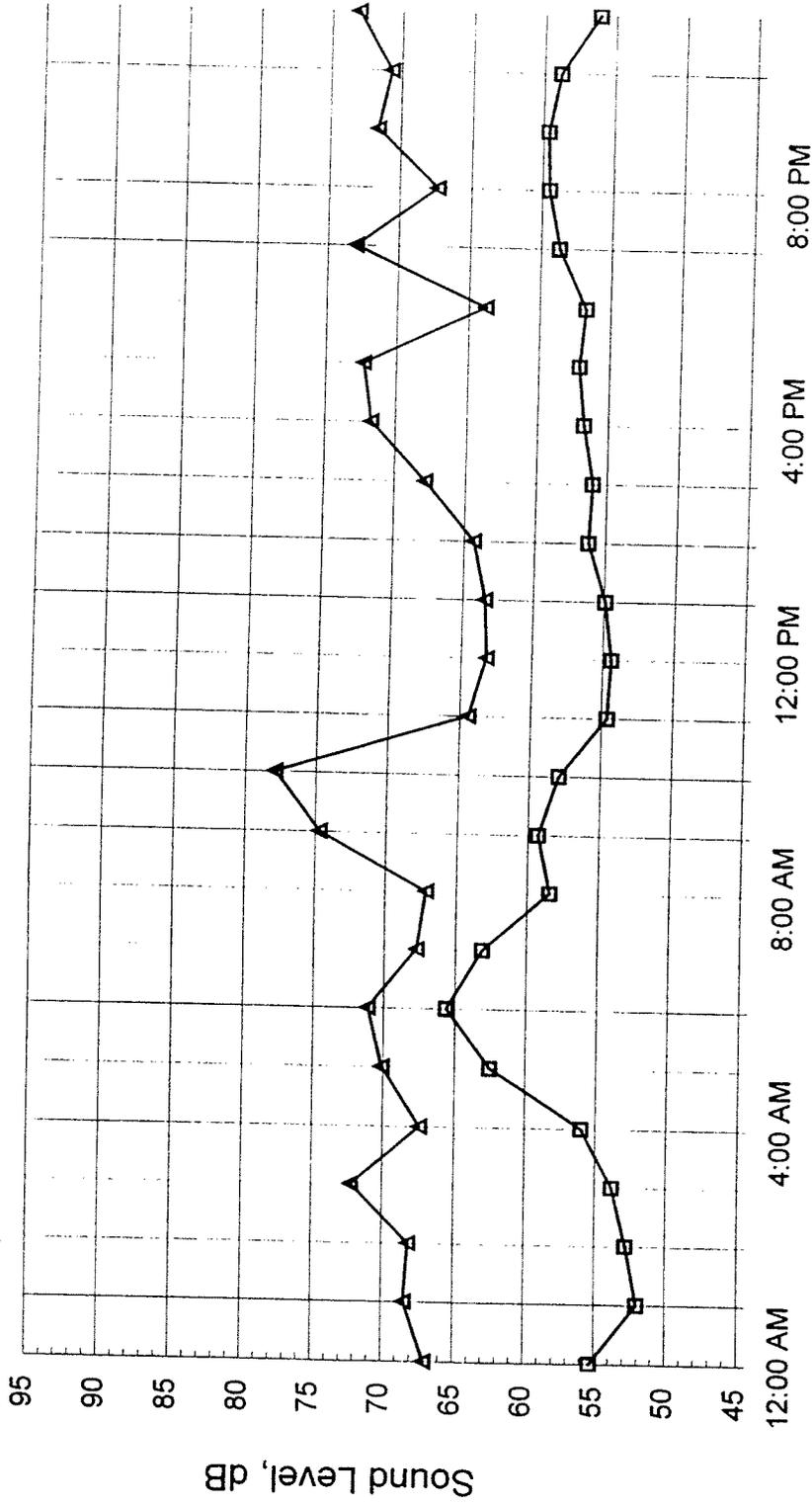
LDN= 65.7 dB

—▲— Lmax —■— Leq

BBA

Measured Hourly Noise Level

3913 Hills Court - Site A
August 11, 1998



LDN= 65.7 dB

Hour of Day

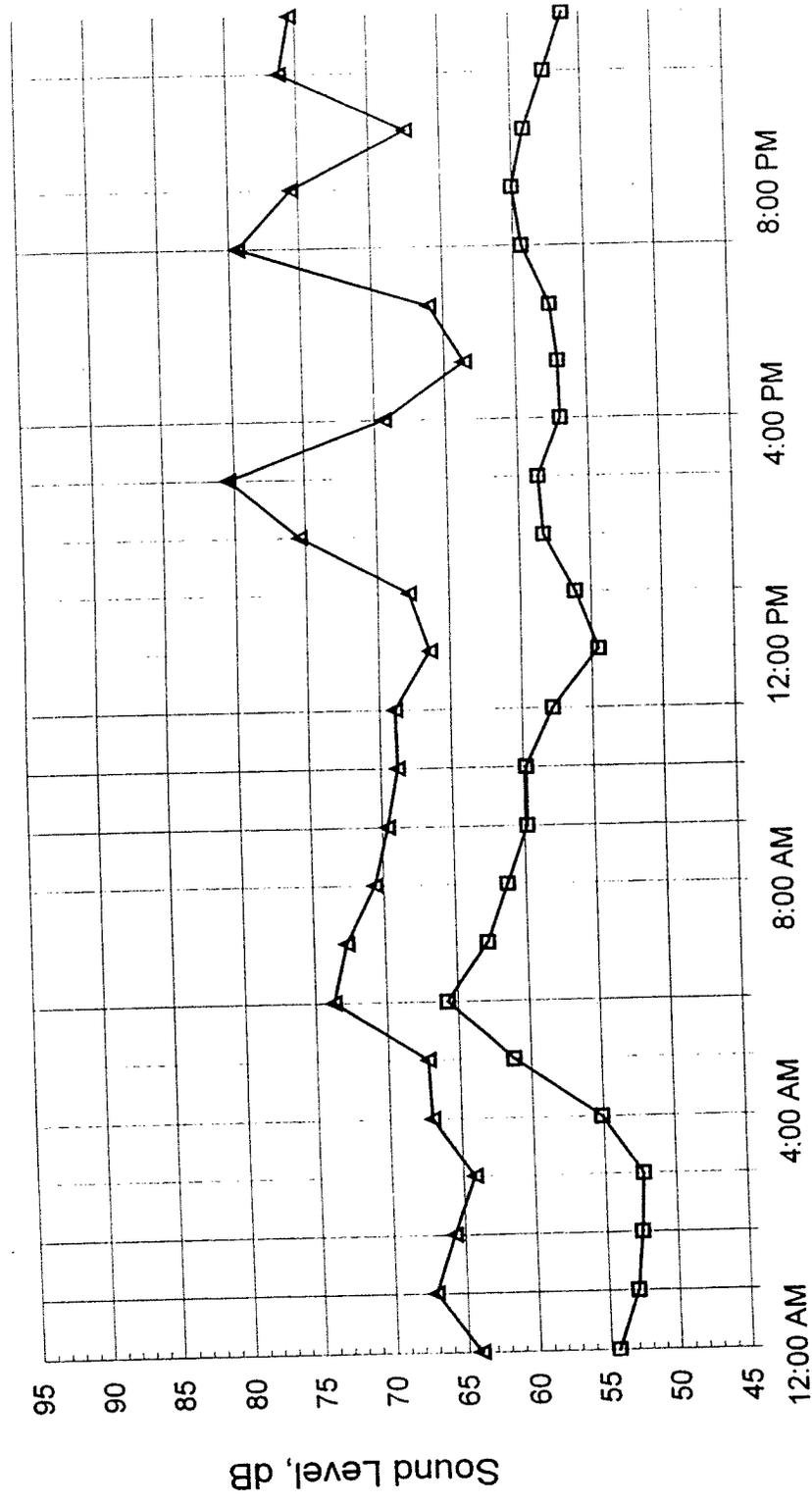
▲ Lmax ■ Leq

BBA

Measured Hourly Noise Level

3913 Hills Court - Site A

August 12, 1998



Hour of Day

—▲— Lmax —■— Leq

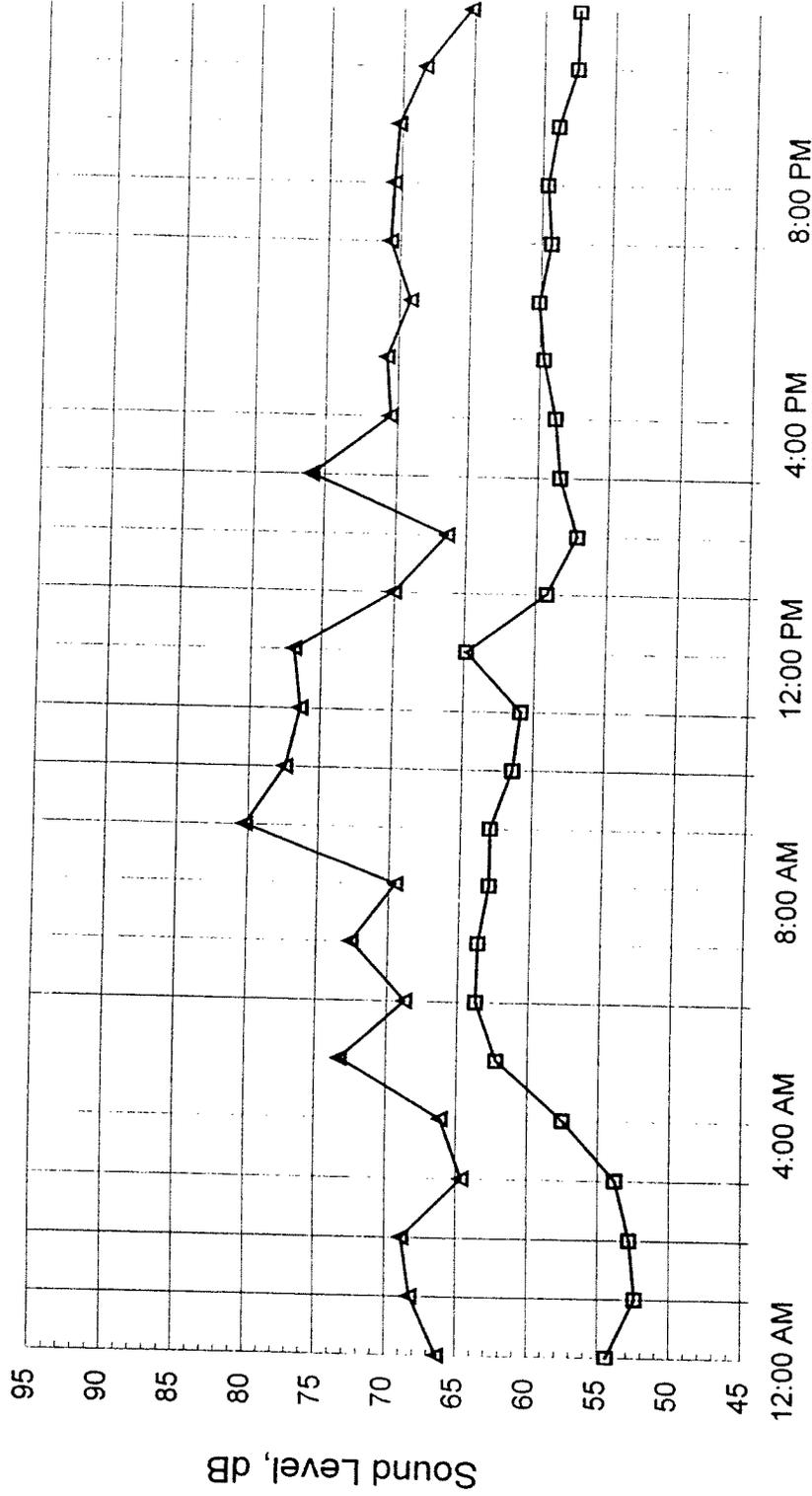
LDN= 65.4 dB

BBA

Measured Hourly Noise Level

3913 Hills Court - Site A

August 13, 1998



Hour of Day

LDN= 65.5 dB

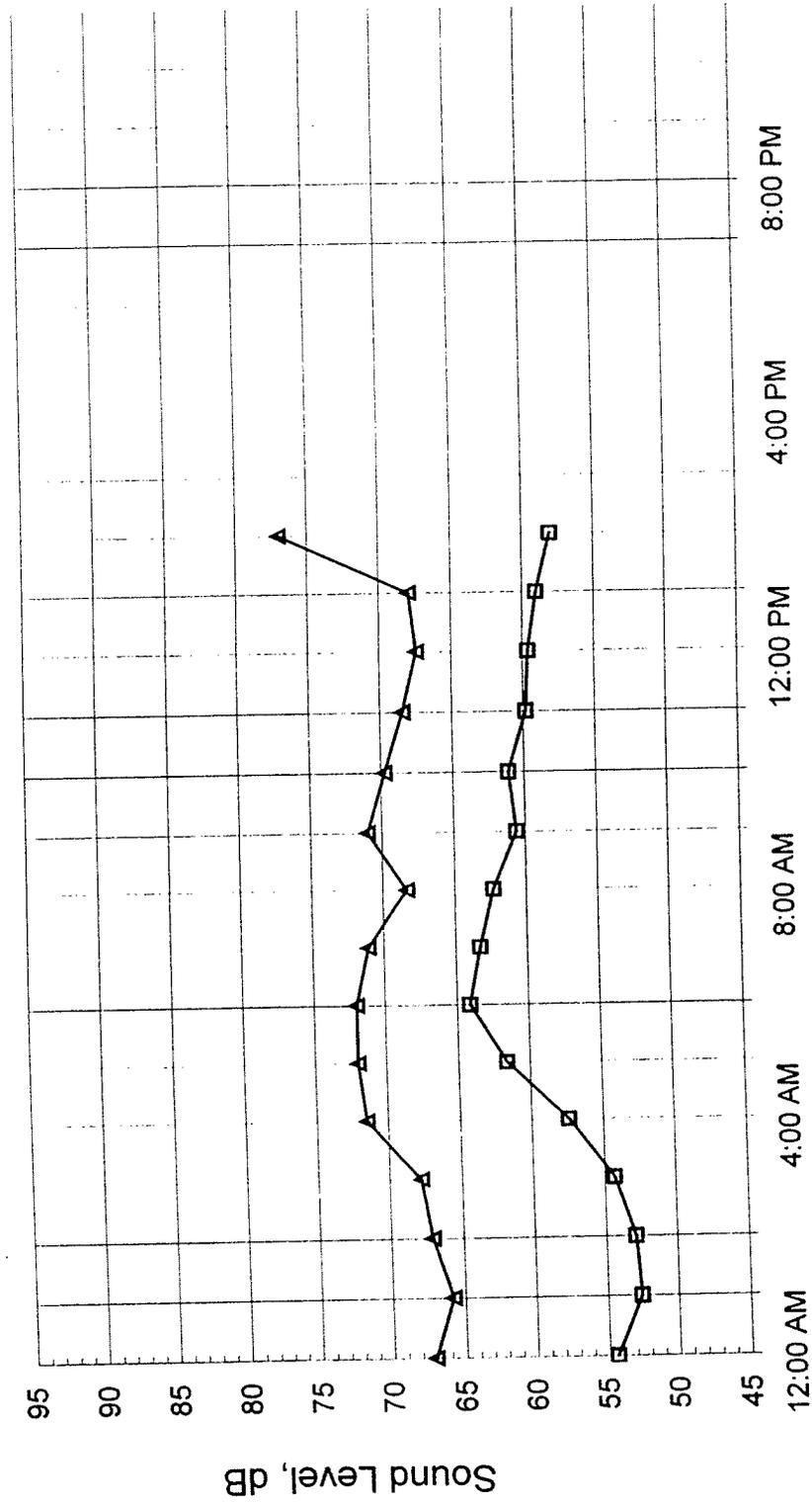


BBA

Measured Hourly Noise Level

3913 Hills Court - Site A

August 14, 1998



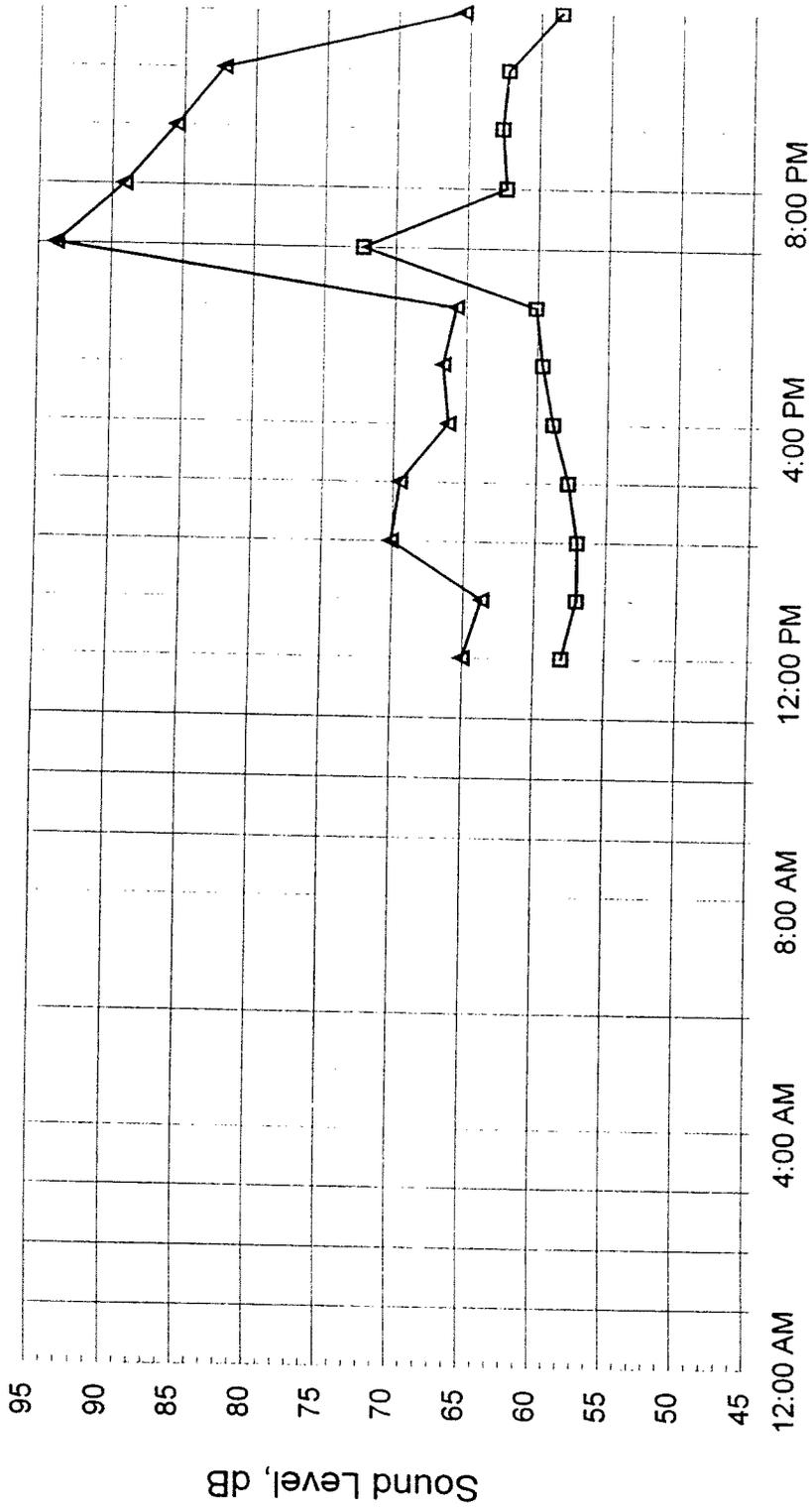
Hour of Day

—▲— Lmax —■— Leq

BBA

Measured Hourly Noise Level

956 Kings Canyon Way - Site B
August 7, 1998

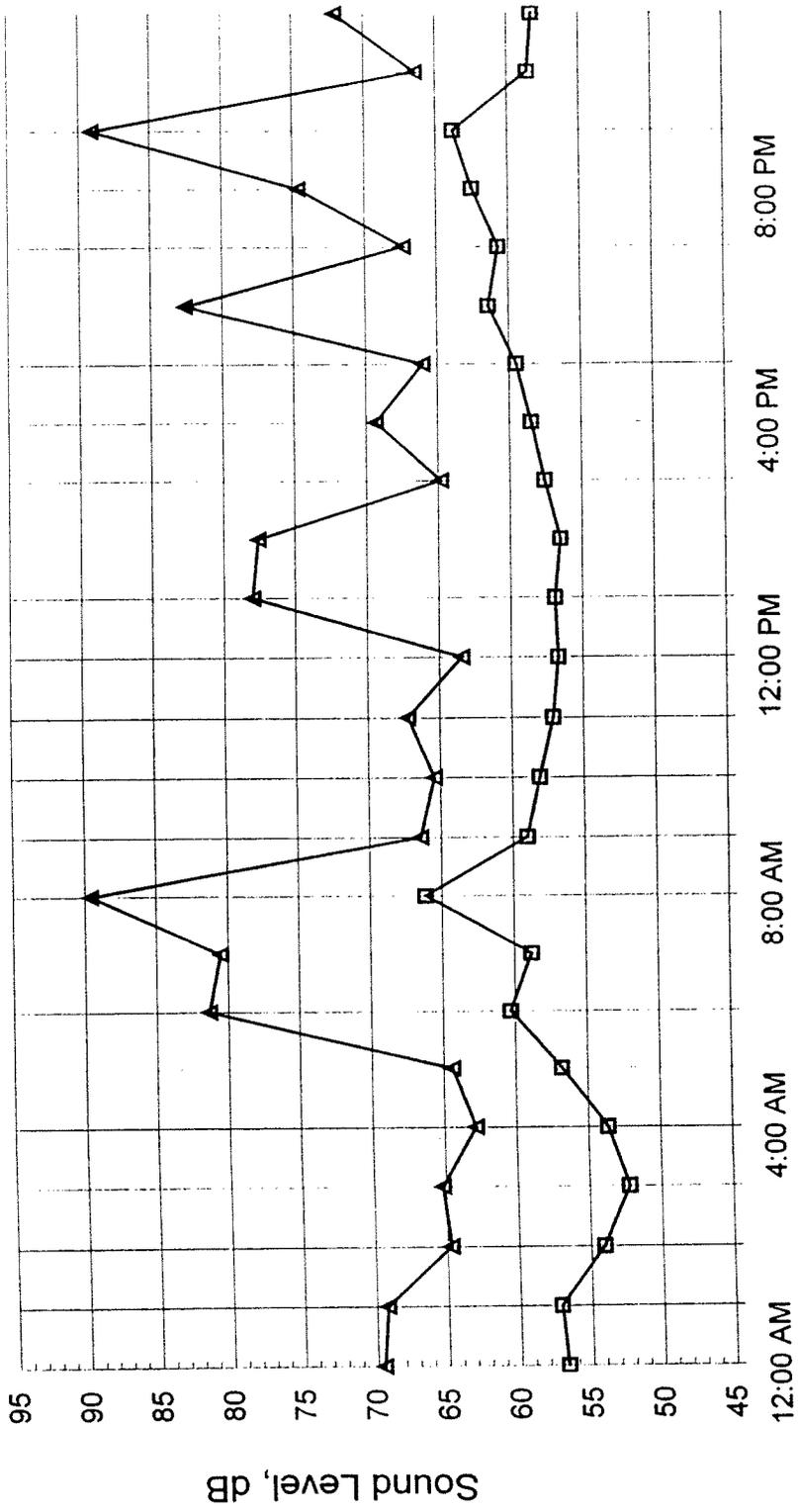


Hour of Day

—▲— Lmax —■— Leq

BBA

Measured Hourly Noise Level
 956 Kings Canyon Way - Site B
 August 8, 1998



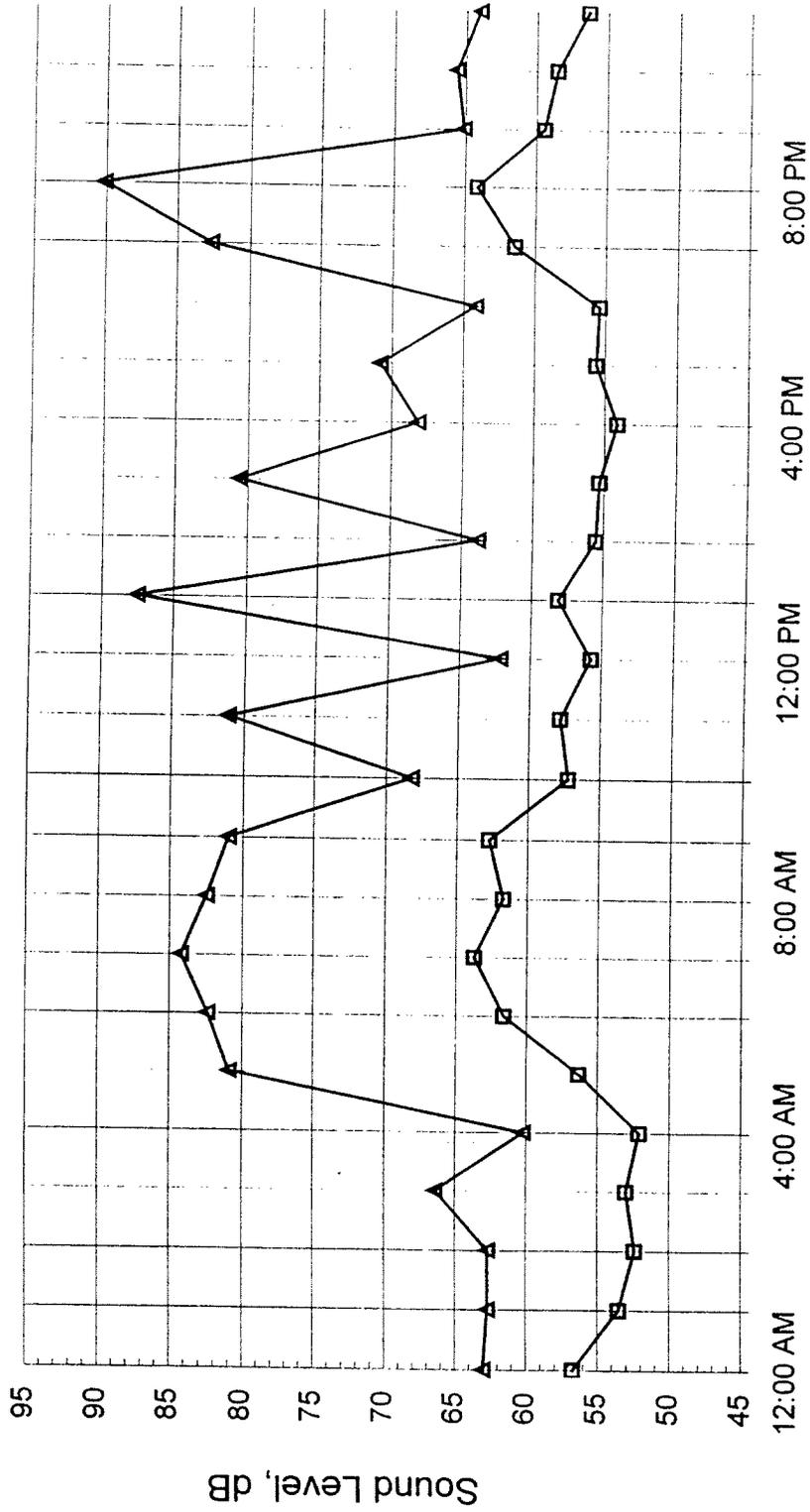
1.000-547 dB

Hour of Day

Measured Hourly Noise Level

956 Kings Canyon Way - Site B

August 9, 1998



Hour of Day

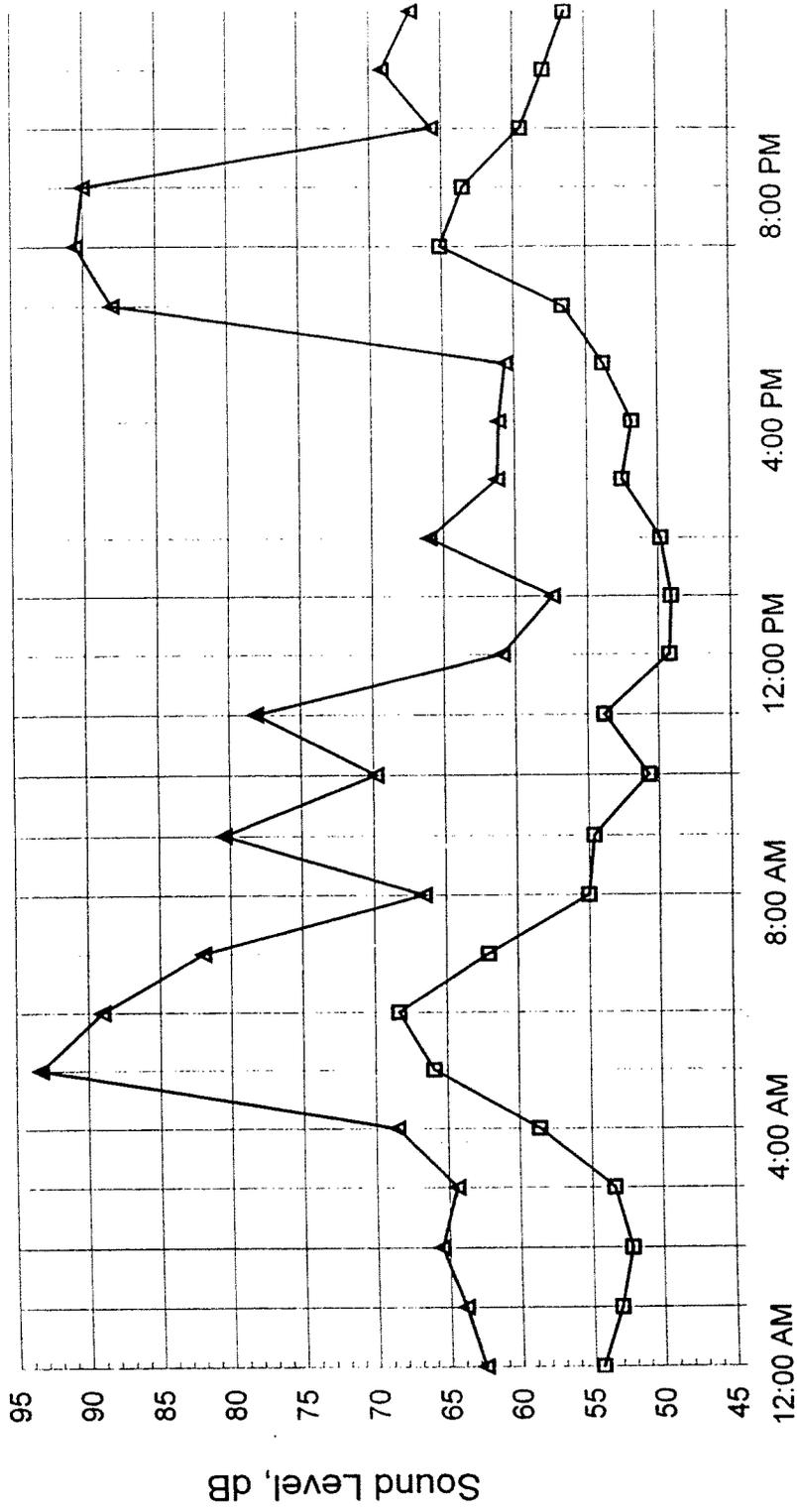
LDN= 63.7 dB



BBA

Measured Hourly Noise Level

956 Kings Canyon Way - Site B
August 10, 1998



LDN= 67.8 dB

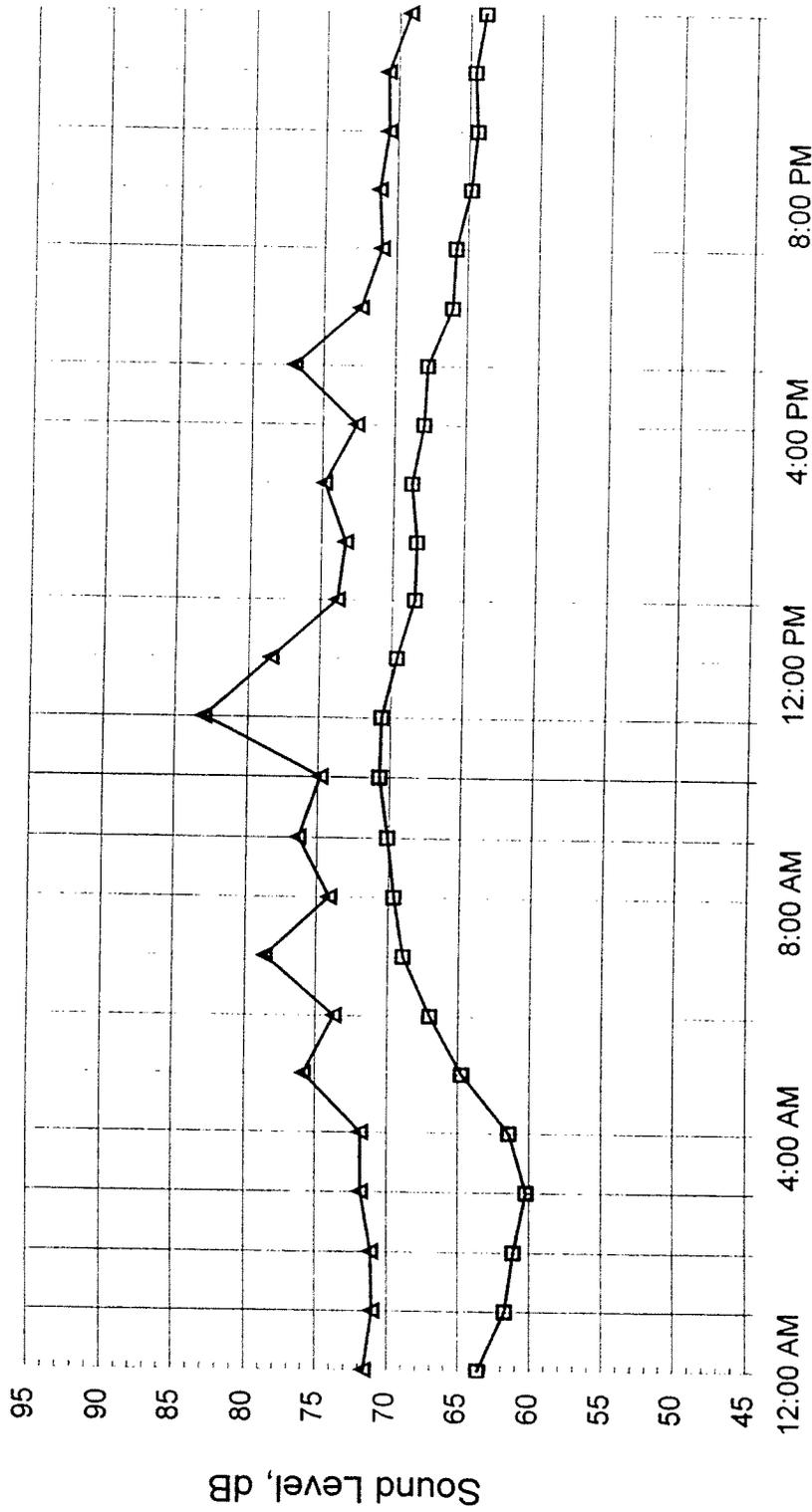
—▲— Lmax —■— Leq

BBA

Measured Hourly Noise Level

956 Kings Canyon Way - Site B

February 14, 1998

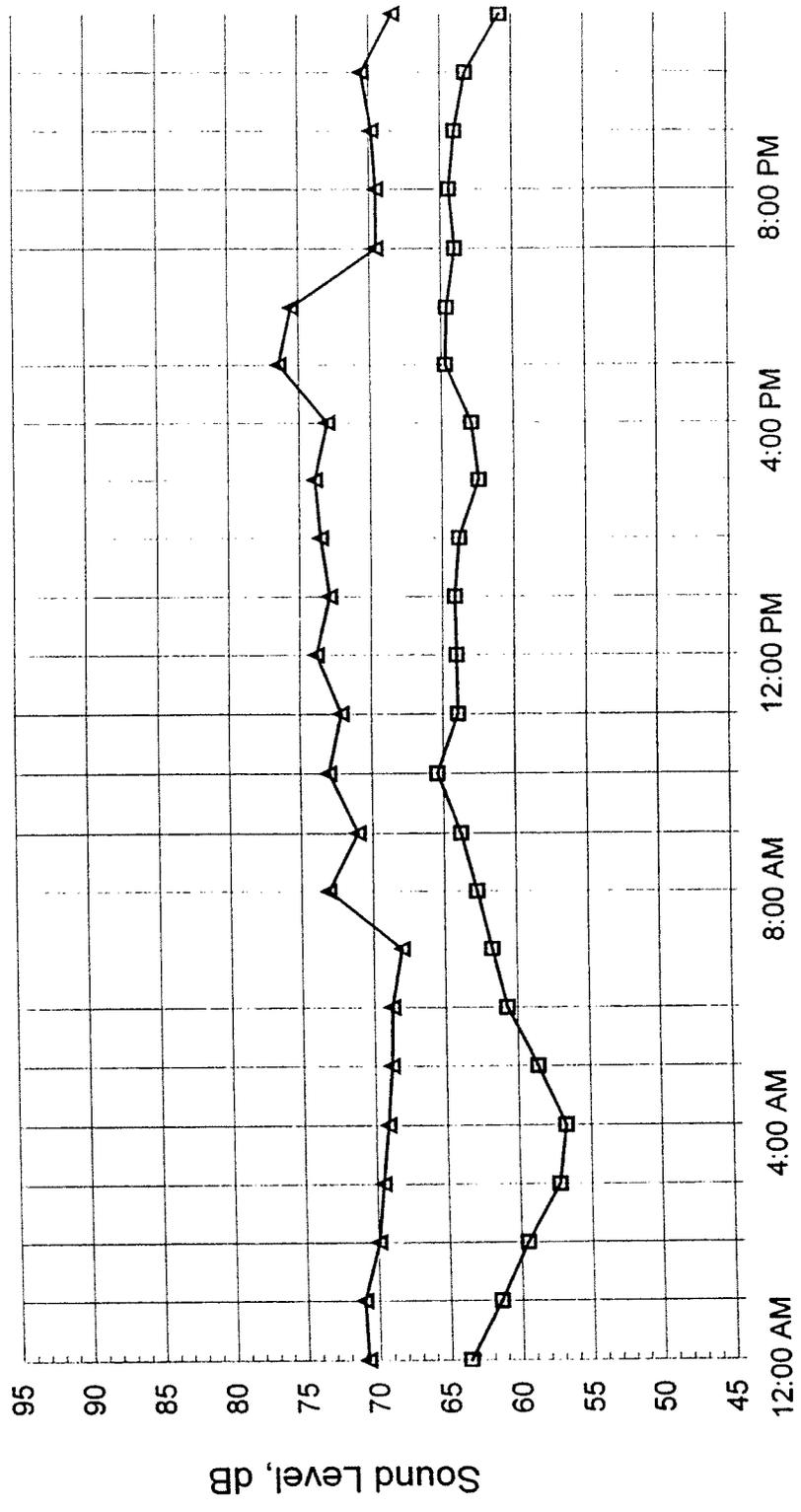


LDN= 71.2 dB

▲ Lmax ■ Leq

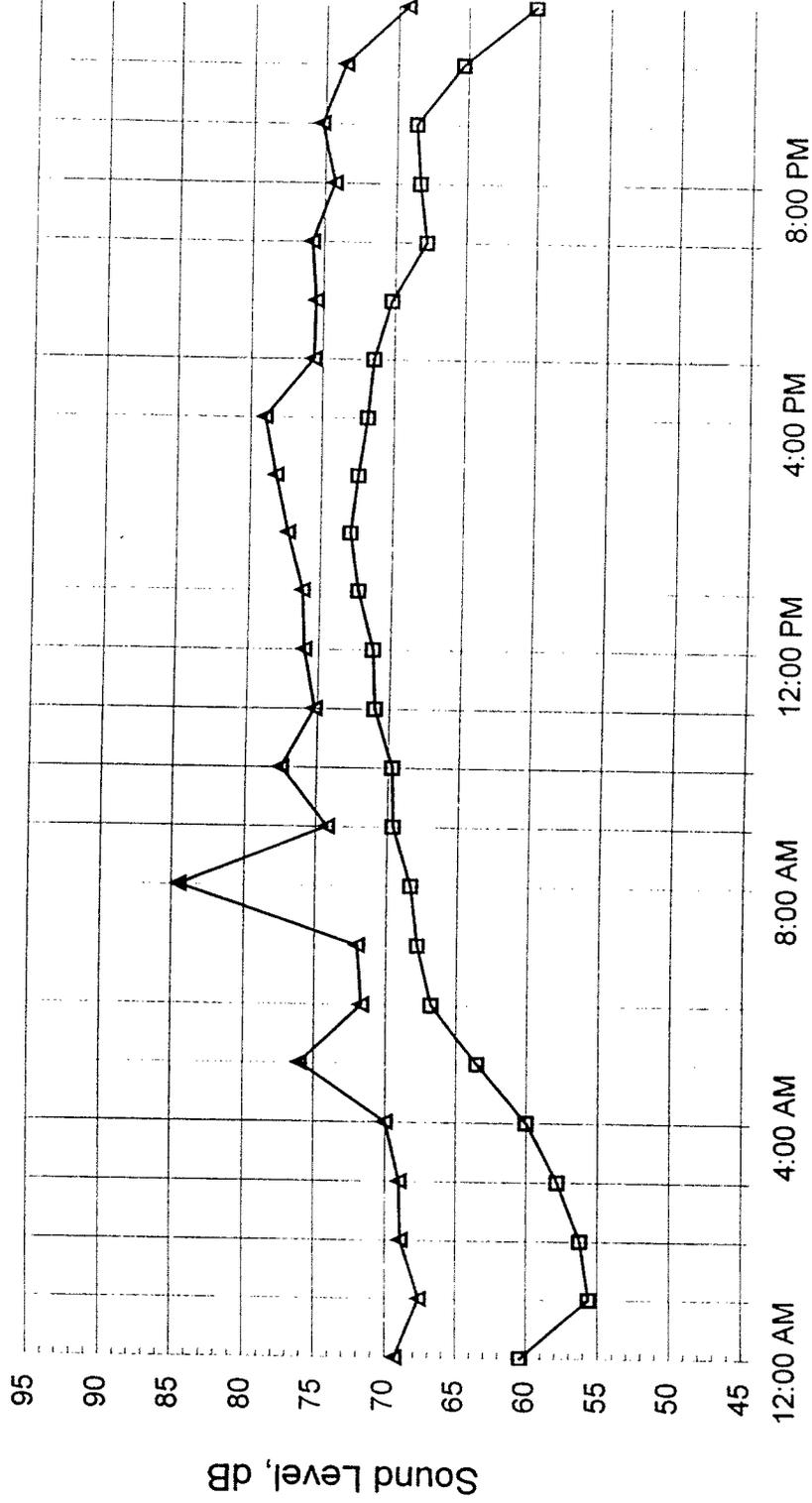
BBA

Measured Hourly Noise Level
956 Kings Canyon Way - Site B
February 15, 1998



Hour of Day

Measured Hourly Noise Level
 956 Kings Canyon Way - Site B
 February 16, 1998



LDN= 71.2 dB

Hour of Day

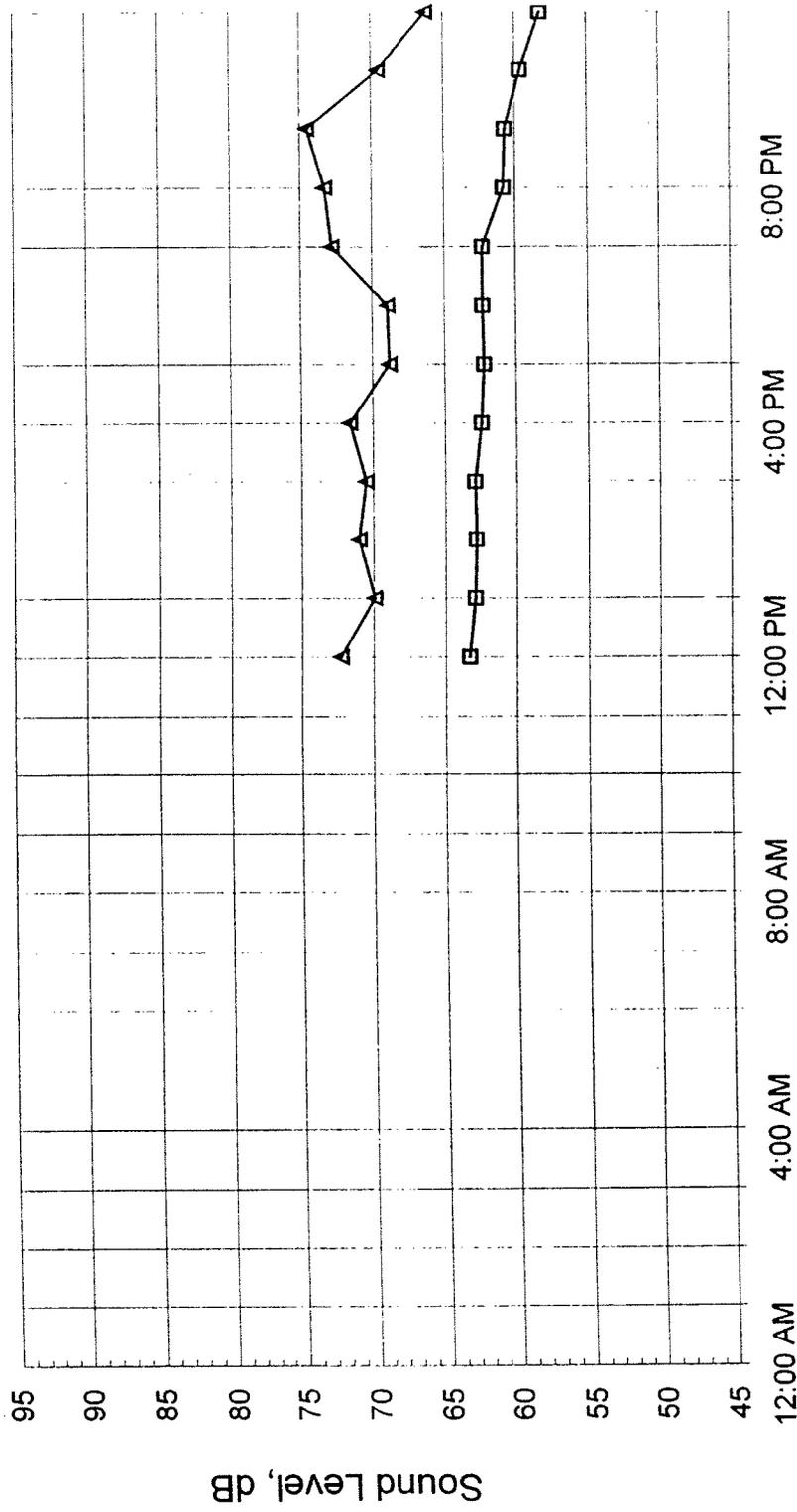


BBA

Measured Hourly Noise Level

707 Platt Circle - Site C

August 7, 1998



Hour of Day

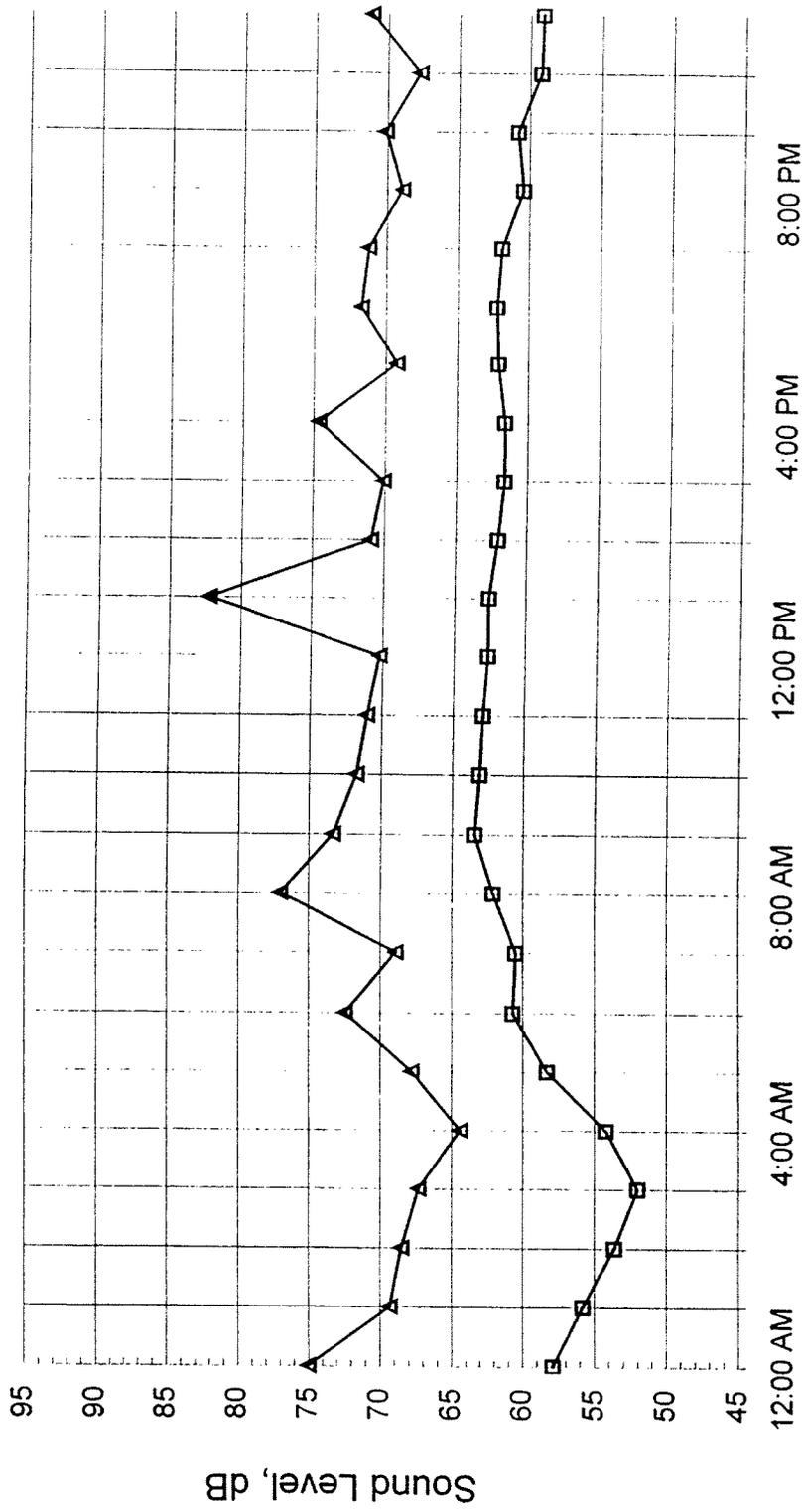
—▲— Lmax —■— Leq

BBA

Measured Hourly Noise Level

707 Platt Circle - Site C

August 8, 1998



LDN= 65.0 dB

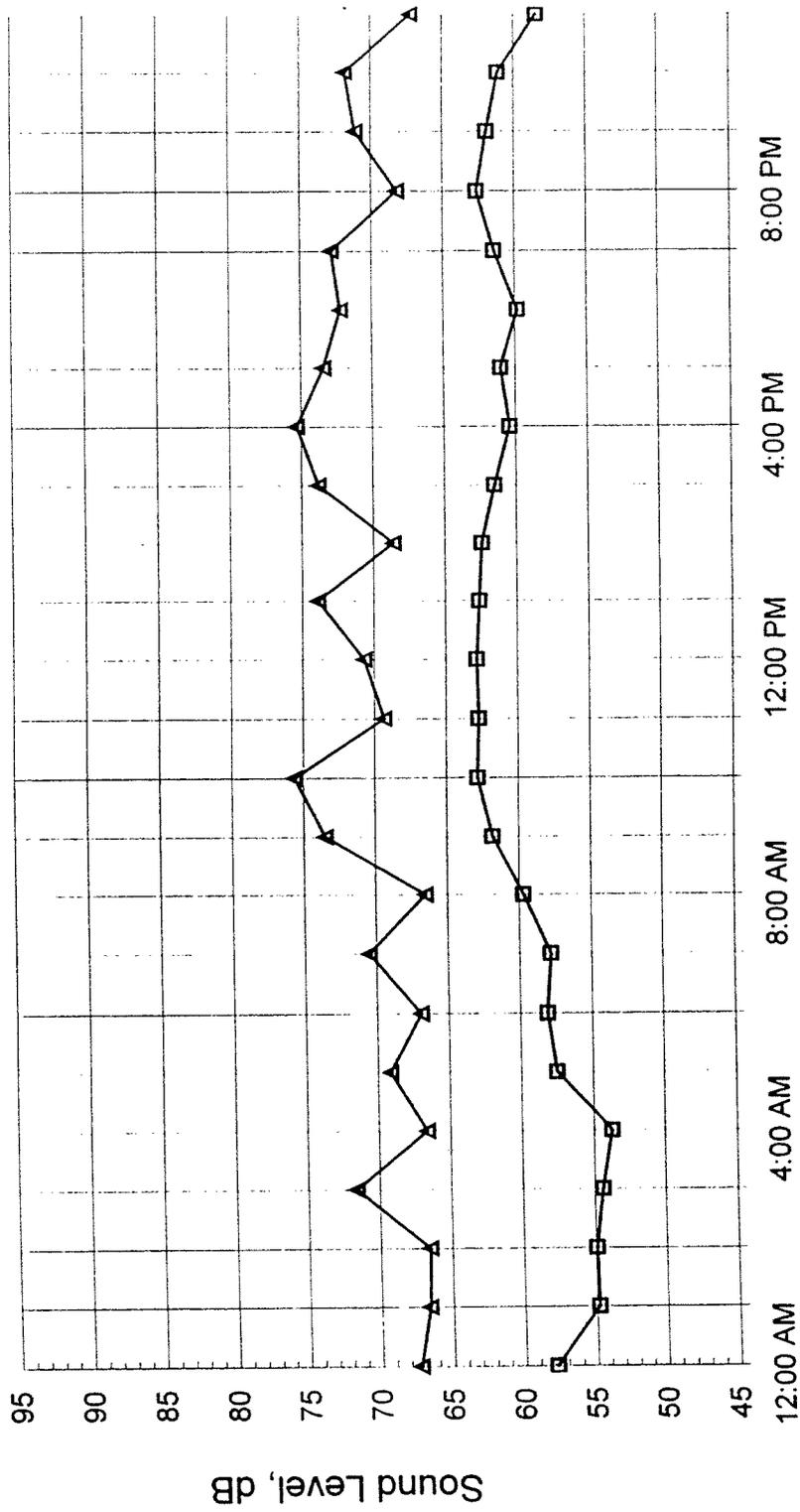
Hour of Day



Measured Hourly Noise Level

707 Platt Circle - Site C

August 9, 1998



Hour of Day

—▲— Lmax —■— Leq

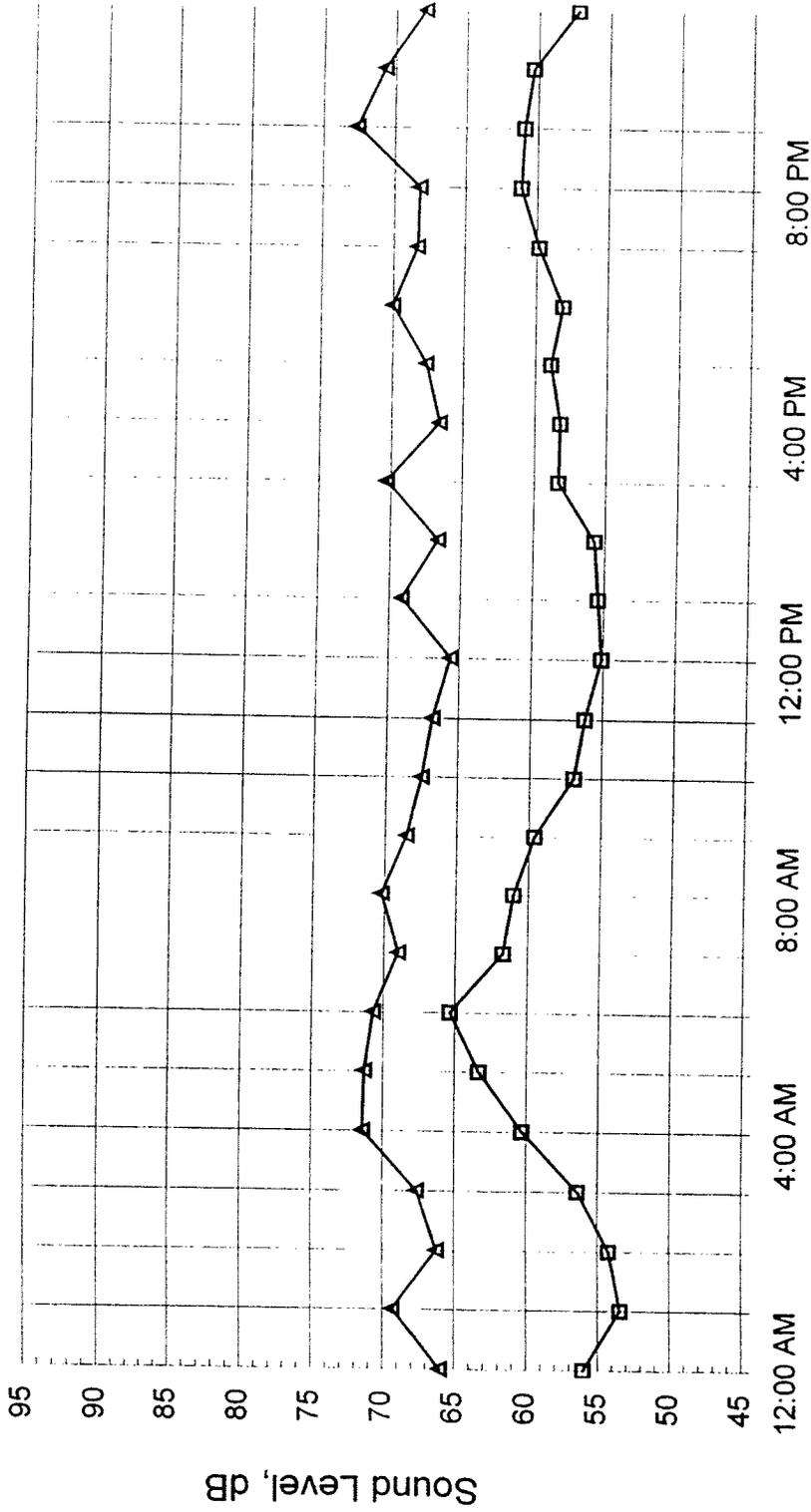
LDN= 64.7 dB



Measured Hourly Noise Level

707 Platt Circle - Site C

August 10, 1998



Hour of Day

LDN= 66.5 dB

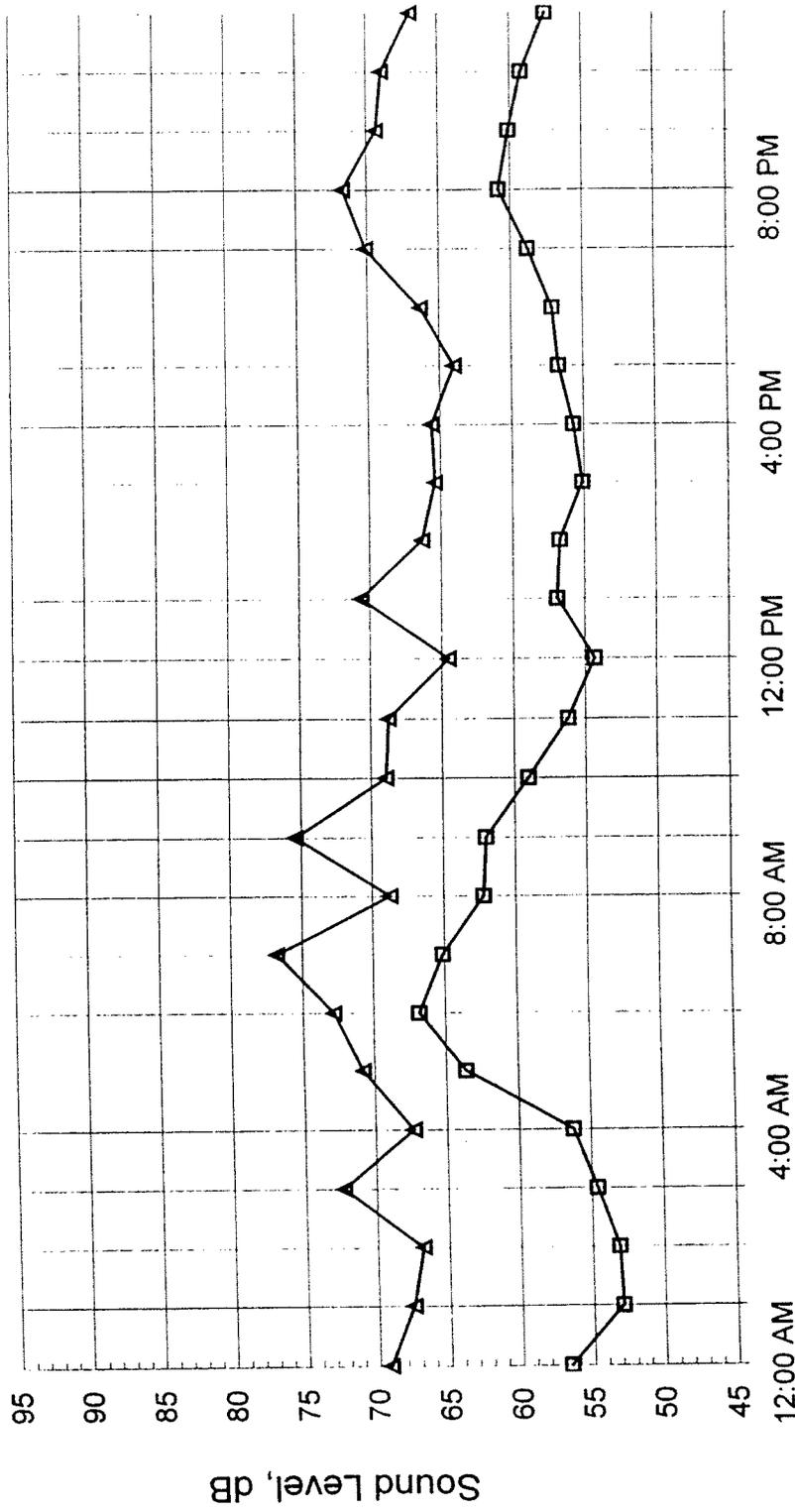
—▲— Lmax —■— Leq



Measured Hourly Noise Level

707 Platt Circle - Site C

August 11, 1998

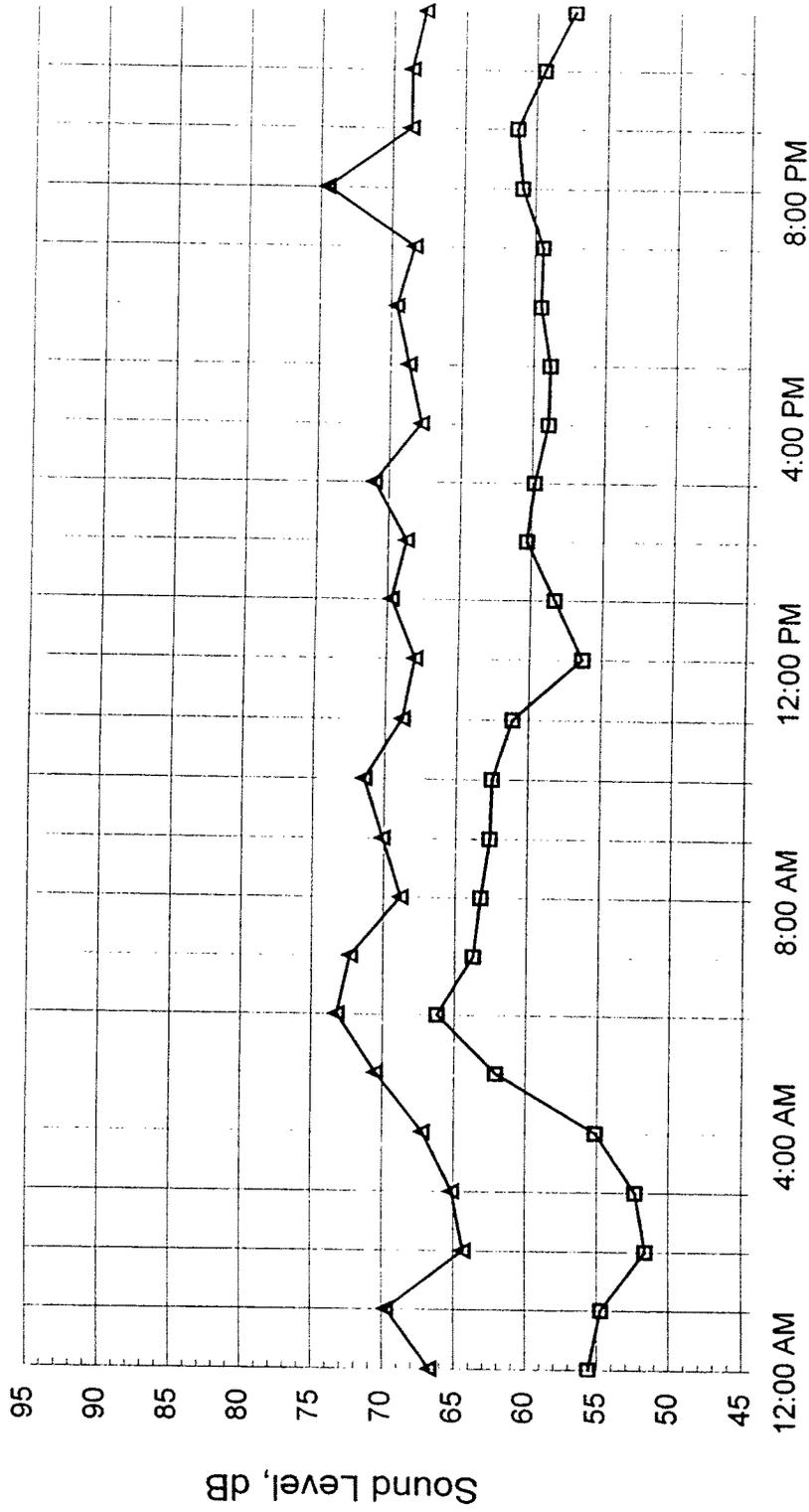


Hour of Day

Measured Hourly Noise Level

707 Platt Circle - Site C

August 12, 1998



Hour of Day

LDN= 66.3 dB

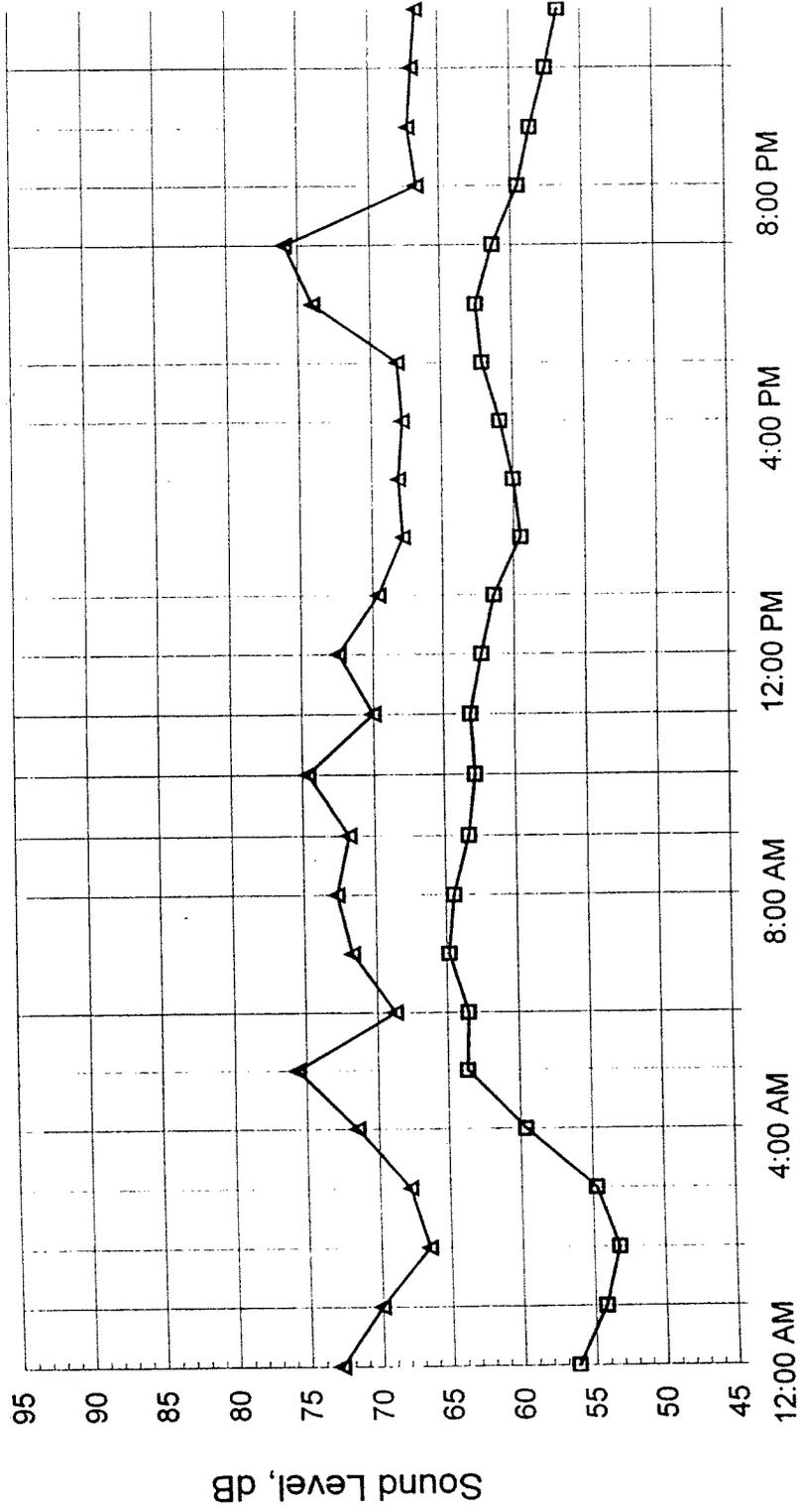


BBA

Measured Hourly Noise Level

707 Platt Circle - Site C

August 13, 1998



LDN= 66.2 dB

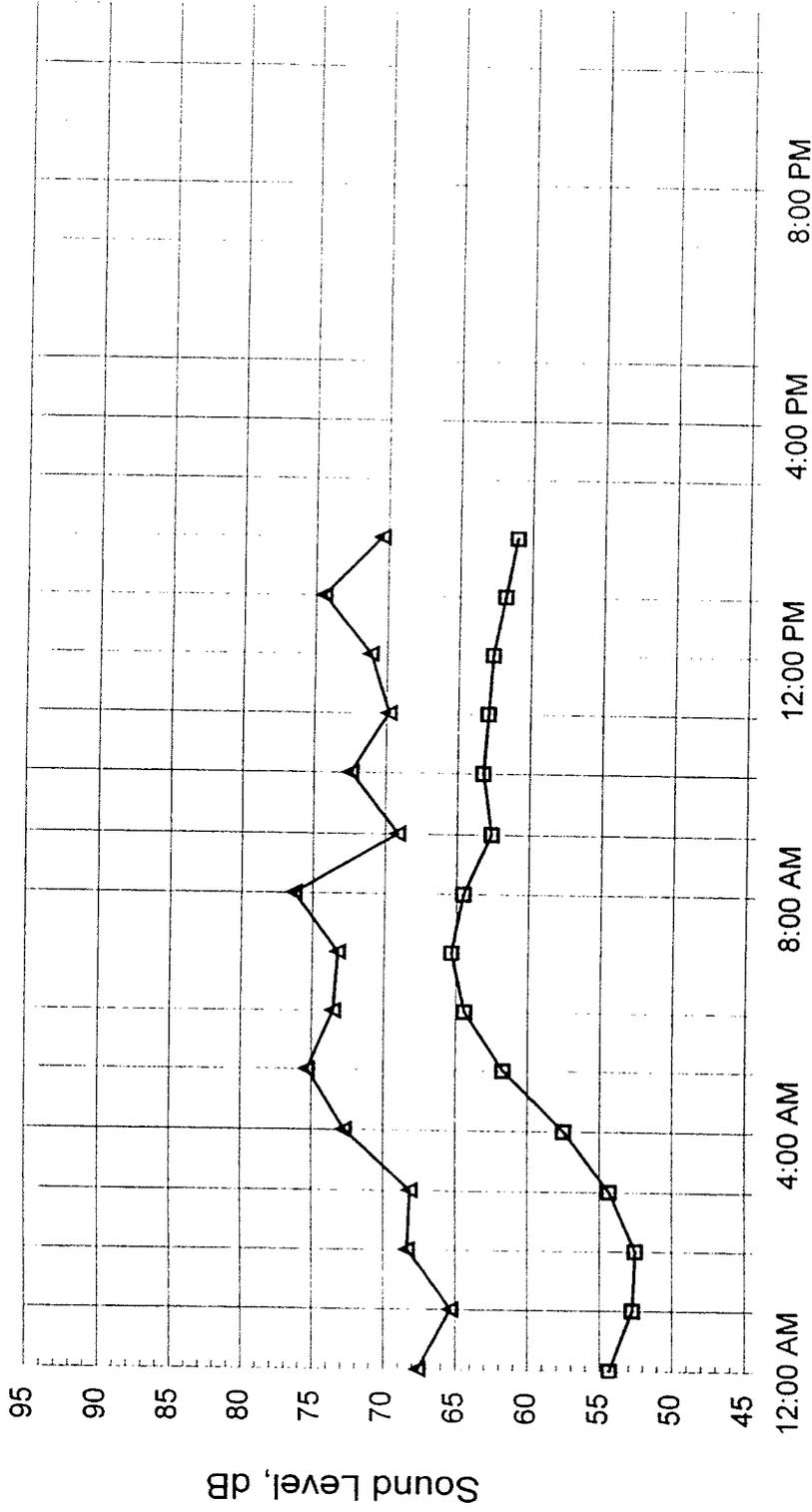
—▲— Lmax —■— Leq



Measured Hourly Noise Level

707 Platt Circle - Site C

August 14, 1998



Hour of Day

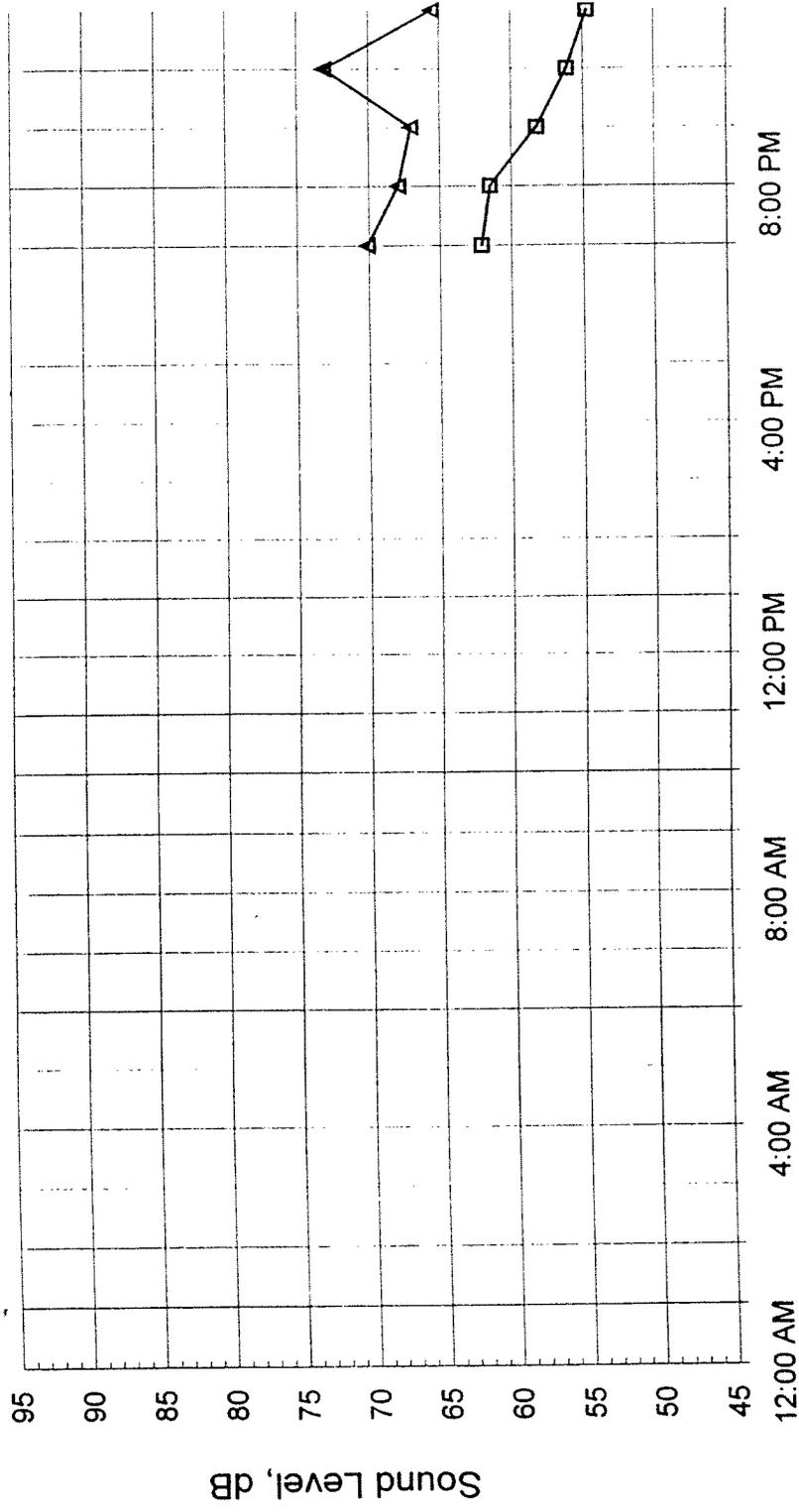
—▲— Lmax —■— Leq

BBA

Measured Hourly Noise Level

3883 Scenic Court - Site D

August 10, 1998



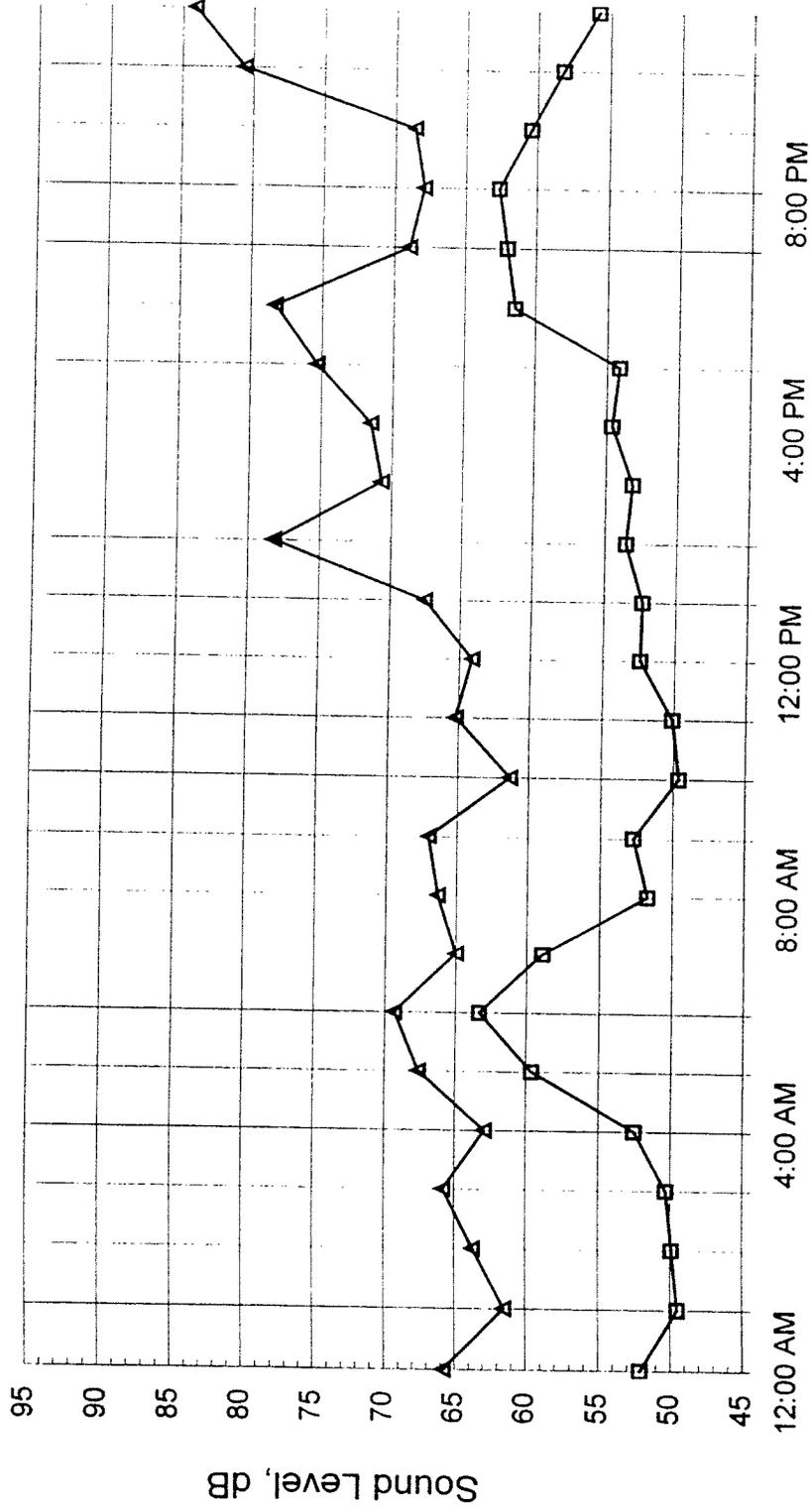
Hour of Day

—▲— Lmax —■— Leq

Measured Hourly Noise Level

3883 Scenic Court - Site D

August 11, 1998



Hour of Day

LDN= 63.7 dB

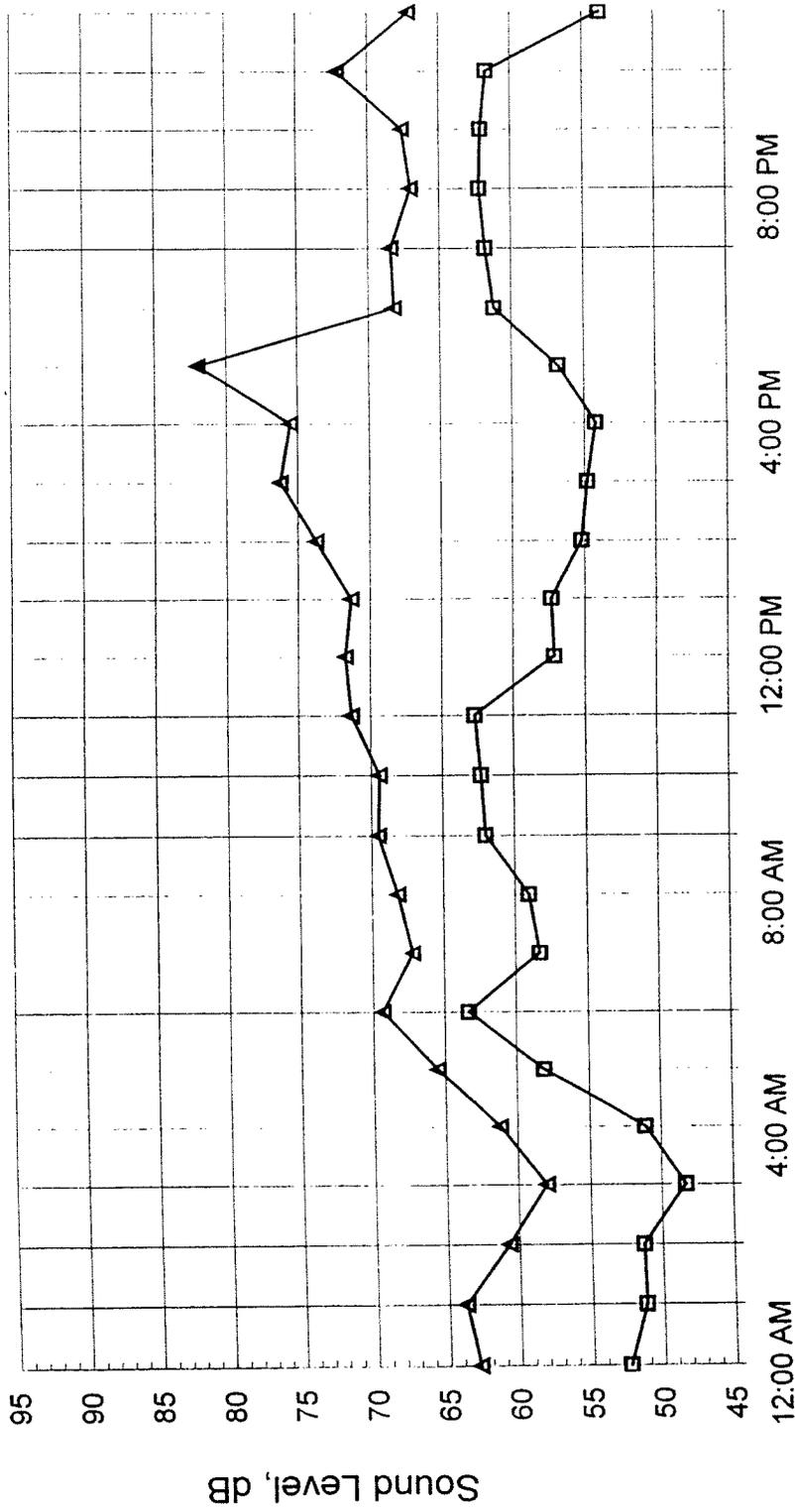
—▲— Lmax —■— Leq

BBA

Measured Hourly Noise Level

3883 Scenic Court - Site D

August 12, 1998



LDN= 64.4 dB

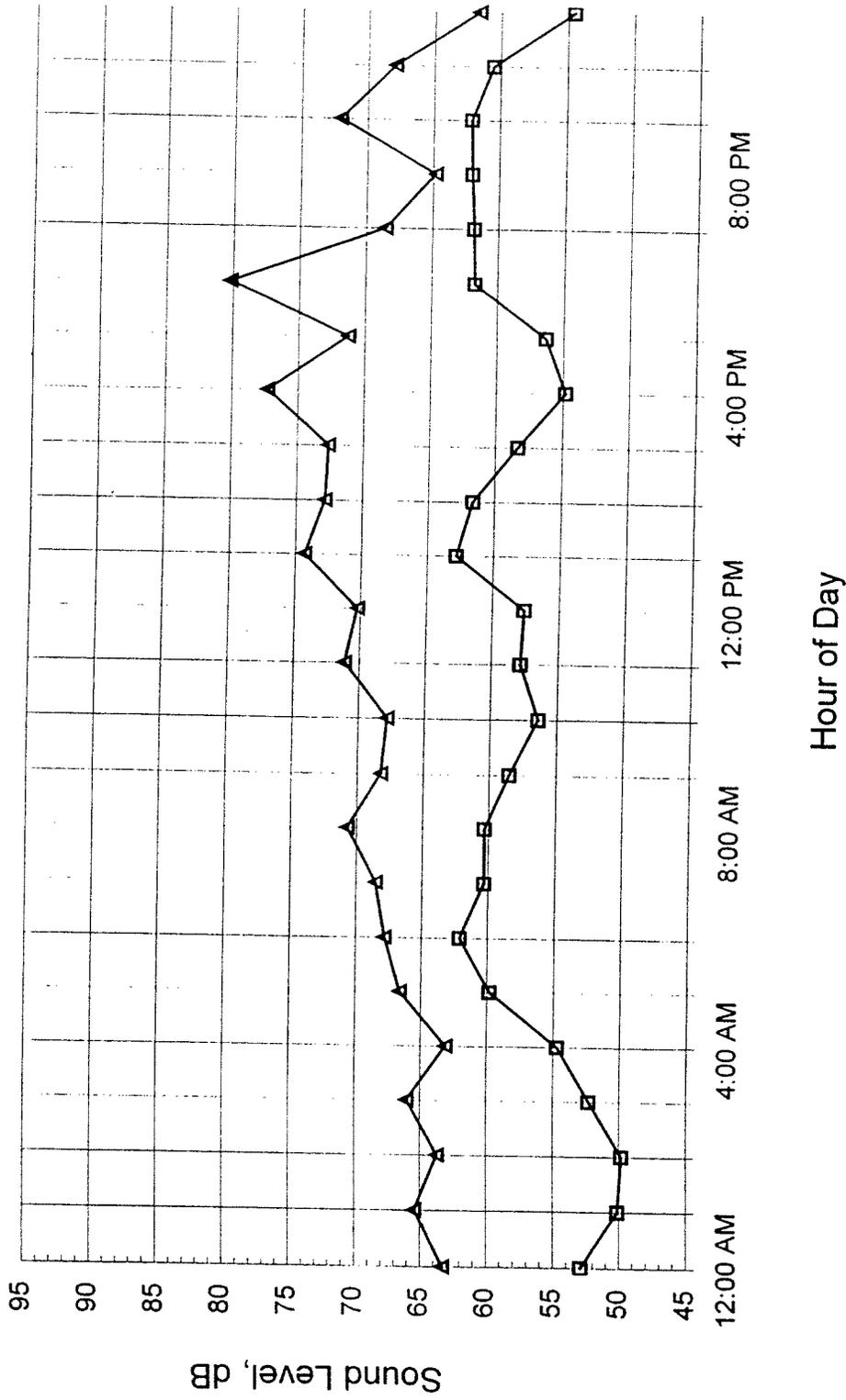
—▲— Lmax —■— Leq



Measured Hourly Noise Level

3883 Scenic Court - Site D

August 13, 1998

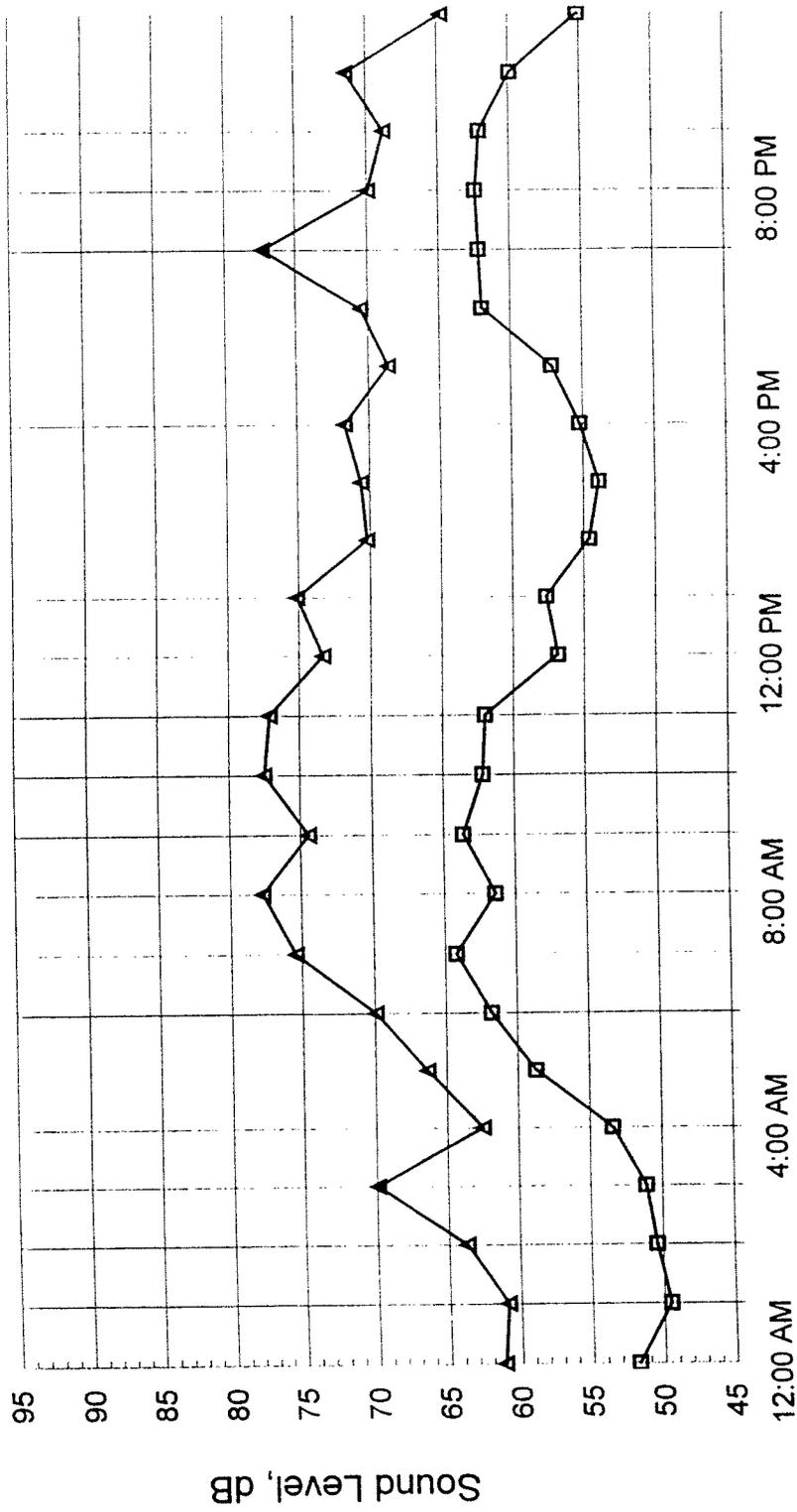


LDN= 64.2 dB

—▲— Lmax —■— Leq

BBA

Measured Hourly Noise Level
 3883 Scenic Court - Site D
 August 14, 1998



LDN= 64.1 dB

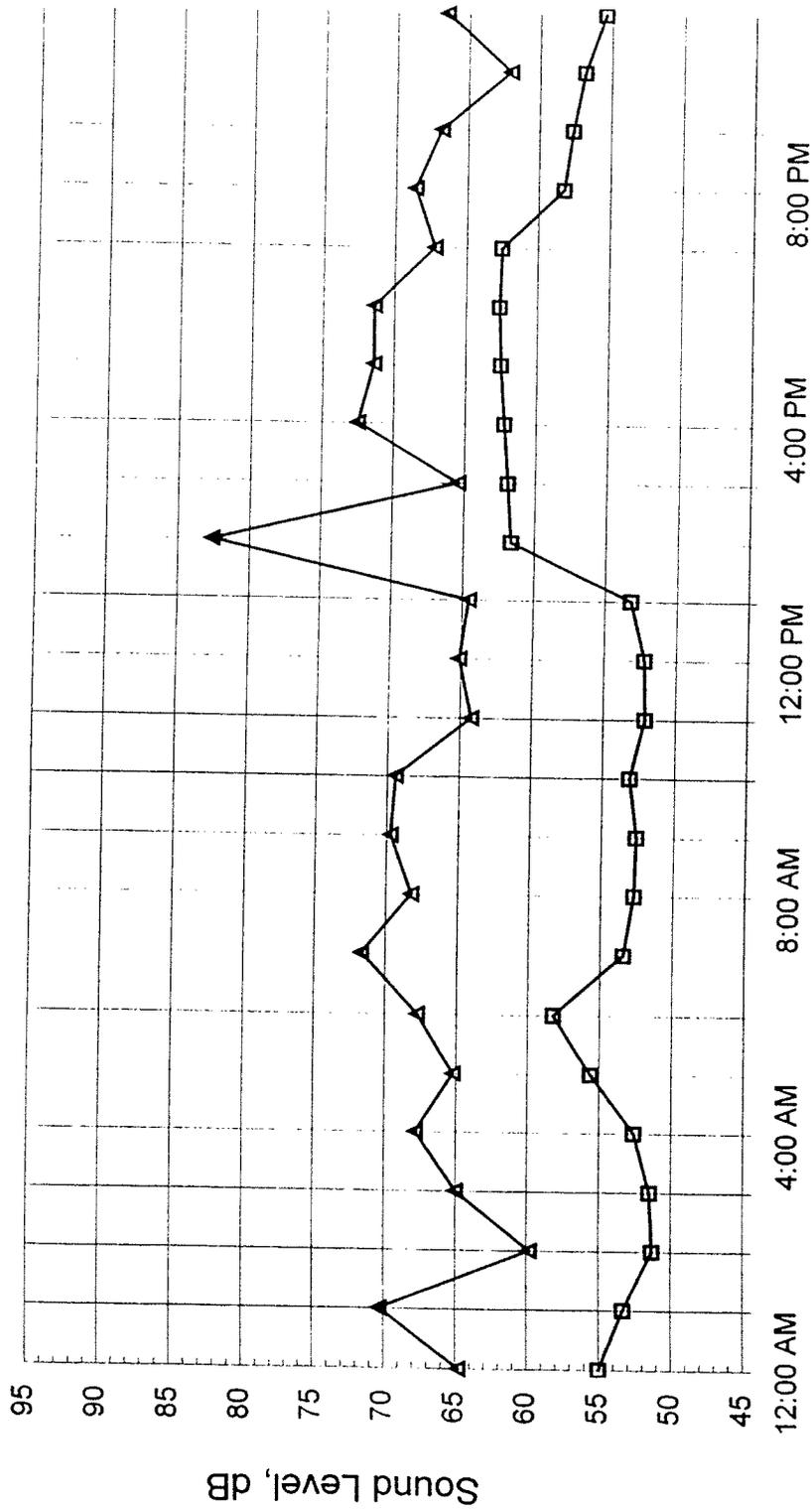
—▲— Lmax —■— Leq



Measured Hourly Noise Level

3883 Scenic Court - Site D

August 15, 1998



Hour of Day

LDN= 62.3 dB

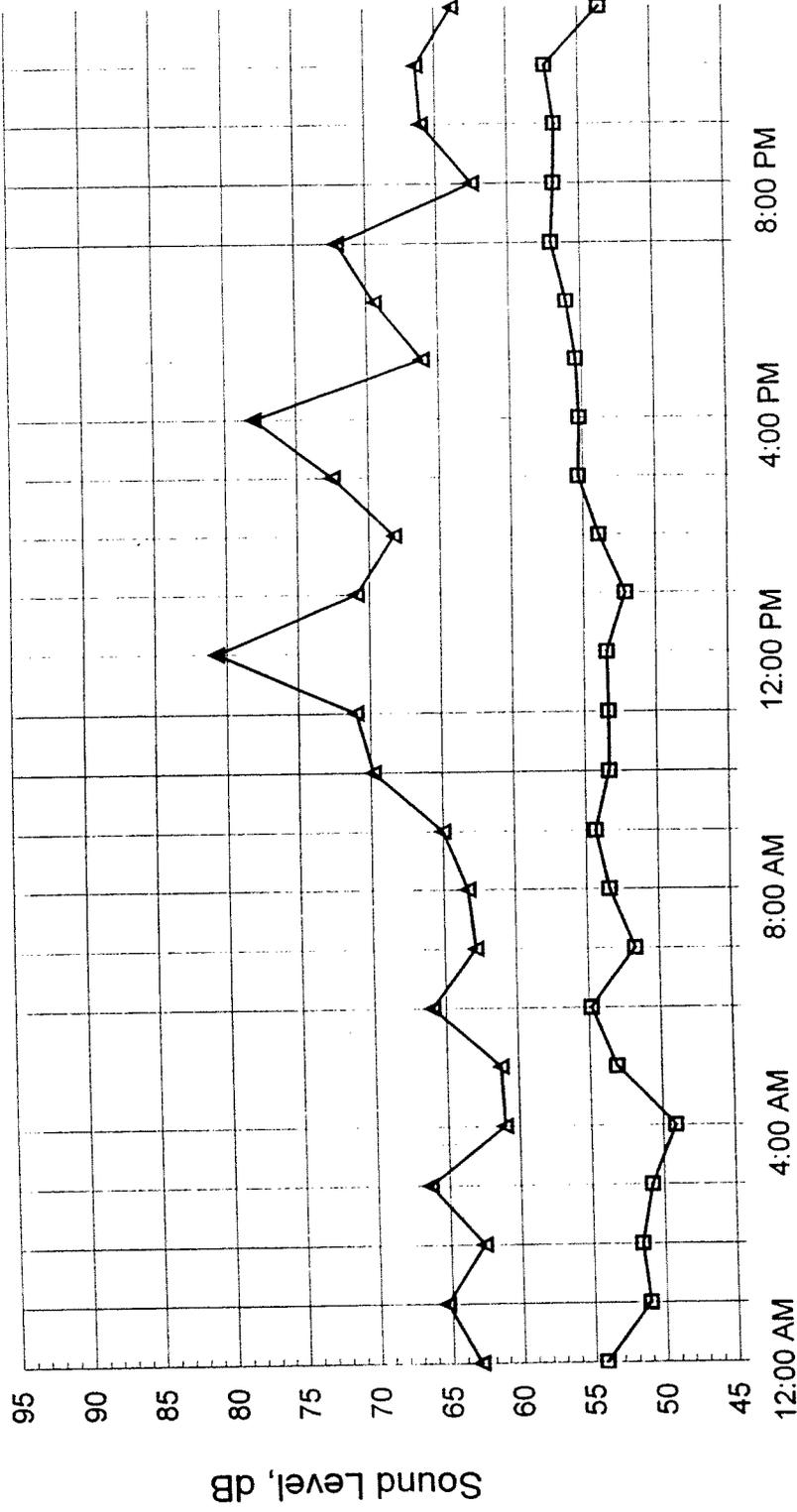
—▲— Lmax —■— Leq

BBA

Measured Hourly Noise Level

3883 Scenic Court - Site D

August 16, 1998



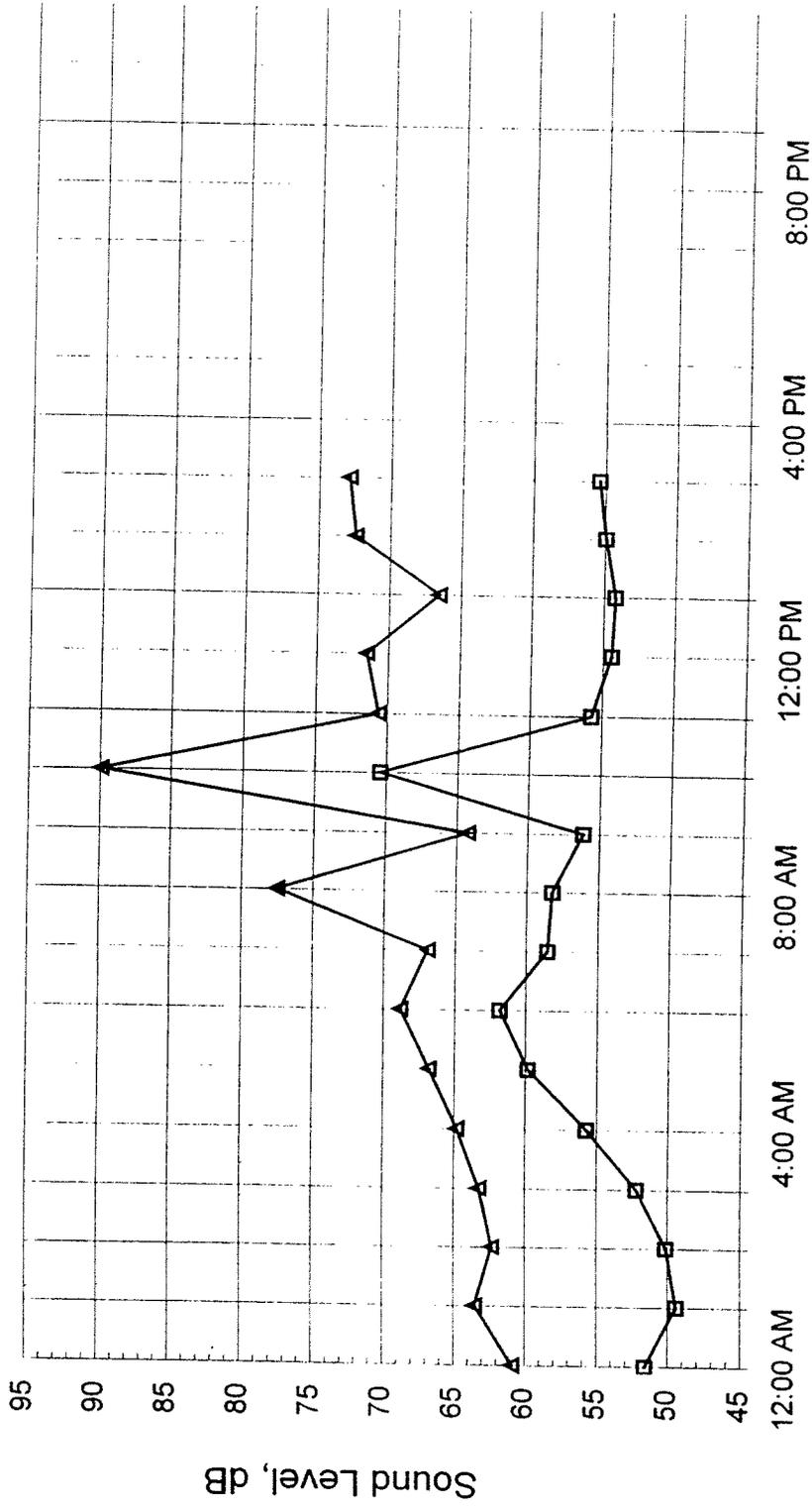
Hour of Day

12:00 AM 4:00 AM 8:00 AM 12:00 PM 4:00 PM 8:00 PM

Measured Hourly Noise Level

3883 Scenic Court - Site D

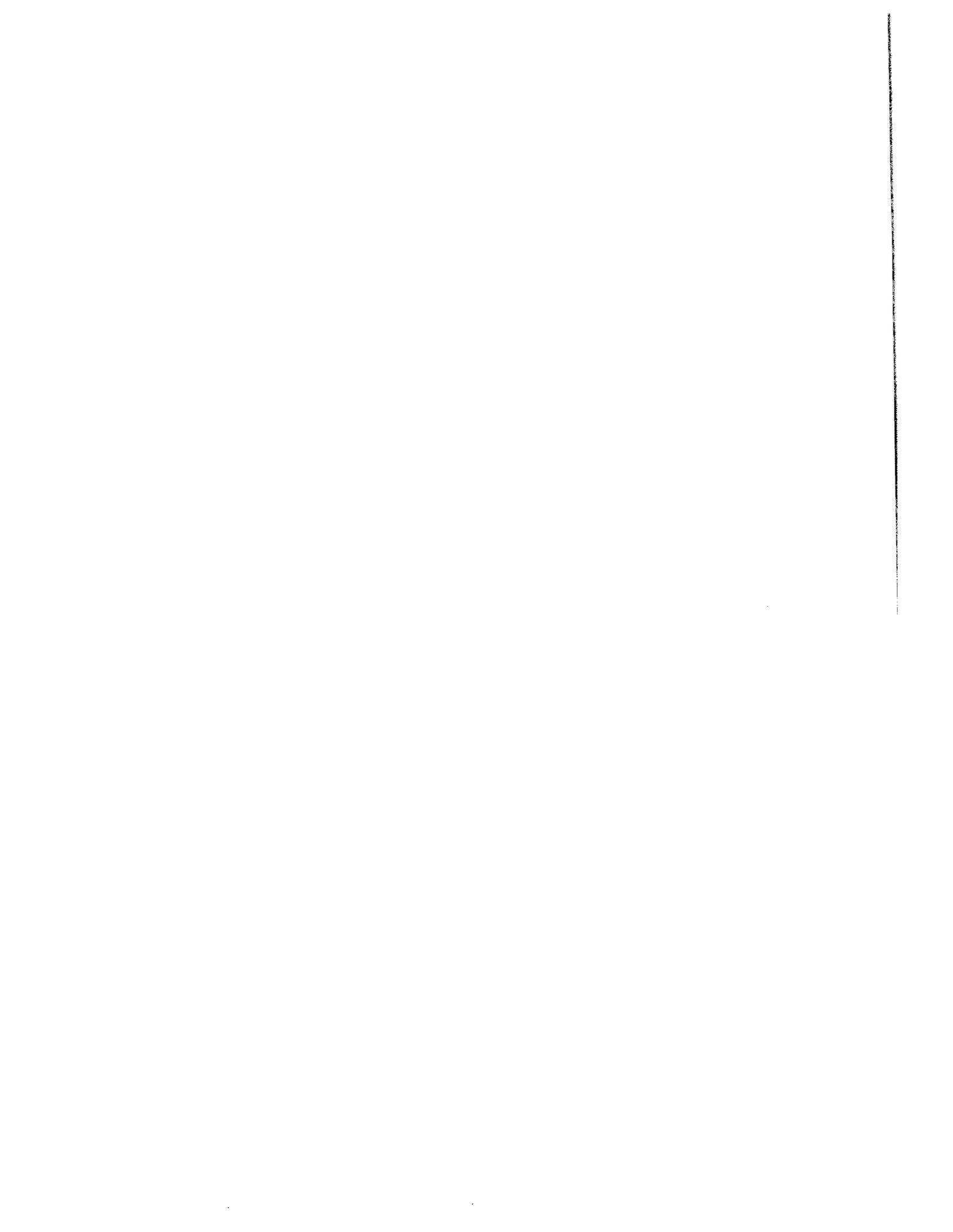
August 17, 1998



Hour of Day

—▲— Lmax —■— Leq

BBA



APPENDIX C

BBA

WORKSHEET "A" FOR CALCULATING REASONABLE ALLOWANCE PER RESIDENCE

PROJECT: Co. Rte. PM.		PROJECT LOCATION:		Page / of <u>4</u>
EA:		<u>EL SERENO HILLS</u>		
NOISE BARRIER I.D. & LOCATION: <u>BI; ROW Barrier</u>				
PROJECT ENGINEER: <u>JCB</u>			Date: <u>1/5/99</u>	
Base Allowance (1998 Dollars) Update for year 2 _____			\$ 15,000	
1) Absolute Noise Levels (Choose One)			Check X	
69 dBA or less:	Add \$ 2,000	<input checked="" type="checkbox"/>		<u>\$ 2,000</u>
70-74 dBA:	Add \$ 4,000	<input type="checkbox"/>		
75-78 dBA:	Add \$ 6,000	<input type="checkbox"/>		
More than 78 dBA:	Add \$ 8,000	<input type="checkbox"/>		
2) "Build" VS Existing Noise Levels (Choose One)			Check X	
Less than 3 dBA:	Add \$ 0	<input type="checkbox"/>		
3-7 dBA:	Add \$ 2,000	<input checked="" type="checkbox"/>		<u>\$ 2,000</u>
8-11 dBA:	Add \$ 4,000	<input type="checkbox"/>		
12 dBA or more:	Add \$ 6,000	<input type="checkbox"/>		
3) Achievable Noise Reduction (Choose One)			Check X	
Less than 6 dBA:	Add \$ 0	<input checked="" type="checkbox"/>		<u>0</u>
6-8 dBA:	Add \$ 2,000	<input type="checkbox"/>		
9-11 dBA:	Add \$ 4,000	<input type="checkbox"/>		
12 dBA or more:	Add \$ 6,000	<input type="checkbox"/>		
4) Either New Construction Or Pre-date 1978? (Choose Yes or No)			Check X	
YES on either one:	Add \$10,000	<input checked="" type="checkbox"/>		<u>10,000</u>
NO on both:	Add \$ 0	<input type="checkbox"/>		
Unmodified Reasonable Allowance Per Residence				<u>\$ 29,000</u>
Continued on Worksheet B				

WORKSHEET "A" FOR CALCULATING REASONABLE ALLOWANCE PER RESIDENCE

PROJECT: Co. Rte. PM.	PROJECT LOCATION:	Page 2 of 4
EA:	EL DORADO HILLS	
NOISE BARRIER I.D. & LOCATION: R2 PROPERTY 74 LINE BARRIERS		
PROJECT ENGINEER: JCB	Date:	
Base Allowance (1998 Dollars) Update for year 2 _____	\$ 15,000 _____	
1) Absolute Noise Levels (Choose One)		Check X
69 dBA or less:	Add \$ 2,000	X
70-74 dBA:	Add \$ 4,000	
75-78 dBA:	Add \$ 6,000	
More than 78 dBA:	Add \$ 8,000	
2) "Build" VS Existing Noise Levels (Choose One)		Check X
Less than 3 dBA:	Add \$ 0	✓
3-7 dBA:	Add \$ 2,000	X
8-11 dBA:	Add \$ 4,000	
12 dBA or more:	Add \$ 6,000	
3) Achievable Noise Reduction (Choose One)		Check X
Less than 6 dBA:	Add \$ 0	
6-8 dBA:	Add \$ 2,000	X
9-11 dBA:	Add \$ 4,000	
12 dBA or more:	Add \$ 6,000	
4) Either New Construction Or Pre-date 1978? (Choose Yes or No)		Check X
YES on either one:	Add \$10,000	X
NO on both:	Add \$ 0	
Unmodified Reasonable Allowance Per Residence		\$ 31,000
Continued on Worksheet B		

WORKSHEET "A" FOR CALCULATING REASONABLE ALLOWANCE PER RESIDENCE

PROJECT: Co. Rte. PM.		PROJECT LOCATION:		Page 3 of 4	
EA:		El Dorado Hills			
NOISE BARRIER I.D. & LOCATION: R.3					
PROJECT ENGINEER:				Date:	
Base Allowance (1998 Dollars) Update for year 2 _____				\$ 15,000	
1) Absolute Noise Levels (Choose One)			Check X		
69 dBA or less:	Add \$ 2,000	✓		\$ 2,000	
70-74 dBA:	Add \$ 4,000				
75-78 dBA:	Add \$ 6,000				
More than 78 dBA:	Add \$ 8,000				
2) "Build" VS Existing Noise Levels (Choose One)			Check X		
Less than 3 dBA:	Add \$ 0				
3-7 dBA:	Add \$ 2,000	✓		\$ 2,000	
8-11 dBA:	Add \$ 4,000				
12 dBA or more:	Add \$ 6,000				
3) Achievable Noise Reduction (Choose One)			Check X		
Less than 6 dBA:	Add \$ 0	✓		0	
6-8 dBA:	Add \$ 2,000				
9-11 dBA:	Add \$ 4,000				
12 dBA or more:	Add \$ 6,000				
4) Either New Construction Or Pre-date 1978? (Choose Yes or No)			Check X		
YES on either one:	Add \$10,000	✓		\$ 10,000	
NO on both:	Add \$ 0				
Unmodified Reasonable Allowance Per Residence				\$ 29,000	
Continued on Worksheet B					

WORKSHEET "A" FOR CALCULATING REASONABLE ALLOWANCE PER RESIDENCE

PROJECT: Co. Rte. PM.	PROJECT LOCATION:	Page 4 of 4
EA:	<i>EL DORADO HILLS</i>	
NOISE BARRIER I.D. & LOCATION:		
PROJECT ENGINEER:		Date:
Base Allowance (1998 Dollars) Update for year 2 _____		\$ 15,000 _____
1) Absolute Noise Levels (Choose One)		Check X
69 dBA or less:	Add \$ 2,000	✓ <i>2000</i>
70-74 dBA:	Add \$ 4,000	
75-78 dBA:	Add \$ 6,000	
More than 78 dBA:	Add \$ 8,000	
2) "Build" VS Existing Noise Levels (Choose One)		Check X
Less than 3 dBA:	Add \$ 0	
3-7 dBA:	Add \$ 2,000	✓ <i>2000</i>
8-11 dBA:	Add \$ 4,000	
12 dBA or more:	Add \$ 6,000	
3) Achievable Noise Reduction (Choose One)		Check X
Less than 6 dBA:	Add \$ 0	
6-8 dBA:	Add \$ 2,000	✗ <i>2000</i>
9-11 dBA:	Add \$ 4,000	
12 dBA or more:	Add \$ 6,000	
4) Either New Construction Or Pre-date 1978? (Choose Yes or No)		Check X
YES on either one:	Add \$10,000	✓ <i>10,000</i>
NO on both:	Add \$ 0	
Unmodified Reasonable Allowance Per Residence		<i>\$ 31,000</i>

Continued on Worksheet B

**Appendix C. Traffic Analysis Technical Appendix -
U.S. Highway 50/El Dorado Hills Boulevard/
Latrobe Road Interchange**

**Technical Appendix
for the
Draft Environmental Impact Report**

**U.S. Highway 50/El Dorado Hills Boulevard/
Latrobe Road Interchange**

Prepared for:

**County of El Dorado
Jones and Stokes Associates**

August 27, 1998



Fehr & Peers Associates
Transportation Consultants

1620 Lead Hill Road
Suite 100
Roseville, CA 95661
916 773-1900
FAX 916 773-2015

Appendix A
Existing Conditions

Streets: (E-W) PARK DRIVE (N-S) EL DORADO HILLS BLVD
 Analyst: FP File Name:
 Area Type: Other 8-4-98 AM PEAK
 Comment: EXISTING CONDITIONS

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	1	<	1	1	<	1	3	<	1	2	<
Volumes	5	3	4	7	1	59	5	403	12	61	1090	19
Lane W (ft)	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
RTOR Vols			0			0			0			0
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	*							
Thru		*					*	
Right		*					*	
Peds								
WB Left		*						
Thru			*				*	
Right			*				*	
Peds								
NB Right								
SB Right								
Green	4.0A	15.0A			4.0A	6.0A	55.0A	
Yellow/AR	4.0	4.0			4.0	0.0	4.0	
Cycle Length: 100 secs	Phase combination order: #1 #2 #5 #6 #7							

Intersection Performance Summary

Lane	Group:	Adj Sat	v/c	g/C	Delay	LOS	Approach:	Delay	LOS
Mvmts	Cap	Flow	Ratio	Ratio					
EB	L	88	1770	0.056	0.050	29.2	D	25.5	D
	TR	272	1703	0.026	0.160	22.9	C		
WB	L	88	1770	0.079	0.050	29.3	D	24.4	C
	TR	254	1588	0.248	0.160	23.8	C		
NB	L	88	1770	0.056	0.050	29.2	D	7.1	B
	TR	3115	5563	0.154	0.560	6.8	B		
SB	L	195	1770	0.329	0.110	26.9	D	8.1	B
	TR	2304	3716	0.532	0.620	7.1	B		

Intersection Delay = 8.6 sec/veh Intersection LOS = B

Lost Time/Cycle, L = 12.0 sec Critical v/c(x) = 0.427

Streets: (E-W) PARK DRIVE (N-S) EL DORADO HILLS BLVD
 Analyst: FP File Name: ELPAEXAM.HC9
 Area Type: Other 8-4-98 PM PEAK
 Comment: EXISTING CONDITIONS

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	1	<	1	1	<	1	3	<	1	2	<
Volumes	12	3	12	18	8	305	19	1088	43	41	521	
Lane W (ft)	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
RTOR Vols			0			0			0			
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination	1	2	3	4	5	6	7
EB Left	*				*		
EB Thru		*					*
EB Right		*					*
EB Peds							
WB Left		*			*	*	
WB Thru		*				*	*
WB Right		*				*	*
WB Peds							
NB Right							
SB Right							
Green	5.0A	26.0A			5.0A	3.0A	45.0A
Yellow/AR	4.0	4.0			4.0	0.0	4.0
Cycle Length: 100 secs Phase combination order: #1 #2 #5 #6 #7							

Intersection Performance Summary

Lane	Group:	Adj Sat	v/c	g/C	Delay	LOS	Approach Delay
Mvmts	Cap	Flow	Ratio	Ratio			
EB	L	106	1770	0.122	0.060	28.8	D 22.5
	TR	442	1636	0.036	0.270	17.4	C
WB	L	106	1770	0.179	0.060	28.9	D 27.4
	TR	429	1590	0.766	0.270	27.3	D
NB	L	106	1770	0.188	0.060	29.0	D 12.7
	TR	2556	5557	0.512	0.460	12.5	B
SB	L	159	1770	0.270	0.090	27.6	D 11.2
	TR	1822	3719	0.319	0.490	10.0	B

Intersection Delay = 14.6 sec/veh Intersection LOS =
 Lost Time/Cycle, L = 12.0 sec Critical v/c(x) = 0.543

Center For Microcomputers In Transportation
 University of Florida
 512 Weil Hall
 Gainesville, FL 32611-2083
 Ph: (904) 392-0378

Streets: (N-S) LATROBE ROAD (E-W) EB RAMPS

Analyst..... FP

Date of Analysis..... 8/4/98

Other Information.....EXISTING CONDITIONS - AM PEAK HOUR

All-way Stop-controlled Intersection

(X) = actual existing approach vol.

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	0	0	1	0	0	0	2	0	1	2	0
Volumes				340(437)				271(211)		172(175)	522(709)	
PHF				1				1		1	1	

Volume Summary and Capacity Analysis WorkSheet

Notes: input volumes were reduced so that HCS volume range checks were not exceeded.

	EB	WB	NB	SB
LT Flow Rate		340	0	172
RT Flow Rate		0	0	0
Approach Flow Rate		340	271	694
Proportion LT	1.00	0.00	0.00	0.25
Proportion RT	0.00	0.00	0.00	0.00
Opposing Approach Flow Rate		0	694	271
Conflicting Approaches Flow Rate		965	340	340
Proportion, Subject Approach Flow Rate	0.26	0.21	0.53	0.53
Proportion, Opposing Approach Flow Rate	0.00	0.53	0.21	0.21
Lanes on Subject Approach	1	2		3
Lanes on Opposing Approach	0	3		2
LT, Opposing Approach	0	172		0
RT, Opposing Approach	0	0		0
LT, Conflicting Approaches		172	340	340
RT, Conflicting Approaches		0	0	0
Proportion LT, Opposing Approach	0.00	0.25		0.00
Proportion RT, Opposing Approach	0.00	0.00		0.00
Proportion LT, Conflicting Approaches	0.18	1.00		1.00
Proportion RT, Conflicting Approaches	0.00	0.00		0.00
Approach Capacity		407	306	777

Intersection Performance Summary

Movement	Approach Flow Rate	Approach Capacity	V/C Ratio	Average Total Delay	LOS
WB	340	407	0.84	23.9	D
NB	271	306	0.89	28.9	D
SB	694	777	0.89	29.8	D

Intersection Delay = 28.1
 Level of Service (Intersection) = D

*actual volume is ~20% greater than was input. Therefore, its delay ≈ 28 * 1.2 ≈ 34 sec/vol. = LOSE*

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Streets: (N-S) LATROBE ROAD (E-W) EB RAMPS
 Analyst..... FP
 Date of Analysis..... 8/4/98
 Other Information.....EXISTING CONDITIONS - PM PEAK HOUR
 All-way Stop-controlled Intersection
 =====

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	0	0	1	0	0	0	2	0	1	2	0
Volumes				194				684		286	203	
PHF				.95				.95		.95	.95	

 Volume Summary and Capacity Analysis WorkSheet

	EB	WB	NB	SB
LT Flow Rate		204	0	301
RT Flow Rate		0	0	0
Approach Flow Rate		204	720	515
Proportion LT		1.00	0.00	0.58
Proportion RT		0.00	0.00	0.00
Opposing Approach Flow Rate		0	515	720
Conflicting Approaches Flow Rate		1235	204	204
Proportion, Subject Approach Flow Rate		0.14	0.50	0.36
Proportion, Opposing Approach Flow Rate		0.00	0.36	0.50
Lanes on Subject Approach		1	2	3
Lanes on Opposing Approach		0	3	2
LT, Opposing Approach		0	301	0
RT, Opposing Approach		0	0	0
LT, Conflicting Approaches		301	204	204
RT, Conflicting Approaches		0	0	0
Proportion LT, Opposing Approach		0.00	0.58	0.00
Proportion RT, Opposing Approach		0.00	0.00	0.00
Proportion LT, Conflicting Approaches		0.24	1.00	1.00
Proportion RT, Conflicting Approaches		0.00	0.00	0.00
*Range limit(s) exceeded (see below)	*	*	*	*

Traffic Volume ranges were far exceeded.
 Therefore, intersection operates at:

LOS F > 45 sec/veh of delay

Streets: (E-W) SARATOGA WAY (N-S) EL DORADO HILLS BLVD
 Analyst: FP File Name: ELSAEXAM.HC9
 Area Type: Other 8-5-98 AM
 Comment: EXISTING CONDITIONS

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	> 1	1	1	1	1	1	1	2	1	1	2	<
Volumes	3	7	138	150	5	44	92	311	211	28	1070	3
Lane W (ft)	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	
RTOR Vols			40			10			15			0
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	*							
EB Thru	*							
EB Right	*							
EB Peds								
WB Left	*							
WB Thru	*							
WB Right	*							
WB Peds								
NB Right								
SB Right								
Green	14.0A				10.0A	17.0A	45.0A	18.0A
Yellow/AR	4.0				4.0	4.0	0.0	4.0
Cycle Length: 120 secs	Phase combination order: #1 #5 #6 #7 #8							

Intersection Performance Summary

Lane	Group:	Adj Sat	v/c	g/C	Delay	LOS	Approach:	Delay	LOS
Mvmts	Cap	Flow	Ratio	Ratio					
EB	LT	231	1845	0.048	0.125	29.9	D	33.9	D
	R	198	1583	0.551	0.125	34.3	D		
WB	L	213	1707	0.783	0.125	44.4	E	41.4	E
	T	233	1863	0.026	0.125	29.8	D		
	R	198	1583	0.192	0.125	30.5	D		
NB	L	266	1770	0.384	0.150	30.2	D	9.7	B
	T	2639	3725	0.138	0.708	3.7	A		
	R	831	1583	0.261	0.525	10.2	B		
SB	L	162	1770	0.191	0.092	32.6	D	68.6	F
	TR	1303	3724	1.079	0.350	69.4	F		

Intersection Delay = 48.2 sec/veh Intersection LOS = E

Lost Time/Cycle, L = 9.0 sec Critical v/c(x) = 0.230

=====
 Streets: (E-W) WB RAMPS (N-S) EL DORADO HILLS BLVD
 Analyst: FP File Name: ELSAEXAM.HC9
 Area Type: Other 8-5-98 AM
 Comment: EXISTING CONDITIONS
 =====

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes				> 1		1	1	2			2	1
Volumes				284	1	318	192	358			597	761
Lane W (ft)				12.0	12.0		12.0	12.0			12.0	12.0
RTOR Vols						100			15			100
Lost Time				3.00	3.00	3.00	3.00	3.00			3.00	3.00

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8	
EB Left					NB Left *				
Thru					Thru	*	*		
Right					Right				
Peds					Peds				
WB Left		*			SB Left				
Thru		*			Thru		*	*	
Right		*			Right		*		
Peds					Peds				
NB Right					EB Right				
SB Right					WB Right				
Green	20.0A				Green	13.0A	8.0A	51.0A	12.0A
Yellow/AR	4.0				Yellow/AR	4.0	0.0	4.0	4.0
Cycle Length: 120 secs Phase combination order: #1 #5 #6 #7 #8									

Intersection Performance Summary

Lane	Group:	Adj Sat	v/c	g/C	Delay	LOS	Approach:	Delay	LOS
Mvmts	Cap	Flow	Ratio	Ratio					
WB	LT	310	1774	1.021	0.175	77.3	F	64.8	F
	R	277	1583	0.874	0.175	48.5	E		
NB	L	206	1770	1.031	0.117	92.4	F	38.4	D
	T	1862	3725	0.224	0.500	10.9	B		
SB	T	2111	3725	0.330	0.567	9.0	B	40.6	E
	R	686	1583	1.071	0.433	70.6	F		

Intersection Delay = 45.3 sec/veh Intersection LOS = E
 Lost Time/Cycle, L = 0.0 sec Critical v/c(x) = 0.000

Overall delay = $\frac{2511 \cdot 45.3 + 2062 \cdot 48.2}{(2511 + 2062)} = 46.6$ LOS E
 for WB Ramps/EDH & Saratoga/EDH intersections

Streets: (E-W) SARATOGA WAY (N-S) EL DORADO HILLS BLVD
 Analyst: FP File Name: ELSAEXPM.HC9
 Area Type: Other 8-5-98 PM
 Comment: EXISTING CONDITIONS

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	> 1		1	1	1	1	1	2	1	1	2	<
Volumes	7	5	44	147	14	83	113	1060	411	54	495	2
Lane W (ft)		12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	
RTOR Vols			10			15			80			0
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	*							
Thru	*							
Right	*							
Peds								
WB Left	*							
Thru	*							
Right	*							
Peds								
NB Right								
SB Right								
Green	16.0A				18.0A	18.0A	30.0A	18.0A
Yellow/AR	4.0				4.0	4.0	4.0	4.0
Cycle Length:	120 secs	Phase combination order: #1 #5 #6 #7 #8						

Intersection Performance Summary

	Lane Group:	Mvmts	Adj Sat	v/c	g/C	Delay	LOS	Approach:	
								Flow	Ratio
EB	LT	254	1792	0.055	0.142	28.8	D	29.2	D
	R	224	1583	0.178	0.142	29.3	D		
WB	L	239	1690	0.723	0.142	38.7	D	35.7	D
	T	264	1863	0.061	0.142	28.8	D		
NB	R	224	1583	0.357	0.142	30.5	D		
	L	280	1770	0.475	0.158	30.7	D	12.1	B
	T	2328	3725	0.597	0.625	9.0	B		
SB	R	699	1583	0.558	0.442	16.8	C		
	L	280	1770	0.228	0.158	28.6	D	26.7	D
	TR	962	3724	0.637	0.258	26.5	D		

Intersection Delay = 18.0 sec/veh Intersection LOS = C
 Lost Time/Cycle, L = 9.0 sec Critical v/c(x) = 0.553

Streets: (E-W) WB RAMPS (N-S) EL DORADO HILLS BLVD
 Analyst: FP File Name: ELWBEXPM.HC9
 Area Type: Other 8-5-98 PM
 Comment: EXISTING CONDITIONS

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes				> 1		1	1	2			2	1
Volumes				105	1	247	299	1237			384	30
Lane W (ft)				12.0	12.0		12.0	12.0			12.0	12.0
RTOR Vols						70			15			60
Lost Time				3.00	3.00	3.00	3.00	3.00			3.00	3.00

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left					*			
Thru						*	*	
Right								
Peds								
WB Left		*						
Thru		*					*	*
Right		*					*	
Peds								
NB Right								
SB Right								
Green	16.0A				24.0A	12.0A	39.0A	13.0
Yellow/AR	4.0				4.0	0.0	4.0	4.0
Cycle Length: 120 secs Phase combination order: #1 #5 #6 #7 #8								

Intersection Performance Summary

Lane	Group:	Adj Sat	v/c	g/C	Delay	LOS	Approach:
Mvmnts	Cap	Flow	Ratio	Ratio			Delay L
WB	LT	251	1775	0.497	0.142	32.0	D 51.2
	R	224	1583	0.932	0.142	62.7	F
NB	L	369	1770	0.955	0.208	56.0	E 43.2
	T	1614	3725	1.005	0.433	40.4	E
SB	T	1769	3725	0.268	0.475	12.3	B 15.9
	R	528	1583	0.538	0.333	21.9	C
Intersection Delay = 37.3 sec/veh Intersection LOS =							
Lost Time/Cycle, L = 0.0 sec Critical v/c(x) = 0.000							

Overall delay = $\frac{2575 \cdot 37.3 + 2435 \cdot 18.0}{(2575 + 2435)} = 27.9$ LOS D
 for
 E DII/WB Ramps
 &
 E DII/Saratoga way
 intersections

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File Name EXEBOFAM.HC5
 Location..... US 50 EASTBOUND LOOP OFF-RAMP
 Analyst..... FP
 Time of Analysis..... AM PK HR
 Driver Population Factor..... 1.00
 Date of Analysis..... 8/6/98
 Other Information..... EXISTING CONDITIONS

A. Ramp Configuration Input Data

	Freeway	Analysis Ramp	Downstream Ramp
Traffic Volume	1400	716	235
Peak-Hour Factor	0.95	0.95	0.95
Percentage HV's	2.0	2.0	2.0
Percentage RV's	1.0	1.0	1.0
Number of Lanes	2	1	
Lane Width (ft)	12.0	12.0	12.0
Free-flow Speed (mph)	65	20	
Obstructions	0	0	0
Distance from Edge (ft)			
Type of Ramp		OFF	ON

Analysis ramp is a right-hand ramp.
 Length of acceleration lane is 0 ft.
 Distance to downstream ramp is 1000 ft.

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File Name EXEBOFPM.HC5
 Location..... US 50 EASTBOUND LOOP OFF-RAMP
 Analyst..... FP
 Time of Analysis..... PM PK HR
 Driver Population Factor..... 1.00
 Date of Analysis..... 8/6/98
 Other Information..... EXISTING CONDITIONS

A. Ramp Configuration Input Data

	Freeway	Analysis Ramp	Downstream Ramp
Traffic Volume	3900	1046	705
Peak-Hour Factor	0.95	0.95	0.95
Percentage HV's	2.0	2.0	2.0
Percentage RV's	1.0	1.0	1.0
Number of Lanes	2	1	
Lane Width (ft)	12.0	12.0	12.0
Free-flow Speed (mph)	65	20	
Obstructions	0	0	0
Distance from Edge (ft)			
Type of Ramp		OFF	ON

Analysis ramp is a right-hand ramp.
 Length of acceleration lane is 0 ft.
 Distance to downstream ramp is 1000 ft.

=====
 File Name EXEBOFPM.HC5

B. Adjustment Factors

Terrain Type		E T	E R	F HV	F W	F P
Freeway	ROLLING	3.00	2.00	0.952	1.00	1.00
Ramp		3.00	2.00	0.952	1.00	1.00
Dnstrm		3.00	2.00	0.952	1.00	1.00

C. Level of Service Results

Type	Vol (vph)	#of FFS Lanes (mph)	Lane Width (ft)	f W	f HV	f P	Vol (pcph)	
Freeway	3900	65	2	12.0	1.00	0.952	1.00	4312
Ramp	1046	20	1	12.0	1.00	0.952	1.00	1157
Downstream	705			12.0	1.00	0.952	1.00	780

Estimation of V12:

 PFD = 1.000 Using Equation: 6 V12 = 4312

Capacity Checks:

 VFO+VR = 4312 V12 = 4312

LOS, Speed, and Density:

 Level of Service (LOS) E
 Computed Density (pc/mi/ln) 41
 Computed Speed (mph) 48

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File Name EXEBONAM.HC5
 Location..... US 50 EASTBOUND DIAG. ON-RAMP
 Analyst..... FP
 Time of Analysis..... AM PK HR
 Driver Population Factor..... 1.00
 Date of Analysis..... 8/6/98
 Other Information..... EXISTING CONDITIONS

A. Ramp Configuration Input Data

	Freeway	Analysis Ramp	Upstream Ramp
Traffic Volume	684	235	716
Peak-Hour Factor	0.95	0.95	0.95
Percentage HV's	2.0	2.0	2.0
Percentage RV's	1.0	1.0	1.0
Number of Lanes	2	1	
Lane Width (ft)	12.0	12.0	12.0
Free-flow Speed (mph)	65	35	
Obstructions	0	0	0
Distance from Edge (ft)			
Type of Ramp		ON	OFF

Analysis ramp is a right-hand ramp.
 Length of acceleration lane is 150 ft.
 Distance to upstream ramp is 1000 ft.

=====
 File Name EXEBONAM.HC5

B. Adjustment Factors

Terrain Type		E T	E R	F HV	F W	F P
Freeway	ROLLING	3.00	2.00	0.952	1.00	1.00
Ramp		3.00	2.00	0.952	1.00	1.00
Upstrm		3.00	2.00	0.952	1.00	1.00

C. Level of Service Results

Type	Vol (vph)	FFS (mph)	#of Lanes	Lane Width (ft)	f W	f HV	f P	Vol (pcph)
Freeway	684	65	2	12.0	1.00	0.952	1.00	756
Ramp	235	35	1	12.0	1.00	0.952	1.00	260
Upstream	716			12.0	1.00	0.952	1.00	792

Estimation of V12:

 PFM = 1.000 Using Equation: 1 V12 = 756

Capacity Checks:

 VFO = 1016 VR12 = 1016

LOS, Speed, and Density:

 Level of Service (LOS) B
 Computed Density (pc/mi/ln) 12
 Computed Speed (mph) 58

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File Name EXEBONPM.HC5
 Location..... US 50 EASTBOUND DIAG. ON-RAMP
 Analyst..... FP
 Time of Analysis..... PM PK HR
 Driver Population Factor..... 1.00
 Date of Analysis..... 8/6/98
 Other Information..... EXISTING CONDITIONS

A. Ramp Configuration Input Data

	Freeway	Analysis Ramp	Upstream Ramp
Traffic Volume	2854	705	1046
Peak-Hour Factor	0.95	0.95	0.95
Percentage HV's	2.0	2.0	2.0
Percentage RV's	1.0	1.0	1.0
Number of Lanes	2	1	
Lane Width (ft)	12.0	12.0	12.0
Free-flow Speed (mph)	65	35	
Obstructions	0	0	0
Distance from Edge (ft)			
Type of Ramp		ON	OFF

Analysis ramp is a right-hand ramp.
 Length of acceleration lane is 150 ft.
 Distance to upstream ramp is 1000 ft.

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=====
 File Name EXEBONPM.HC5
 Location..... US 50 WESTBOUND DIAG. OFF-RAMP
 Analyst..... FP
 Time of Analysis..... AM PK HR
 Driver Population Factor..... 1.00
 Date of Analysis..... 8/6/98
 Other Information..... EXISTING CONDITIONS
 =====

A. Ramp Configuration Input Data

	Freeway	Analysis Ramp	Downstream Ramp
Traffic Volume	3649	602	953
Peak-Hour Factor	0.95	0.95	0.95
Percentage HV's	2.0	2.0	2.0
Percentage RV's	1.0	1.0	1.0
Number of Lanes	2	1	
Lane Width (ft)	12.0	12.0	12.0
Free-flow Speed (mph)	65	30	
Obstructions	0	0	0
Distance from Edge (ft)			
Type of Ramp		OFF	ON

Analysis ramp is a right-hand ramp.
 Length of acceleration lane is 0 ft.
 Distance to downstream ramp is 1500 ft.

=====
 File Name EXEBONPM.HC5

B. Adjustment Factors

Terrain Type		E T	E R	F HV	F W	F P
Freeway	ROLLING	3.00	2.00	0.952	1.00	1.00
Ramp		3.00	2.00	0.952	1.00	1.00
Dnstrm		3.00	2.00	0.952	1.00	1.00

C. Level of Service Results

Type	Vol (vph)	#of FFS Lanes (mph)	Lane Width (ft)	f W	f HV	f P	Vol (pcph)
Freeway	3649	65 2	12.0	1.00	0.952	1.00	4035
Ramp	602	30 1	12.0	1.00	0.952	1.00	666
Downstream	953		12.0	1.00	0.952	1.00	1054

Estimation of V12:

 PFD = 1.000 Using Equation: 6 V12 = 4035

Capacity Checks:

 VFO+VR = 4035 V12 = 4035

LOS, Speed, and Density:

 Level of Service (LOS) E
 Computed Density (pc/mi/ln) 39
 Computed Speed (mph) 52

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=====
 File Name EXWBOFAM.HC5
 Location..... US 50 WESTBOUND DIAG. OFF-RAMP
 Analyst..... FP
 Time of Analysis..... PM PK HR
 Driver Population Factor..... 1.00
 Date of Analysis..... 8/6/98
 Other Information..... EXISTING CONDITIONS
 =====

A. Ramp Configuration Input Data

	Freeway	Analysis Ramp	Downstream Ramp
Traffic Volume	1351	352	601
Peak-Hour Factor	0.95	0.95	0.95
Percentage HV's	2.0	2.0	2.0
Percentage RV's	1.0	1.0	1.0
Number of Lanes	2	1	
Lane Width (ft)	12.0	12.0	12.0
Free-flow Speed (mph)	65	30	
Obstructions	0	0	0
Distance from Edge (ft)			
Type of Ramp		OFF	ON

Analysis ramp is a right-hand ramp.
 Length of acceleration lane is 0 ft.
 Distance to downstream ramp is 1500 ft.

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=====
 File Name EXWBOFPM.HC5
 Location..... US 50 WESTBOUND DIAG. ON-RAMP
 Analyst..... FP
 Time of Analysis..... AM PK HR
 Driver Population Factor..... 1.00
 Date of Analysis..... 8/6/98
 Other Information..... EXISTING CONDITIONS
 =====

A. Ramp Configuration Input Data

	Freeway	Analysis Ramp	Upstream Ramp
Traffic Volume	3047	953	602
Peak-Hour Factor	0.95	0.95	0.95
Percentage HV's	2.0	2.0	2.0
Percentage RV's	1.0	1.0	1.0
Number of Lanes	2	1	
Lane Width (ft)	12.0	12.0	12.0
Free-flow Speed (mph)	65	35	
Obstructions	0	0	0
Distance from Edge (ft)			
Type of Ramp		ON	OFF

Analysis ramp is a right-hand ramp.
 Length of acceleration lane is 150 ft.
 Distance to upstream ramp is 1500 ft.

=====
File Name EXWBOFPM.HC5

B. Adjustment Factors

Terrain Type		E T	E R	F HV	F W	F P
Freeway	ROLLING	3.00	2.00	0.952	1.00	1.00
Ramp		3.00	2.00	0.952	1.00	1.00
Upstrm		3.00	2.00	0.952	1.00	1.00

C. Level of Service Results

Type	Vol (vph)	#of FFS Lanes (mph)	Lane Width (ft)	f W	f HV	f P	Vol (pcph)		
Freeway	3047	65	2	12.0	1.00	0.952	1.00	3369	
Ramp	ON	953	35	1	12.0	1.00	0.952	1.00	1054
Upstream	OFF	602		12.0	1.00	0.952	1.00	666	

Estimation of V12:

PFM = 1.000 Using Equation: 1 V12 = 3369

Capacity Checks:

VFO = 4423 VR12 = 4423

LOS, Speed, and Density:

Level of Service (LOS) F
Computed Density (pc/mi/ln) *
Computed Speed (mph) *

*Unstable flow

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=====
 File Name EXWBONAM.HC5
 Location..... US 50 WESTBOUND DIAG. ON-RAMP
 Analyst..... FP
 Time of Analysis..... PM PK HR
 Driver Population Factor..... 1.00
 Date of Analysis..... 8/6/98
 Other Information..... EXISTING CONDITIONS
 =====

A. Ramp Configuration Input Data

	Freeway	Analysis Ramp	Upstream Ramp
Traffic Volume	999	601	352
Peak-Hour Factor	0.95	0.95	0.95
Percentage HV's	2.0	2.0	2.0
Percentage RV's	1.0	1.0	1.0
Number of Lanes	2	1	
Lane Width (ft)	12.0	12.0	12.0
Free-flow Speed (mph)	65	35	
Obstructions	0	0	0
Distance from Edge (ft)			
Type of Ramp		ON	OFF

Analysis ramp is a right-hand ramp.
 Length of acceleration lane is 150 ft.
 Distance to upstream ramp is 1500 ft.

File Name EXWBONAM.HC5

B. Adjustment Factors

Terrain Type		E T	E R	F HV	F W	F P
Freeway	ROLLING	3.00	2.00	0.952	1.00	1.00
Ramp		3.00	2.00	0.952	1.00	1.00
Upstrm		3.00	2.00	0.952	1.00	1.00

C. Level of Service Results

Type	Vol (vph)	#of FFS (mph)	Lane Lanes	Lane Width (ft)	f W	f HV	f P	Vol (pcph)
Freeway	999	65	2	12.0	1.00	0.952	1.00	1105
Ramp	601	35	1	12.0	1.00	0.952	1.00	665
Upstream	352			12.0	1.00	0.952	1.00	389

Estimation of V12:

PFM = 1.000 Using Equation: 1 V12 = 1105

Capacity Checks:

VFO = 1770 VR12 = 1770

LOS, Speed, and Density:

Level of Service (LOS)	B
Computed Density (pc/mi/ln)	18
Computed Speed (mph)	57

=====
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 University of Florida
 512 Weil Hall
 Gainesville, FL 32611-2083
 Ph: (904) 392-0378
 =====

File Name THURBOTH.HC3
 Location..... US 50 WEST OF EDH/LATROBE IC
 From/To.....
 Analyst..... FP
 Time of Analysis..... AM PEAK HOUR
 Date of Analysis..... 8 /7 /98
 Other Information.... EXISTING CONDITIONS

A. Geometrics and Traffic Input Data	EB Dir 1	WB Dir 2
Traffic Volume (vph)	1400	4000
Peak-Hour Factor or Peak 15-min Volume	1.00	1.00
Percentage of Trucks	1.0	1.0
Percentage of Recreational Vehicles	0.0	0.0
Number of Lanes	2	2
Free-Flow Speed (mph)	65.0	65.0
Lane Width (ft)	12.0	12.0
Obstructions-No (0), One (1) or Both (2)	0	0
Distance from Pavement Edge (ft)		
Driver Population Factor	1.00	1.00

B. Adjustment Factors

	Segment Length(ft)	Equiv. Grade	E T	E R	F HV	F W	F P
Dir 1	5700.0	-1.61%	1.50		0.995	1.00	1.00
Dir 2	5700.0	1.61%	1.50		0.995	1.00	1.00

C. Level of Service Results

	Dir 1	Dir 2
Maximum Service Flow (MSF) (pcphpl)	704	2010
Level of Service (LOS)	B	E
Projected Speed at Flow Rate (mph)	65.0	60.0
Density (pc/mi/ln)	10.83	33.48
Density (veh/mi/ln)	10.78	33.31
Speed of prevailing traffic (mph)	65.0	60.0

=====
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File Name EXWEAM.HC3
 Location..... US 50 WEST OF EDH/LATROBE IC
 From/To.....
 Analyst..... FP
 Time of Analysis..... PM PEAK HOUR
 Date of Analysis..... 8 /7 /98
 Other Information.... EXISTING CONDITIONS

	<i>EB</i> Dir 1	<i>wf</i> Dir 2
A. Geometrics and Traffic Input Data		
Traffic Volume (vph)	3900	1600
Peak-Hour Factor or Peak 15-min Volume	1.00	1.00
Percentage of Trucks	1.0	1.0
Percentage of Recreational Vehicles	0.0	0.0
Number of Lanes	2	2
Free-Flow Speed (mph)	65.0	65.0
Lane Width (ft)	12.0	12.0
Obstructions-No (0), One (1) or Both (2)	0	0
Distance from Pavement Edge (ft)		
Driver Population Factor	1.00	1.00

B. Adjustment Factors

	Segment Length(ft)	Equiv. Grade	E T	E R	F HV	F W	F P
Dir 1	5700.0	-1.61%	1.50		0.995	1.00	1.00
Dir 2	5700.0	1.61%	1.50		0.995	1.00	1.00

	Dir 1	Dir 2
C. Level of Service Results		
Maximum Service Flow (MSF) (pcphpl)	1960	804
Level of Service (LOS)	E	B
Projected Speed at Flow Rate (mph)	60.8	65.0
Density (pc/mi/ln)	32.21	12.37
Density (veh/mi/ln)	32.05	12.31
Speed of prevailing traffic (mph)	60.8	65.0

=====
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File Name EXWEAM.HC3
 Location..... US 50 EAST OF EDH/LATROBE IC
 From/To.....
 Analyst..... FP
 Time of Analysis..... AM PEAK HOUR
 Date of Analysis..... 8 /7 /98
 Other Information.... EXISTING CONDITIONS

A. Geometrics and Traffic Input Data	EB	WB
	Dir 1	Dir 2
Traffic Volume (vph)	917	3649
Peak-Hour Factor or Peak 15-min Volume	1.00	1.00
Percentage of Trucks	1.0	1.0
Percentage of Recreational Vehicles	0.0	0.0
Number of Lanes	2	2
Free-Flow Speed (mph)	65.0	65.0
Lane Width (ft)	12.0	12.0
Obstructions-No (0), One (1) or Both (2)	0	0
Distance from Pavement Edge (ft)		
Driver Population Factor	1.00	1.00

B. Adjustment Factors

	Segment Length(ft)	Equiv. Grade	E T	E R	F HV	F W	F P
Dir 1	900.0	-1.60%	1.50		0.995	1.00	1.00
Dir 2	900.0	1.60%	1.50		0.995	1.00	1.00

C. Level of Service Results

	Dir 1	Dir 2
Maximum Service Flow (MSF) (pcphpl)	461	1834
Level of Service (LOS)	A	D
Projected Speed at Flow Rate (mph)	65.0	62.6
Density (pc/mi/ln)	7.09	29.29
Density (veh/mi/ln)	7.06	29.15
Speed of prevailing traffic (mph)	65.0	62.6

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File Name EXEAAM.HC3
 Location..... US 50 EAST OF EDH/LATROBE IC
 From/To.....
 Analyst..... FP
 Time of Analysis..... PM PEAK HOUR
 Date of Analysis..... 8 /7 /98
 Other Information.... EXISTING CONDITIONS

	<i>EB</i> Dir 1	<i>WB</i> Dir 2

A. Geometrics and Traffic Input Data	Dir 1	Dir 2
Traffic Volume (vph)	3559	1351
Peak-Hour Factor or Peak 15-min Volume	1.00	1.00
Percentage of Trucks	1.0	1.0
Percentage of Recreational Vehicles	0.0	0.0
Number of Lanes	2	2
Free-Flow Speed (mph)	65.0	65.0
Lane Width (ft)	12.0	12.0
Obstructions-No (0), One (1) or Both (2)	0	0
Distance from Pavement Edge (ft)		
Driver Population Factor	1.00	1.00

B. Adjustment Factors

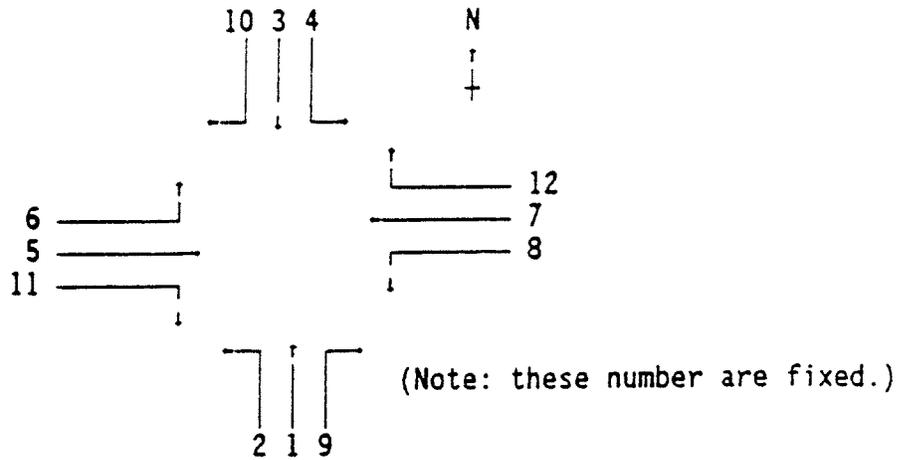
	Segment Length(ft)	Equiv. Grade	E T	E R	F HV	F W	F L
Dir 1	900.0	-1.60%	1.50		0.995	1.00	1.0
Dir 2	900.0	1.60%	1.50		0.995	1.00	1.0

C. Level of Service Results

	Dir 1	Dir 2

Maximum Service Flow (MSF) (pcphpl)	1788	67
Level of Service (LOS)	D	
Projected Speed at Flow Rate (mph)	63.1	65.
Density (pc/mi/ln)	28.33	10.4
Density (veh/mi/ln)	28.19	10.3
Speed of prevailing traffic (mph)	63.1	65.

Appendix B
2005 Conditions



A. TRANSYT-7F "Standard" Scheme

Note: TRANSYT7-F expresses delay at intersections in terms of total delay (stopped delay plus accel/decel delays). Average total delay is approximately 30 percent greater than average stopped delay. The average total delay estimates from the TRANSYT7-F output have been converted to stopped delay, which is the traditional measure of delay at signalized intersections.

Preferica 5:14 --
2005 AM

*
* Release 7.2 (TRF
*
* TRAFFIC SIGNAL
*
* PF
*
* Sponsored by:
*
* U.S. Department of Transportation
* Federal Highway Administration
*
* Software Maintenance and
* Center for Microcomputer
* Transportation Research
* 512 Weil Hall, Gaine
* (904
*
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* All Rig
*

Date of Run: 8/ 5/98 Start Time of

CYCLE EVALUATION

CYCLE LENGTH (sec)	STEP SIZE (steps)	AVERAGE DELAY (sec/veh)	PERCENT STOPS (%)	COI (%)
100	33	24.00	61	
105	35	25.04	61	
110	37	26.44	60	
115	38	25.40	59	
120	40	26.76	59	

BEST CYCLE LENGTH = 100 SEC.

EL DORADO HILLS 2005 AM INTERIM CASE NUMBER 1.
CYCLE: 100 Seconds, 60 Steps

<PERFORMANCE WITH OPTIMAL SETTINGS>

MOVEMENT/ NODE NOS.	V/C (%)	TOTAL TRAVEL (v-mi)	TRAVEL TIME TOTAL (v-hr)	AVG. (sec/v)	TOTAL DELAY (v-hr)	AVG. DELAY (sec/v)	UNIFORM STOPS NO. (%)	MAX BACK OF QUEUE EST. CAP.	FUEL CONS. (gal)	
101	: 24	71.13	5.42	41.1	3.37	25.6	361.(76)	10	51	7.9
103	: 37	154.66	5.74	21.8	1.30	4.9	308.(32)	9	55	9.2
104	: 80	55.68	6.59	69.3	4.99	52.5	319.(93)	9	55	8.2
108	: 87	10.08	8.23	54.8	7.82	52.1	502.(93)	14>	6C	8.1
109	: 11	23.51	.68	15.5	.00	.0	0.(0)	0	25	.9
112	: 76	3.91	3.00	51.5	2.85	48.8	190.(91)	5>	3C	3.0
							21.1			
NODE	1: 87	318.98	29.65		20.33	27.4	1681.(63)			37.16
201	: 24	57.47	3.31	33.8	1.66	16.9	199.(56)	6	55	4.9
202	: 75	52.10	7.49	84.3	6.00	67.5	320.(100)	9	55	8.8
203	: 50	135.31	7.87	40.1	3.99	20.3	679.(96)	19	65	13.1
204	: 38	9.95	1.09	75.5	.80	55.7	51.(98)	1	32	1.3
206	: 44	8.03	3.61	30.1	3.28	27.4	328.(76)	9>	6C	4.0
207	: 73	.97	1.19	82.4	1.15	79.7	50.(96)	1	3	1.2
208	: 46	.58	.47	54.2	.44	51.5	29.(95)	1	3	.5
209	: 17	17.09	.87	29.9	.38	13.0	31.(30)	1	28	1.2
210	: 68	181.24	6.12	23.3	.91	3.5	347.(37)	15	32	10.2
211	: 84	6.86	4.99	48.8	4.71	46.1	325.(88)	10>	3C	5.0
212	: 72	.78	1.00	86.0	.97	83.3	40.(96)	1	3	1.0
							19.8			
NODE	2: 84	470.38	38.02		24.30	25.7	2400.(70)			51.20

EDH/EB Ramps

EDH/WB Ramps

EL DORADO HILLS 2005 AM INTERIM CASE NUMBER 1.
CYCLE: 100 Seconds, 60 Steps

MOVEMENT/ NODE NOS.	V/C (%)	TOTAL TRAVEL (v-mi)	TRAVEL TIME TOTAL (v-hr)	AVG. (sec/v)	TOTAL DELAY (v-hr)	AVG. DELAY (sec/v)	UNIFORM STOPS NO. (%)	MAX BACK OF QUEUE EST. CAP.	FUEL CONS. (gal)	
301	: 25	131.16	5.12	24.2	2.18	10.3	350.(46)	10	87	10.4
302	: 78	18.07	2.44	83.8	2.04	69.9	99.(95)	3	29	3.3
303	: 59	398.90	13.47	27.6	4.55	9.3	681.(39)	19	115	25.4
304	: 78	23.88	2.86	98.1	2.33	79.8	105.(100)	3	38	3.8
305	: 79	3.52	3.12	59.5	2.98	56.8	175.(92)	5>	3C	3.0
306	: 34	2.05	1.36	44.6	1.28	41.9	99.(90)	3	6	1.6
307	: 37	1.27	.82	43.3	.77	40.6	60.(88)	2	3	1.0
308	: 41	.39	.31	54.0	.30	51.3	20.(95)	1	3	.4
							14.6			
NODE	3: 79	579.24	29.51		16.43	19.0	1588.(51)			48.94

EDH/Park Drive

All MOEs are in units per hour.

EL DORADO HILLS 2005 AM INTERIM CASE NUMBER 1.
 CYCLE: 100 Seconds, 60 Steps

SYSTEM-WIDE PERFORMANCE: ALL NODES

PERFORMANCE MEASURES	UNITS	SYSTEM TOTALS
Total Travel	veh-mi/hr	1369
Total Travel Time	veh-hr/hr	97
Total Uniform Delay	veh-hr/hr	51
Total Random Delay	veh-hr/hr	10
Total Delay	veh-hr/hr	61
Average Delay	sec/veh	23.9 13.4
Passenger Delay	pax-hr/hr	73
Stops: Total	veh/hr	5669
Percentage	%	62
System Speed	mph	14.1
Fuel Consumption	gal/hr	137
Operating Cost	\$/hr	919
Disutility Index	DI	61.1
Average PROS	PROS	37.7
Performance Index	PROS/DI	.6115

Performance Index (PI): Disutility Index (DI):
 PROS/Disutility Index Delay + Stops

No. of Simulations = 69, Links = 1071 Elapsed Time = 3.0 sec.
 1TRANSYT-7F:

EL DORADO HILLS 2005 AM INTERIM CASE NUMBER 1.
 CYCLE: 100 Seconds, 60 Steps

PROGRESSION ON ARTERIES

ART.	B/W EFFICIENCY			ATTAINABILITY		INTERFERENCE		PROS		
	FWD	REV	AVG	FWD	REV	FWD	REV	FWD	REV	AVG
1	35	33	34	80	72	21	14	38	37	38

1TRANSYT-7F:

EL DORADO HILLS 2005 AM INTERIM CASE NUMBER 1.
 CYCLE: 100 Seconds, 60 Steps

TRANSYT-7F TRAFFIC SIGNAL TIMING TABLES

 NETWORK-WIDE SIGNAL TIMING PARAMETERS

SYSTEM CYCLE LENGTH = 100 SECONDS

MASTER OFFSET REFERENCE LOCATION = INTERSECTION NO. 1 START OF INTERVAL 1.

NETWORK INCLUDES ACTUATED SIGNAL - GREEN TIMES ARE ESTIMATED.

Key to Interval Types:

F : Fixed green.

V : Variable green.

Y : Yellow.

R : All-red.

An 'M' by an interval length means this is the minimum time available.

 INTERSECTION CONTROLLER SETTINGS

 INTERSECTION 1 ACTUATED - SPLITS ESTIMATED

Interval Number :	1	2	3	4	5	6
Intvl Length(sec):	13	4	56	4	19	4
Intvl Length (%) :	13	4	56	4	19	4
Pin Settings (%) :	100/0	13	17	73	77	96
Phase Start (No.):	1 ACT	2 NAP	3 ACT			
Interval Type :	V	Y	V	Y	V	Y
Splits (sec):	17	60	23			
Splits (%) :	17	60	23			
Links Moving :	103	101	108			
	104	103	109			
	109	109	112			

Offset = 0 sec 0 %.

This is the master controller.

1TRANSYT-7F:

EL DORADO HILLS 2005 AM INTERIM CASE NUMBER 1.
 CYCLE: 100 Seconds, 60 Steps

 INTERSECTION 2 ACTUATED - SPLITS ESTIMATED

Interval Number :	1	2	3	4	5	6	7	8	9	10
Intvl Length(sec):	8	4	1	1	40	4	30	4	4	4
Intvl Length (%) :	8	4	1	1	40	4	30	4	4	4
Pin Settings (%) :	100/0	8	12	13	14	54	58	88	92	96
Phase Start (No.):	1 ACT	2 ACT	3 NAP	4 ACT	5 ACT					
Interval Type :	V	Y	V	Y	V	Y	V	Y	V	Y
Splits (sec):	12	2	44	34	8					
Splits (%) :	12	2	44	34	8					
Links Moving :	202	201	201	206	207					
	204	202	203	210	208					
	210	209	209	211	-210					
		210	210		212					

Offset = 4 sec 4 %.

 INTERSECTION 3 ACTUATED - SPLITS ESTIMATED

Interval Number :	1	2	3	4	5	6	7	8	9	10
Intvl Length(sec):	8	4	57	4	3M	4	3	1	12	4
Intvl Length (%) :	8	4	57	4	3	4	3	1	12	4
Pin Settings (%) :	100/0	8	12	69	73	76	80	83	84	96
Phase Start (No.):	1 ACT	2 NAP	3 ACT	4 ACT	5 ACT					
Interval Type :	V	Y	V	Y	V	Y	V	Y	V	Y
Splits (sec):	12	61	7	4	16					
Splits (%) :	12	61	7	4	16					
Links Moving :	302	301	306	305	305					
	304	303	308	306	307					

Offset = 0 sec 0 %.

1TRANSYT-7F:

EL DORADO HILLS 2005 AM INTERIM CASE NUMBER 1.
 CYCLE: 100 Seconds, 60 Steps

Preferred Project ARLD A-L-I
 2005 PM

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*****
*
* Release 7.2 (TRANSYT-7F) February 1994
*
* TRAFFIC SIGNAL SYSTEM OPTIMIZATION
*
* PROGRAM
*
* Sponsored by: Developed by:
*
* U.S. Department of Transportation University of Florida
* Federal Highway Administration Transportation Research Center
*
* Software Maintenance and User Support Furnished by:
* Center for Microcomputers in Transportation (McTrans)
* Transportation Research Center, University of Florida
* 512 Weil Hall, Gainesville, FL 32611-6585 USA
* (904) 392-0378
*
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*
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Date of Run: 8/ 5/98 Start Time of Run: 14:29:58 Data File: 20INTRPM.TIN
 EL DORADO HILLS 2005 PM INTERIM CASE NUMBER 1.

 CYCLE EVALUATION SUMMARY PERFORMANCE

CYCLE LENGTH (sec)	STEP SIZE (steps)	AVERAGE DELAY (sec/veh)	PERCENT STOPS (%)	FUEL CONSUMPTION (gal/hr)	DISUTILITY INDEX	NUMBER SATURATED LINKS	PERFORMANCE INDEX
100	33	29.29	61	164.0	84.7	3	25.0
105	35	30.26	61	166.3	87.5	2	24.4
110	37	36.22	73	189.2	104.7	2	22.4
115	38	29.48	61	164.3	85.3	1	25.2
120	40	30.17	63	168.3	87.3	1	24.4

BEST CYCLE LENGTH = 115 SEC. CYCLE SENSITIVITY = 4.5 %

--- 80 --- NOTE ---

TRANSYT-7F OPTIMIZES THE SYSTEM USING THE BEST CYCLE LENGTH AND HILL-CLIMB STEP SIZES AS INDICATED BY CARD TYPE 52.

EL DORADO HILLS 2005 PM INTERIM CASE NUMBER 1.
 CYCLE: 115 Seconds, 60 Steps

<PERFORMANCE WITH OPTIMAL SETTINGS>

MOVEMENT/ NODE NOS.	V/C (%)	TOTAL TRAVEL (v-mi)	TRAVEL TIME TOTAL (v-hr)	AVG. (sec/v)	TOTAL DELAY (v-hr)	AVG. DELAY (sec/v)	UNIFORM STOPS NO. (%)
101	: 88	147.20	16.82	61.6	12.59	46.1	895.(91
103	: 25	70.17	3.12	26.0	1.10	9.2	121.(28
104	: 91	71.96	7.92	64.5	5.86	47.7	419.(95
108	: 20	5.56	1.79	21.6	1.57	18.9	171.(58
109	: 35	77.12	2.22	15.5	.00	.0	0.(0
112	: 96*	11.76	12.10	69.0	11.63	66.3	580.(92
NODE 1: 96*		383.77	43.97		32.74	35.7	2187.(66
201	: 65	215.87	10.61	28.8	4.41	12.0	696.(53
202	: 53	68.38	2.63	22.6	.67	5.7	193.(46
203	: 36	90.91	5.23	39.6	2.62	19.8	198.(42
204	: 83	13.97	2.76	136.3	2.36	116.5	74.(101
206	: 87	7.40	7.56	68.6	7.27	65.9	375.(95
207	: 27	1.17	.82	47.1	.78	44.4	55.(87
208	: 81	3.32	3.49	70.6	3.36	67.9	166.(93
209	: 23	28.98	1.39	28.0	.55	11.2	156.(88
210	: 27	68.32	1.99	20.1	.03	.3	21.(6
211	: 62	2.35	1.89	54.0	1.80	51.3	114.(90
212	: 38	1.36	.98	48.4	.93	45.7	64.(88
NODE 2: 87		502.03	39.36		24.76	24.3	2113.(58

EDH/EB Ramps

EDH/WB Ramps

1TRANSYT-7F:

EL DORADO HILLS 2005 PM INTERIM CASE NUMBER 1.
 CYCLE: 115 Seconds, 60 Steps

MOVEMENT/ NODE NOS.	V/C (%)	TOTAL TRAVEL (v-mi)	TRAVEL TIME TOTAL (v-hr)	AVG. (sec/v)	TOTAL DELAY (v-hr)	AVG. DELAY (sec/v)	UNIFORM STOPS NO. (%)
301	: 60	331.09	15.74	32.8	8.34	17.4	787.(4
302	: 56	28.13	3.56	87.2	2.93	71.8	146.(9
303	: 37	187.55	9.40	37.5	5.21	20.8	563.(6
304	: 78	15.20	2.16	106.3	1.82	89.6	69.(9
305	: 29	2.14	1.20	37.5	1.11	34.8	90.(7
306	: 48	2.67	2.10	52.8	1.99	50.1	131.(9
307	: 77	5.29	4.23	53.6	4.02	50.9	257.(9
308	: 67	.97	1.10	76.1	1.06	73.4	49.(9
NODE 3: 78		573.04	39.49		26.48	27.7	2092.(6

EDH/Park Dr.

All MOEs are in units per hour.

1TRANSYT-7F:

EL DORADO HILLS 2005 PM INTERIM CASE NUMBER 1.
 CYCLE: 115 Seconds, 60 Steps

SYSTEM-WIDE PERFORMANCE: ALL NODES

PERFORMANCE MEASURES	UNITS	SYSTEM TOTALS
Total Travel	veh-mi/hr	1459
Total Travel Time	veh-hr/hr	123
Total Uniform Delay	veh-hr/hr	65
Total Random Delay	veh-hr/hr	19
Total Delay	veh-hr/hr	84
Average Delay	sec/veh	29.0 22.3
Passenger Delay	pax-hr/hr	101
Stops: Total	veh/hr	6392
Percentage	%	61
System Speed	mph	11.9
Fuel Consumption	gal/hr	164
Operating Cost	\$/hr	1064
Disutility Index	DI	84.0
Performance Index	PROS	25.2

Performance Index (PI): Disutility Index (DI):
 PROS Delay + Stops

No. of Simulations = 66, Links = 1031 Elapsed Time = 2.5 sec.
 1TRANSYT-7F:

Page 8

EL DORADO HILLS 2005 PM INTERIM CASE NUMBER 1.
 CYCLE: 115 Seconds, 60 Steps

PROGRESSION ON ARTERIES

ART.	B/W EFFICIENCY			ATTAINABILITY		INTERFERENCE		PROS		
	FWD	REV	AVG	FWD	REV	FWD	REV	FWD	REV	AVG
1	22	17	19	53	50	17	16	25	25	25

1TRANSYT-7F:

Page 9

EL DORADO HILLS 2005 PM INTERIM CASE NUMBER 1.
 CYCLE: 115 Seconds, 60 Steps

 TRANSYT-7F TRAFFIC SIGNAL TIMING TABLES

SYSTEM CYCLE LENGTH = 115 SECONDS

MASTER OFFSET REFERENCE LOCATION = INTERSECTION NO. 1 START OF INTERVAL 1.

NETWORK INCLUDES ACTUATED SIGNAL - GREEN TIMES ARE ESTIMATED.

Key to Interval Types:

- F : Fixed green.
- V : Variable green.
- Y : Yellow.
- R : All-red.

An 'M' by an interval length means this is the minimum time available.

 INTERSECTION CONTROLLER SETTINGS

 INTERSECTION 1 ACTUATED - SPLITS ESTIMATED

Interval Number :	1	2	3	4	5	6
Intvl Length(sec):	17	4	34	4	52	4
Intvl Length (%) :	15	3	30	3	46	3
Pin Settings (%) :	100/0	15	18	48	51	97
Phase Start (No.):	1 ACT	2 NAP	3 ACT			
Interval Type :	V	Y	V	Y	V	Y
Splits (sec):	21		38		56	
Splits (%) :	18		33		49	
Links Moving :	103		101		108	
	104		103		109	
	109		109		112	

Offset = 0 sec 0 %.

This is the master controller.

1TRANSYT-7F:

EL DORADO HILLS 2005 PM INTERIM CASE NUMBER 1.
 CYCLE: 115 Seconds, 60 Steps

 INTERSECTION 2 ACTUATED - SPLITS ESTIMATED

Interval Number :	1	2	3	4	5	6	7	8	9	10
Intvl Length(sec):	6M	4	18	1	43	4	16	4	15	4
Intvl Length (%) :	5	3	16	1	39	3	14	3	13	3
Pin Settings (%) :	100/0	5	8	24	25	64	67	81	84	97
Phase Start (No.):	1 ACT	2 ACT	3 NAP	4 ACT	5 ACT					
Interval Type :	V	Y	V	Y	V	Y	V	Y	V	Y
Splits (sec):	10		19		47		20		19	
Splits (%) :	8		17		42		17		16	
Links Moving :	202	201	201	206	207					
	204	202	203	210	208					
	210	209	209	211	-210					
		210	210		212					

Offset = 47 sec 41 %.

 INTERSECTION 3 ACTUATED - SPLITS ESTIMATED

Interval Number :	1	2	3	4	5	6	7	8	9	10	11	12
Intvl Length(sec):	6M	4	7	1	51	4	5M	4	1	1	27	4
Intvl Length (%) :	5	3	6	1	47	3	4	3	1	1	23	3
Pin Settings (%) :	100/0	5	8	14	15	62	65	69	72	73	74	97
Phase Start (No.):	1 ACT	2 ACT	3 NAP	4 ACT	5 ACT	6 ACT						
Interval Type :	V	Y	V	Y	V	Y	V	Y	V	Y	V	Y
Splits (sec):	10		8		55		9		2		31	
Splits (%) :	8		7		50		7		2		26	
Links Moving :	302	301	301	306	305	305						
	304	302	303	308	306	307						

Offset = 48 sec 42 %.

1TRANSYT-7F:

EL DORADO HILLS 2005 PM INTERIM CASE NUMBER 1.
 CYCLE: 115 Seconds, 60 Steps

Alt II
2005 A-M

*
* Release 7.2 (TRANSYT-7F)
*
* TRAFFIC SIGNAL SYSTEM OP
*
* PROGRAM
*
* Sponsored by:
*
* U.S. Department of Transportation
* Federal Highway Administration
*
* Software Maintenance and User Sup
* Center for Microcomputers in Trans
* portation Research Center, Un
* 512 Weil Hall, Gainesville, FL
* (904) 392-0378
*
* TRANSYT/7 (C) British Crow
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*

Date of Run: 8/ 6/98 Start Time of Run: 8

CYCLE EVALUATION SUMMARY PER

CYCLE LENGTH (sec)	STEP SIZE (steps)	AVERAGE DELAY (sec/veh)	PERCENT STOPS (%)	FUEL CONSUMPTION (gal/hr)
100	33	22.20	56	133.6
105	35	23.38	56	135.8
110	37	24.71	55	137.7
115	38	24.78	56	138.2
120	40	26.06	56	140.5

BEST CYCLE LENGTH = 115 SEC. CYCLE SEN

--- 80 --- NOTE -
+ TRANSYT-7F OPTIMIZES THE SY
CYCLE LENGTH AND HILL-CLIMB
INDICATED BY CARD TYPE 52.

1TRANSYT-7F:

EL DORADO HILLS 2005 AM ALT II CASE NUMBER 1.
 CYCLE: 115 Seconds, 60 Steps

<PERFORMANCE WITH OPTIMAL SETTINGS>

MOVEMENT/ NODE NOS.	V/C (%)	TOTAL TRAVEL (v-mi)	TRAVEL TIME TOTAL (v-hr)	AVG. (sec/v)	TOTAL DELAY (v-hr)	AVG. DELAY (sec/v)	UNIFORM STOPS NO. (%)	MAX BACK OF QUEUE EST.CAP.	FUEL CONS. (gal)
101	: 23	71.13	2.20	16.7	.15	1.2	34.(7)	1 51	3.1
103	: 36	154.66	5.85	22.2	1.41	5.3	305.(32)	11 55	9.2
104	: 80	55.68	7.08	74.6	5.48	57.7	319.(93)	10 55	8.5
108	: 79	10.08	7.69	51.2	7.29	48.5	492.(91)	16> 6C	7.7
109	: 11	23.51	.68	15.5	.00	.0	0.(0)	0 25	.9
112	: 69	3.91	2.92	50.1	2.77	47.4	185.(88)	6> 3C	2.9
<i>B Ramps</i>									
NODE	1: 80	318.98	26.43		17.10	<u>23.0</u>	^{17.7} 1335.(50)		32.27
201	: 45	125.84	7.18	33.4	3.56	16.6	359.(46)	12 55	10.1
202	: 80	52.10	8.94	100.6	7.44	83.7	320.(100)	10 55	9.8
203	: 47	135.31	9.44	48.1	5.56	28.3	681.(96)	22 65	14.3
204	: 71	9.95	1.66	114.6	1.37	94.8	51.(99)	2 32	1.8
207	: 49	.97	.84	58.1	.80	55.4	49.(93)	2 3	.9
208	: 30	.58	.47	54.5	.45	51.8	29.(93)	1 3	.5
209	: 16	18.72	.90	28.2	.36	11.3	30.(26)	1 28	1.2
210	: 68	181.24	6.23	23.7	1.02	3.9	376.(40)	17 32	10.5
211	: 85	6.86	5.81	56.9	5.54	54.2	334.(91)	11> 3C	5.6
212	: 48	.78	.68	58.6	.65	55.9	39.(93)	1 3	.8
<i>NB Ramps</i>									
NODE	2: 85	532.35	42.15		26.75	<u>28.3</u>	^{21.5} 2267.(67)		55.49

1TRANSYT-7F:

EL DORADO HILLS 2005 AM ALT II CASE NUMBER 1.
 CYCLE: 115 Seconds, 60 Steps

MOVEMENT/ NODE NOS.	V/C (%)	TOTAL TRAVEL (v-mi)	TRAVEL TIME TOTAL (v-hr)	AVG. (sec/v)	TOTAL DELAY (v-hr)	AVG. DELAY (sec/v)	UNIFORM STOPS NO. (%)	MAX BACK OF QUEUE EST.CAP.	FUEL CONS. (gal)
301	: 24	131.16	5.08	24.0	2.15	10.2	326.(43)	11 87	10.1
302	: 79	18.07	2.73	93.6	2.33	79.8	99.(95)	3 29	3.5
303	: 56	398.90	13.81	28.4	4.90	10.1	677.(39)	22 115	25.6
304	: 79	23.88	3.28	112.6	2.75	94.3	105.(100)	3 38	4.1
305	: 81	3.52	3.60	68.6	3.46	65.9	176.(93)	6> 3C	3.4
306	: 32	2.05	1.53	50.1	1.45	47.4	99.(90)	3 6	1.8
307	: 42	1.27	.97	51.5	.92	48.8	61.(90)	2 3	1.1
308	: 48	.39	.38	65.9	.37	63.2	20.(97)	1 3	.4
<i>2nd Dr.</i>									
NODE	3: 81	579.24	31.40		18.33	<u>21.2</u>	^{16.3} 1563.(50)		50.00

All MOEs are in units per hour.

1TRANSYT-7F:

EL DORADO HILLS 2005 AM ALT II CASE NUMBER 1.
 CYCLE: 115 Seconds, 60 Steps

SYSTEM-WIDE PERFORMANCE: ALL NODES

PERFORMANCE MEASURES	UNITS	SYSTEM TOTALS
Total Travel	veh-mi/hr	1431
Total Travel Time	veh-hr/hr	100
Total Uniform Delay	veh-hr/hr	53
Total Random Delay	veh-hr/hr	9
Total Delay	veh-hr/hr	62
Average Delay	sec/veh	24.3 13.7
Passenger Delay	pax-hr/hr	75
Stops: Total	veh/hr	5166
Percentage	%	56
System Speed	mph	14.3
Fuel Consumption	gal/hr	138
Operating Cost	\$/hr	912
Disutility Index	DI	62.2
Average PROS	PROS	42.6
Performance Index	PROS/DI	.6853

Performance Index (PI): Disutility Index (DI):
 PROS/Disutility Index Delay + Stops

No. of Simulations = 68, Links = 1020 Elapsed Time = 2.9 sec.
 1TRANST-7F:

Page 8

EL DORADO HILLS 2005 AM ALT II CASE NUMBER 1.
 CYCLE: 115 Seconds, 60 Steps

PROGRESSION ON ARTERIES

ART.	B/W EFFICIENCY			ATTAINABILITY		INTERFERENCE		PROS		
	FWD	REV	AVG	FWD	REV	FWD	REV	FWD	REV	AVG
1	41	38	40	89	75	18	13	43	43	43

1TRANST-7F:

Page 9

EL DORADO HILLS 2005 AM ALT II CASE NUMBER 1.
 CYCLE: 115 Seconds, 60 Steps

 NETWORK-WIDE SIGNAL TIMING PARAMETERS

SYSTEM CYCLE LENGTH = 115 SECONDS

MASTER OFFSET REFERENCE LOCATION = INTERSECTION NO. 1 START OF INTERVAL 1.

NETWORK INCLUDES ACTUATED SIGNAL - GREEN TIMES ARE ESTIMATED.

Key to Interval Types:

F : Fixed green.

V : Variable green.

Y : Yellow.

R : All-red.

An 'M' by an interval length means this is the minimum time available.

 INTERSECTION CONTROLLER SETTINGS

 INTERSECTION 1 ACTUATED - SPLITS ESTIMATED

Interval Number :	1	2	3	4	5	6
Intvl Length(sec):	15	4	66	4	22	4
Intvl Length (%) :	13	3	59	3	19	3
Pin Settings (%) :	100/0	13	16	75	78	97
Phase Start (No.):	1 ACT	2 NAP	3 ACT			
Interval Type :	V	Y	V	Y	V	Y
Splits (sec):	19		70		26	
Splits (%) :	16		62		22	
Links Moving :	103	101	108			
	104	103	109			
	109	109	112			

Offset = 0 sec 0 %.

This is the master controller.

1TRANSYT-7F:

EL DORADO HILLS 2005 AM ALT CASE NUMBER 1.
 CYCLE: 115 Seconds, 60 Steps

INTERSECTION 2 ACTUATED - SPLITS ESTIMATED

Interval Number :	1	2	3	4	5	6	7	8	9	10
Intvl Length(sec):	5M	4	5	1	49	4	34	4	5	4
Intvl Length (%) :	4	3	4	1	45	3	30	3	4	3
Pin Settings (%) :	100/0	4	7	11	12	57	60	90	93	97
Phase Start (No.):	1 ACT	2 ACT	3 NAP	4 ACT	5 ACT					
Interval Type :	V	Y	V	Y	V	Y	V	Y	V	Y
Splits (sec):	9	6	53	38	9					
Splits (%) :	7	5	48	33	7					
Links Moving :	202	201	201	210	207					
	204	202	203	211	208					
	210	209	209		-210					
		210	210		212					

Offset = 6 sec 5 %.

INTERSECTION 3 ACTUATED - SPLITS ESTIMATED

Interval Number :	1	2	3	4	5	6	7	8	9	10
Intvl Length(sec):	9	4	69	4	3M	4	5	1	12	4
Intvl Length (%) :	8	3	62	3	3	3	4	1	10	3
Pin Settings (%) :	100/0	8	11	73	76	79	82	86	87	97
Phase Start (No.):	1 ACT	2 NAP	3 ACT	4 ACT	5 ACT					
Interval Type :	V	Y	V	Y	V	Y	V	Y	V	Y
Splits (sec):	13	73	7	6	16					
Splits (%) :	11	65	6	5	13					
Links Moving :	302	301	306	305	305					
	304	303	308	306	307					

Offset = 0 sec 0 %.

1TRANSYT-7F:

Page 11

EL DORADO HILLS 2005 AM ALT II CASE NUMBER 1.
CYCLE: 115 Seconds, 60 Steps

A14 II
2005 AM

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*****
*
* Release 7.2 (TRANSYT-7F) February 1994 *
*
* TRAFFIC SIGNAL SYSTEM OPTIMIZATION *
*
* PROGRAM *
*
* Sponsored by: Developed by: *
*
* U.S. Department of Transportation University of Florida *
* Federal Highway Administration Transportation Research Center *
*
* Software Maintenance and User Support Furnished by: *
* Center for Microcomputers in Transportation (McTrans) *
* Transportation Research Center, University of Florida *
* 512 Weil Hall, Gainesville, FL 32611-6585 USA *
* (904) 392-0378 *
*
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*****

```

Date of Run: 8/ 6/98 Start Time of Run: 8:52:32 Data File: 05ALT1PM.TIN

EL DORADO HILLS 2005 PM ALT II CASE NUMBER 1.

CYCLE EVALUATION SUMMARY PERFORMANCE

CYCLE LENGTH (sec)	STEP SIZE (steps)	AVERAGE DELAY (sec/veh)	PERCENT STOPS (%)	FUEL CONSUMPTION (gal/hr)	DISUTILITY INDEX	NUMBER SATURATED LINKS	PERFORMANCE INDEX
100	33	27.78	58	161.9	80.3	3	27.0
105	35	27.53	57	159.3	79.6	2	25.7
110	37	34.02	65	178.3	98.4	2	23.3
115	38	27.04	57	158.6	78.2	1	27.0
120	40	35.21	65	182.7	101.8	1	23.9

BEST CYCLE LENGTH = 100 SEC. CYCLE SENSITIVITY = 6.7 %

--- 80 --- NOTE -

+ TRANSYT-7F OPTIMIZES THE SYSTEM USING THE BEST CYCLE LENGTH AND HILL-CLIMB STEP SIZES AS INDICATED BY CARD TYPE 52.

EL DORADO HILLS 2005 PM ALT I CASE NUMBER 1.
 CYCLE: 100 Seconds, 60 Steps

<PERFORMANCE WITH OPTIMAL SETTINGS>

MOVEMENT/ NODE NOS.	V/C (%)	TOTAL TRAVEL (v-mi)	TRAVEL TIME TOTAL (v-hr)	AVG. (sec/v)	TOTAL DELAY (v-hr)	AVG. DELAY (sec/v)	UNIFORM STOPS NO. (%)
101	: 95*	147.20	20.01	73.3	15.78	57.8	916. (93)
103	: 26	70.17	2.67	22.3	.66	5.5	101. (23)
104	: 96*	71.96	10.67	86.9	8.61	70.1	425. (96)
108	: 20	5.56	1.60	19.4	1.38	16.7	172. (58)
109	: 35	77.12	2.22	15.5	.00	.0	0. (0)
112	: 96*	11.76	11.91	68.0	11.44	65.3	579. (92)
EDH/EB Ramps NODE	1: 96*	383.77	49.09		37.86	41.3	2194. (66)
201	: 81	277.08	14.37	30.4	6.41	13.6	1079. (63)
202	: 43	68.38	2.51	21.5	.54	4.7	36. (9)
203	: 38	90.91	5.07	38.4	2.46	18.6	263. (55)
204	: 72	13.97	1.99	98.3	1.59	78.5	74. (101)
207	: 29	1.17	.74	42.2	.69	39.5	55. (88)
208	: 88	3.32	4.17	84.4	4.04	81.7	168. (94)
209	: 24	32.56	1.09	19.7	.16	2.8	80. (40)
210	: 27	68.32	1.98	20.0	.02	.2	11. (3)
EDH/WB Ramps 211	: 86	2.35	3.25	92.9	3.16	90.2	119. (95)
212	: 42	1.36	.89	43.8	.83	41.1	64. (88)
NODE	2: 88	559.42	36.07		19.89	19.5	1950. (53)

1TRANSYT-7F:

EL DORADO HILLS 2005 PM ALT I CASE NUMBER 1.
 CYCLE: 100 Seconds, 60 Steps

MOVEMENT/ NODE NOS.	V/C (%)	TOTAL TRAVEL (v-mi)	TRAVEL TIME TOTAL (v-hr)	AVG. (sec/v)	TOTAL DELAY (v-hr)	AVG. DELAY (sec/v)	UNIFORM STOPS NO. (%)
301	: 61	331.09	14.49	30.2	7.09	14.8	662. (38)
302	: 55	28.13	2.71	66.5	2.09	51.1	146. (99)
303	: 37	187.55	8.84	35.3	4.65	18.6	567. (63)
304	: 82	15.20	2.29	112.7	1.95	96.0	70. (96)
305	: 30	2.14	1.06	33.3	.98	30.6	90. (78)
306	: 46	2.67	1.84	46.3	1.73	43.6	131. (91)
307	: 83	5.29	4.33	54.9	4.12	52.2	258. (91)
308	: 73	.97	1.17	81.3	1.13	78.6	49. (95)
EDH/Park Dr. NODE	3: 83	573.04	36.74		23.74	24.8	1973. (57)

All MOEs are in units per hour.

1TRANSYT-7F:

EL DORADO HILLS 2005 PM ALT I CASE NUMBER 1.
 CYCLE: 100 Seconds, 60 Steps

SYSTEM-WIDE PERFORMANCE: ALL NODES

PERFORMANCE MEASURES	UNITS	SYSTEM TOTALS
Total Travel	veh-mi/hr	1516
Total Travel Time	veh-hr/hr	122
Total Uniform Delay	veh-hr/hr	54
Total Random Delay	veh-hr/hr	28
Total Delay	veh-hr/hr	81
Average Delay	sec/veh	28.2 21.7
Passenger Delay	pax-hr/hr	98
Stops: Total	veh/hr	6117
Percentage	%	59
System Speed	mph	12.4
Fuel Consumption	gal/hr	163
Operating Cost	\$/hr	1059
Disutility Index	DI	81.5
Performance Index	PROS	27.0

Performance Index (PI): Disutility Index (DI):
 PROS Delay + Stops

No. of Simulations = 66, Links = 989 Elapsed Time = 1.8 sec.
 1TRANSYT-7F:

Page 8

EL DORADO HILLS 2005 PM ALT II CASE NUMBER 1.
 CYCLE: 100 Seconds, 60 Steps

PROGRESSION ON ARTERIES

ART.	B/W EFFICIENCY			ATTAINABILITY		INTERFERENCE		PROS		
	FWD	REV	AVG	FWD	REV	FWD	REV	FWD	REV	AVG
1	21	24	23	54	73	14	17	27	27	27

1TRANSYT-7F:

Page 9

EL DORADO HILLS 2005 PM ALT II CASE NUMBER 1.
 CYCLE: 100 Seconds, 60 Steps

 NETWORK-WIDE SIGNAL TIMING PARAMETERS

SYSTEM CYCLE LENGTH = 100 SECONDS

MASTER OFFSET REFERENCE LOCATION = INTERSECTION NO. 1 START OF INTERVAL 1.

NETWORK INCLUDES ACTUATED SIGNAL - GREEN TIMES ARE ESTIMATED.

Key to Interval Types:

- F : Fixed green.
- V : Variable green.
- Y : Yellow.
- R : All-red.

An 'M' by an interval length means this is the minimum time available.

 INTERSECTION CONTROLLER SETTINGS

 INTERSECTION 1 ACTUATED - SPLITS ESTIMATED

Interval Number :	1	2	3	4	5	6
Intvl Length(sec):	14	4	29	4	45	4
Intvl Length (%) :	14	4	29	4	45	4
Pin Settings (%) :	100/0	14	18	47	51	96
Phase Start (No.):	1 ACT	2 NAP	3 ACT			
Interval Type :	V	Y	V	Y	V	Y
Splits (sec):	18		33		49	
Splits (%) :	18		33		49	
Links Moving :	103		101		108	
	104		103		109	
	109		109		112	

Offset = 0 sec 0 %.

This is the master controller.

1TRANSYT-7F:

EL DORADO HILLS 2005 PM ALT 1 CASE NUMBER 1.
 CYCLE: 100 Seconds, 60 Steps

 INTERSECTION 2 ACTUATED - SPLITS ESTIMATED

Interval Number :	1	2	3	4	5	6	7	8	9	10
Intvl Length(sec):	6M	4	20	1	35	4	10	4	12	4
Intvl Length (%) :	6	4	20	1	35	4	10	4	12	4
Pin Settings (%) :	100/0	6	10	30	31	66	70	80	84	96
Phase Start (No.):	1 ACT	2 ACT	3 NAP	4 ACT	5 ACT					
Interval Type :	V	Y	V	Y	V	Y	V	Y	V	Y
Splits (sec):	10	21	39	14	16					
Splits (%) :	10	21	39	14	16					
Links Moving :	202	201	201	210	207					
	204	202	203	211	208					
	210	209	209		-210					
		210	210		212					

Offset = 34 sec 34 %.

 INTERSECTION 3 ACTUATED - SPLITS ESTIMATED

Interval Number :	1	2	3	4	5	6	7	8	9	10	11	12
Intvl Length(sec):	5M	4	6	1	44	4	4M	4	1	1	22	4
Intvl Length (%) :	5	4	6	1	44	4	4	4	1	1	22	4
Pin Settings (%) :	100/0	5	9	15	16	60	64	68	72	73	74	96
Phase Start (No.):	1 ACT	2 ACT	3 NAP	4 ACT	5 ACT	6 ACT						
Interval Type :	V	Y	V	Y	V	Y	V	Y	V	Y	V	Y
Splits (sec):	9	7	48	8	2	26						
Splits (%) :	9	7	48	8	2	26						
Links Moving :	302	301	301	306	305	305						
	304	302	303	308	306	307						

Offset = 29 sec 29 %.

1TRANSYT-7F:

EL DORADO HILLS 2005 PM ALT U CASE NUMBER 1.
 CYCLE: 100 Seconds, 60 Steps

HCS: Unsignalized Intersections Release

=====
 Center For Microcomputers In Transport
 University of Florida
 512 Weil Hall
 Gainesville, FL 32611-2083
 Ph: (904) 392-0378
 =====

Streets: (N-S) EL DORADO HILLS BLVD
 Major Street Direction.... NS
 Length of Time Analyzed... 15 (min)
 Analyst..... DDD
 Date of Analysis..... 8/5/98
 Other Information..... 2005 (M PEAL

Two-way Stop-controlled Intersection

=====

	Northbound			Southbound	
	L	T	R	L	T
No. Lanes	0	2	0	0	0
Stop/Yield			N		
Volumes		750			
PHF		.9			
Grade		0			
MC's (%)					
SU/RV's (%)					
CV's (%)					
PCE's					

Adjustment Factors

Vehicle
 Maneuver

-
- Left Turn Major Road
 - Right Turn Minor Road
 - Through Traffic Minor Road
 - Left Turn Minor Road

ag
 on

Worksheet for TWSC Intersection

Step 1: RT from Minor Street

	WB	EB

Conflicting Flows: (vph)	416	
Potential Capacity: (pcph)	603	
Movement Capacity: (pcph)	603	
Prob. of Queue-Free State:	0.56	

Intersection Performance Summary

Movement	Flow Rate (pcph)	Move Cap (pcph)	Shared Cap (pcph)	Avg. Total Delay (sec/veh)	95% Queue Length (veh)	LOS	Approach Delay (sec/veh)

WB R	263	603		10.5	2.3	C	10.5

Intersection Delay = 2.3 sec/veh

HCS: Unsignalized Intersections
 =====
 Center For Microcomputers In Tran
 University of Florida
 512 Weil Hall
 Gainesville, FL 32611-2083
 Ph: (904) 392-0378
 =====

Streets: (N-S) EL DORADO HILLS BI
 Major Street Direction.... NS
 Length of Time Analyzed... 15 (mi
 Analyst..... fp
 Date of Analysis..... 8/5/98
 Other Information..... 2
 M

Two-way Stop-controlled Intersect
 =====

	Northbound			Sout
	L	T	R	L
No. Lanes	0	2	0	0
Stop/Yield			N	
Volumes		1840		
PHF		.9		
Grade		0		
MC's (%)				
SU/RV's (%)				
CV's (%)				
PCE's				

Adjustme

Vehicle
 Maneuver

- Left Turn Major Road
 Right Turn Minor Road
 Through Traffic Minor Road
 Left Turn Minor Road

=====

Worksheet for TWSC Intersection

```

-----
Step 1: RT from Minor Street          WB          EB
-----
Conflicting Flows: (vph)              1022
Potential Capacity: (pcph)            179
Movement Capacity: (pcph)            179
Prob. of Queue-Free State:           0.00
-----
    
```

Intersection Performance Summary

Movement	Flow Rate (pcph)	Move Cap (pcph)	Shared Cap (pcph)	Avg. Total Delay (sec/veh)	95% Queue Length (veh)	LOS	Approach Delay (sec/veh)
WB R	242	179		235.3	12.4	F	235.3

Intersection Delay = 22.9 sec/veh

=====
Center For Microcomputers In Transportation
University of Florida
512 Weil Hall
Gainesville, FL 32611-2083
Ph: (904) 392-0378
=====

Streets: (N-S) LATROBE ROAD
Analyst..... FP
Date of Analysis..... 8/4/98
Other Information..... 2005 NO PROJECT
R

All-way Stop-controlled Intersection

	Eastbound			Westbound			No. Lanes
	L	T	R	L	T	R	
No. Lanes	0	0	0	1	0	0	0
Volumes				490			
PHF				.95			

Range Limit(s) Exceeded

From HCM Range of Model Validity (p. 10-37):

The intersection volume exceeds 2100 vph.

∴ LOS F delay > 4.

Center For Microcomputers In Transportation
 University of Florida
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 Gainesville, FL 32611-2083
 Ph: (904) 392-0378

Streets: (N-S) LATROBE ROAD (E-W) EB RAMPS
 Analyst..... FP
 Date of Analysis..... 8/4/98
 Other Information..... 2005 NO PROJECT CONDITIONS- AM PEAK HOU
 R

All-way Stop-controlled Intersection

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	0	0	1	0	0	0	2	0	1	2	0
Volumes				270				890		400	390	
PHF				.95				.95		.95	.95	

Volume Summary and Capacity Analysis WorkSheet

	EB	WB	NB	SB
LT Flow Rate		284	0	421
RT Flow Rate		0	0	0
Approach Flow Rate		284	937	832
Proportion LT		1.00	0.00	0.51
Proportion RT		0.00	0.00	0.00
Opposing Approach Flow Rate		0	832	937
Conflicting Approaches Flow Rate		1769	284	284
Proportion, Subject Approach Flow Rate		0.14	0.46	0.41
Proportion, Opposing Approach Flow Rate		0.00	0.41	0.46
Lanes on Subject Approach		1	2	3
Lanes on Opposing Approach		0	3	2
LT, Opposing Approach		0	421	0
RT, Opposing Approach		0	0	0
LT, Conflicting Approaches		421	284	284
RT, Conflicting Approaches		0	0	0
Proportion LT, Opposing Approach		0.00	0.51	0.00
Proportion RT, Opposing Approach		0.00	0.00	0.00
Proportion LT, Conflicting Approaches		0.24	1.00	1.00
Proportion RT, Conflicting Approaches		0.00	0.00	0.00
*Range limit(s) exceeded (see below)	*	*	*	*

HCS Volume thresholds are far exceeded. Thus,

LOS F delay > 45 sec/veh

=====
 Streets: (E-W) PARK DRIVE (N-S) EL DORADO HILLS BLVD
 Analyst: FP File Name: ELPA20AM.HC9
 Area Type: Other 8-4-98 AM PEAK
 Comment: 2005 NO PROJECT CONDITIONS
 =====

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	1	<	1	1	<	1	3	<	1	3	<
Volumes	80	20	130	20	20	60	60	640	20	100	1380	130
Lane W (ft)	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
RTOR Vols			0			0			0			0
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	*	*			NB Left	*		
Thru		*	*		Thru		*	
Right		*	*		Right		*	
Peds					Peds			
WB Left	*				SB Left	*	*	
Thru			*		Thru		*	*
Right			*		Right		*	*
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green	5.0A	10.0A	12.0A		Green	5.0A	6.0A	50.0A
Yellow/AR	4.0	0.0	4.0		Yellow/AR	4.0	0.0	4.0
Cycle Length: 104 secs Phase combination order: #1 #2 #3 #5 #6 #7								

Intersection Performance Summary

Lane	Group:	Adj Sat	v/c	g/C	Delay	LOS	Approach:	Delay	LOS
Mvmts	Cap	Flow	Ratio	Ratio					
EB	L	272	1770	0.308	0.154	25.5	D	24.0	C
	TR	358	1620	0.441	0.221	23.2	C		
WB	L	102	1770	0.206	0.058	30.3	D	28.3	D
	TR	207	1653	0.407	0.125	27.8	D		
NB	L	102	1770	0.617	0.058	38.2	D	12.3	B
	TR	2728	5563	0.280	0.490	10.1	B		
SB	L	204	1770	0.514	0.115	29.8	D	11.4	B
	TR	3023	5516	0.579	0.548	10.3	B		

Intersection Delay = 13.2 sec/veh Intersection LOS = B
 Lost Time/Cycle, L = 12.0 sec Critical v/c(x) = 0.522

Streets: (E-W) PARK DRIVE (N-S) EL DORADO HILLS BLVD
 Analyst: FP File Name: ELPA20PM.HC9
 Area Type: Other 8-4-98 PM PEAK
 Comment: 2005 NO PROJECT CONDITIONS

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	1	<	1	1	<	1	3	<	1	3	<
Volumes	110	20	100	50	20	310	100	1440	60	70	670	100
Lane W (ft)	12.0	12.0		12.0	12.0		12.0	12.0		12.0	12.0	
RTOR Vols			0			40			0			0
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	*	*			NB Left	*		
Thru		*	*		Thru		*	
Right		*	*		Right		*	
Peds					Peds			
WB Left	*				SB Left	*		
Thru			*		Thru		*	
Right			*		Right		*	
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green	8.0A	6.0A	24.0A		Green	8.0A	50.0A	
Yellow/AR	4.0	0.0	4.0		Yellow/AR	4.0	4.0	
Cycle Length: 112 secs Phase combination order: #1 #2 #3 #5 #6								

Intersection Performance Summary

Lane	Group:	Adj Sat	v/c	g/C	Delay	LOS	Approach:	Delay	LOS
Mvmts	Cap	Flow	Ratio	Ratio					
EB	L	237	1770	0.489	0.134	30.3	D	25.3	D
	TR	451	1630	0.279	0.277	20.6	C		
WB	L	142	1770	0.373	0.080	32.3	D	38.2	D
	TR	358	1603	0.852	0.223	39.2	D		
NB	L	142	1770	0.738	0.080	44.6	E	17.8	C
	TR	2530	5555	0.687	0.455	16.2	C		
SB	L	142	1770	0.520	0.080	34.6	D	14.5	B
	TR	2495	5480	0.357	0.455	12.9	B		

Intersection Delay = 19.5 sec/veh Intersection LOS = C
 Lost Time/Cycle, L = 12.0 sec Critical v/c(x) = 0.703

Streets: (E-W) SARATOGA WAY (N-S) EL DORADO HILLS BLVD
 Analyst: FP File Name: ELSAEXAM.HC9
 Area Type: Other 8-5-98 AM
 Comment: 2005 NO PROJECT CONDITIONS

	Eastbound			Westbound			Northbound			Southbound	
	L	T	R	L	T	R	L	T	R	L	T
No. Lanes	> 1		1	1	1	1	1	2	1	1	2
Volumes	10	10	150	80	10	60	110	590	150	50	1540
Lane W (ft)		12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
RTOR Vols			40			10			30		
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination	1	2	3	4	5	6	7
EB Left	*				NB Left	*	
Thru	*				Thru	*	*
Right	*				Right	*	*
Peds					Peds		
WB Left	*				SB Left	*	
Thru	*				Thru		*
Right	*				Right		*
Peds					Peds		
NB Right					EB Right		
SB Right					WB Right		
Green	8.0A				Green	7.0A	11.0A 60.0A
Yellow/AR	4.0				Yellow/AR	4.0	4.0 0.0
Cycle Length: 120 secs Phase combination order: #1 #5 #6 #7 #8							

Intersection Performance Summary

Lane	Group:	Adj Sat	v/c	g/C	Delay	LOS	Approa
Mvmts	Cap	Flow	Ratio	Ratio			Delay
EB	LT	134	1787	0.164	0.075	33.6	D 100.3
	R	119	1583	1.036	0.075	112.2	F
WB	L	123	1645	0.721	0.075	47.2	E 42.4
	T	140	1863	0.079	0.075	33.4	D
	R	119	1583	0.472	0.075	36.6	D
NB	L	177	1770	0.689	0.100	40.9	E 7.9
	T	2918	3725	0.236	0.783	2.2	A
	R	950	1583	0.141	0.600	6.8	B
SB	L	118	1770	0.475	0.067	37.1	D 94.5
	TR	1768	3722	1.150	0.475	96.1	F

Intersection Delay = 67.8 sec/veh Intersection LOS
 Lost Time/Cycle, L = 9.0 sec Critical v/c(x) = 0.318

Streets: (E-W) WB RAMPS (N-S) EL DORADO HILLS BLVD
 Analyst: FP File Name: ELWBEXAM.HC9
 Area Type: Other 8-5-98 AM
 Comment: 2005 NO PROJECT CONDITIONS

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes				> 1		1	1	2			2	1
Volumes				500	1	390	290	460			820	950
Lane W (ft)				12.0	12.0		12.0	12.0			12.0	12.0
RTOR Vols						150			15			200
Lost Time				3.00	3.00	3.00	3.00	3.00			3.00	3.00

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left					*			
Thru						*	*	
Right								
Peds								
WB Left		*						
Thru		*					*	*
Right		*					*	
Peds								
NB Right								
SB Right								
Green	20.0A				13.0A	8.0A	51.0A	12.0A
Yellow/AR	4.0				4.0	0.0	4.0	4.0
Cycle Length: 120 secs Phase combination order: #1 #5 #6 #7 #8								

Intersection Performance Summary

Lane	Group:	Adj Sat	v/c	g/C	Delay	LOS	Approach:	Delay	LOS
Mvmts	Cap	Flow	Ratio	Ratio					
WB	LT	310	1774	1.794	0.175	*	*	*	*
	R	277	1583	0.960	0.175	63.5	F		
NB	L	206	1770	1.559	0.117	*	*	*	*
	T	1862	3725	0.288	0.500	11.3	B		
SB	T	2111	3725	0.453	0.567	9.9	B	*	*
	R	686	1583	1.216	0.433	*	*		

Intersection Delay = * (sec/veh) Intersection LOS = *
 (g/C) * (V/c) is greater than one. Calculation of D1 is infeasible.

LOS F > 60 sec/veh

Streets: (E-W) SARATOGA WAY (N-S) EL DORADO HILLS BI
 Analyst: FP File Name: ELSA05AM.HC9
 Area Type: Other 8-5-98 PM
 Comment: 2005 NO PROJECT CONDITIONS

	Eastbound			Westbound			Northbound			Sout
	L	T	R	L	T	R	L	T	R	L
No. Lanes	> 1		1	1	1	1	1	2	1	1
Volumes	10	10	50	230	20	100	130	1410	280	70
Lane W (ft)		12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
RTOR Vols			5			20			80	
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination	1	2	3	4	5	6
EB Left	*					
Thru	*					
Right	*					
Peds						
WB Left	*					
Thru	*					
Right	*					
Peds						
NB Right						
SB Right						
Green	27.0A				14.0A	13.0A
Yellow/AR	4.0				4.0	0.0
Cycle Length:	115 secs	Phase combination order: #1 #5 #6 #7 #8				

Intersection Performance Summary

Lane	Group:	Adj Sat	v/c	g/C	Delay	LOS	App Del
Mvmts	Cap	Flow	Ratio	Ratio			
EB	LT	412	1691	0.058	0.243	21.6	21.
	R	365	1500	0.145	0.243	22.1	
WB	L	377	1548	0.719	0.243	30.2	27.
	T	430	1765	0.056	0.243	21.6	
	R	365	1500	0.257	0.243	22.8	
NB	L	146	1676	1.050	0.087	108.8	25.
	T	1933	3529	0.901	0.548	19.5	
	R	535	1500	0.439	0.357	18.6	
SB	L	219	1676	0.375	0.130	30.1	91
	TR	858	3522	1.124	0.243	97.0	

Intersection Delay = 44.9 sec/veh Intersection

Lost Time/Cycle, L = 9.0 sec Critical v/c(x) = 0.779

Streets: (E-W) WB RAMPS (N-S) EL DORADO HILLS BLVD
 Analyst: FP File Name: ELWB05PM.HC9
 Area Type: Other 8-5-98 PM
 Comment: 2005 NO PROJECT CONDITIONS

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes				> 1	1	1	1	2			2	1
Volumes				190	1	360	380	1460			650	400
Lane W (ft)				12.0	12.0		12.0	12.0			12.0	12.0
RTOR Vols						150						120
Lost Time				3.00	3.00	3.00	3.00	3.00			3.00	3.00

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left					*			
Thru						*	*	
Right								
Peds								
WB Left		*						
Thru		*						
Right		*						
Peds								
NB Right								
SB Right							*	*
Green	17.0A				25.0A	8.0A	42.0A	12.0A
Yellow/AR	4.0				4.0	0.0	4.0	4.0

Cycle Length: 120 secs Phase combination order: #1 #5 #6 #7 #8

Intersection Performance Summary

Lane	Group:	Mvmts	Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach:	
									Delay	LOS
WB	LT	266		1774	0.846	0.150	46.8	E	70.5	F
	R	237		1583	1.044	0.150	92.1	F		
NB	L	384		1770	1.166	0.217	134.1	F	101.3	F
	T	1583		3725	1.140	0.425	93.2	F		
SB	T	1831		3725	0.438	0.492	12.9	B	15.3	C
	R	567		1583	0.582	0.358	21.3	C		

Intersection Delay = 72.3 sec/veh Intersection LOS = F
 Lost Time/Cycle, L = 0.0 sec Critical v/c(x) = 0.000

Overall Delay = $\frac{3090 \cdot 44.9 + 3440 \cdot 72.3}{(3090 + 3440)} = 59.3$ LOSE
 @ WB/EDH
 &
 sarafaj/EDH

=====
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 =====

File Name 05WEAM.HC3
 Location..... US 50 WEST OF EDH/LATROBE IC
 From/To.....
 Analyst..... FP
 Time of Analysis..... AM PEAK HOUR
 Date of Analysis..... 8 /7 /98
 Other Information.... 2005 CONDITIONS

	EB	WB
A. Geometrics and Traffic Input Data	Dir 1	Dir 2
Traffic Volume (vph)	2090 = 2290	5420
Peak-Hour Factor or Peak 15-min Volume	1.00 30043V	1.00
Percentage of Trucks	1.0	1.0
Percentage of Recreational Vehicles	0.0	0.0
Number of Lanes	2	2
Free-Flow Speed (mph)	65.0	65.0
Lane Width (ft)	12.0	12.0
Obstructions-No (0), One (1) or Both (2)	0	0
Distance from Pavement Edge (ft)		
Driver Population Factor	1.00	1.00

B. Adjustment Factors

	Segment Length(ft)	Equiv. Grade	E T	E R	F HV	F W	F P
Dir 1	5700.0	-1.61%	1.50		0.995	1.00	1.00
Dir 2	5700.0	1.61%	1.50		0.995	1.00	1.00

C. Level of Service Results

	Dir 1	Dir 2
Maximum Service Flow (MSF) (pcphpl)	1050	* 2724
Level of Service (LOS)	C	*F
Projected Speed at Flow Rate (mph)	65.0	
Density (pc/mi/ln)	16.15	
Density (veh/mi/ln)	16.07	
Speed of prevailing traffic (mph)	65.0	

* Speed and density are highly variable for LOS F

* Maximum Service Flow must not be greater than 2200 for 2 lanes.

=====
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File Name 05WEPM.HC3
 Location..... US 50 WEST OF EDH/LATROBE IC
 From/To.....
 Analyst..... FP
 Time of Analysis..... PM PEAK HOUR
 Date of Analysis..... 8 /7 /98
 Other Information.... 2005 CONDITIONS

A. Geometrics and Traffic Input Data

EB Dir 1 *WF* Dir 2

	Dir 1	Dir 2
Traffic Volume (vph)	5210 = 5820-	2800
Peak-Hour Factor or Peak 15-min Volume	1.00 61040V	1.00
Percentage of Trucks	1.0	1.0
Percentage of Recreational Vehicles	0.0	0.0
Number of Lanes	2	2
Free-Flow Speed (mph)	65.0	65.0
Lane Width (ft)	12.0	12.0
Obstructions-No (0), One (1) or Both (2)	0	0
Distance from Pavement Edge (ft)		
Driver Population Factor	1.00	1.00

B. Adjustment Factors

	Segment Length(ft)	Equiv. Grade	E T	E R	F HV	F W	F P
Dir 1	5700.0	-1.61%	1.50		0.995	1.00	1.00
Dir 2	5700.0	1.61%	1.50		0.995	1.00	1.00

C. Level of Service Results

Dir 1 Dir 2

Maximum Service Flow (MSF) (pcphpl)	* 2618	1407
Level of Service (LOS)	*F	C
Projected Speed at Flow Rate (mph)		65.0
Density (pc/mi/ln)		21.65
Density (veh/mi/ln)		21.54
Speed of prevailing traffic (mph)		65.0

* Speed and density are highly variable for LOS F

* Maximum Service Flow must not be greater than 2200 for 2 lanes.

=====
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File Name EXEAPM.HC3
 Location..... US 50 EAST OF EDH/LATROBE IC
 From/To.....
 Analyst..... FP
 Time of Analysis..... AM PEAK HOUR
 Date of Analysis..... 8 /7 /98
 Other Information.... 2005 CONDITIONS

	<i>EF</i> Dir 1	<i>WF</i> Dir 2

A. Geometrics and Traffic Input Data	Dir 1	Dir 2
Traffic Volume (vph)	2360	5070
Peak-Hour Factor or Peak 15-min Volume	1.00	1.00
Percentage of Trucks	1.0	1.0
Percentage of Recreational Vehicles	0.0	0.0
Number of Lanes	2	2
Free-Flow Speed (mph)	65.0	65.0
Lane Width (ft)	12.0	12.0
Obstructions-No (0), One (1) or Both (2)	0	0
Distance from Pavement Edge (ft)		
Driver Population Factor	1.00	1.00

B. Adjustment Factors

	Segment Length(ft)	Equiv. Grade	E T	E R	F HV	F W	F P
Dir 1	900.0	-1.60%	1.50		0.995	1.00	1.00
Dir 2	900.0	1.60%	1.50		0.995	1.00	1.00

C. Level of Service Results

	Dir 1	Dir 2
Maximum Service Flow (MSF) (pcphpl)	1186	* 2548
Level of Service (LOS)	C	*F
Projected Speed at Flow Rate (mph)	65.0	
Density (pc/mi/ln)	18.25	
Density (veh/mi/ln)	18.16	
Speed of prevailing traffic (mph)	65.0	

* Speed and density are highly variable for LOS F

* Maximum Service Flow must not be greater than 2200 for 2 lanes.

=====
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File Name 05EAAM.HC3
 Location..... US 50 EAST OF EDH/LATROBE IC
 From/To.....
 Analyst..... FP
 Time of Analysis..... PM PEAK HOUR
 Date of Analysis..... 8 /7 /98
 Other Information.... 2005 CONDITIONS

	EG	WB
A. Geometrics and Traffic Input Data	Dir 1	Dir 2
Traffic Volume (vph)	6440	2570
Peak-Hour Factor or Peak 15-min Volume	1.00	1.00
Percentage of Trucks	1.0	1.0
Percentage of Recreational Vehicles	0.0	0.0
Number of Lanes	2	2
Free-Flow Speed (mph)	65.0	65.0
Lane Width (ft)	12.0	12.0
Obstructions-No (0), One (1) or Both (2)	0	0
Distance from Pavement Edge (ft)		
Driver Population Factor	1.00	1.00

B. Adjustment Factors

	Segment Length(ft)	Equiv. Grade	E T	E R	F HV	F W	F P
Dir 1	900.0	-1.60%	1.50		0.995	1.00	1.00
Dir 2	900.0	1.60%	1.50		0.995	1.00	1.00

C. Level of Service Results

	Dir 1	Dir 2
Maximum Service Flow (MSF) (pcphpl)	* 3236	1291
Level of Service (LOS)	*F	C
Projected Speed at Flow Rate (mph)		65.0
Density (pc/mi/ln)		19.86
Density (veh/mi/ln)		19.76
Speed of prevailing traffic (mph)		65.0

* Speed and density are highly variable for LOS F

* Maximum Service Flow must not be greater than 2200 for 2 lanes.

=====
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 =====

File Name EXEBONAM.HC5
 Location..... US 50 EASTBOUND DIAG. ON-RAMP
 Analyst..... FP
 Time of Analysis..... AM PK HR
 Driver Population Factor..... 1.00
 Date of Analysis..... 8/6/98
 Other Information..... 2005 CONDITIONS - BUILD ALTERNATIVES

A. Ramp Configuration Input Data

	Freeway	Analysis Ramp	Ramp
Traffic Volume	1580	460	
Peak-Hour Factor	0.95	0.95	
Percentage HV's	2.0	2.0	
Percentage RV's	1.0	1.0	
Number of Lanes	2	2	
Lane Width (ft)	12.0	12.0	
Free-flow Speed (mph)	65	35	
Obstructions	0	0	
Distance from Edge (ft)			
Type of Ramp		ON	

Analysis ramp is a right-hand ramp.
 Length of acceleration lane is 150 ft.

=====
 File Name EXEBONAM.HC5

B. Adjustment Factors

Terrain Type		E T	E R	F HV	F W	F P
Freeway	ROLLING	3.00	2.00	0.952	1.00	1.00
Ramp		3.00	2.00	0.952	1.00	1.00

C. Level of Service Results

Type	Vol (vph)	FFS (mph)	#of Lanes	Lane Width (ft)	f W	f HV	f P	Vol (pcph)
Freeway	1580	65	2	12.0	1.00	0.952	1.00	1747
Ramp	460	35	2	12.0	1.00	0.952	1.00	509

Estimation of V12:

 PFM = 1.000 Using Equation: 1 V12 = 1747

Capacity Checks:

 VFO = 2256 VR12 = 2256

LOS, Speed, and Density:

 Level of Service (LOS) C
 Computed Density (pc/mi/ln) 22
 Computed Speed (mph) 57

HCS: Ramps Release 2.1d

=====
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=====
File Name 5BEBONAM.HC5
Location..... US 50 EASTBO
Analyst..... FP
Time of Analysis..... PM PK HR
Driver Population Factor..... 1.00
Date of Analysis..... 8/6/98
Other Information..... 2005 CONDITI

A. Ramp Configuration Input

Ar

Freeway

Traffic Volume 4600
Peak-Hour Factor 0.95
Percentage HV's 2.0
Percentage RV's 1.0
Number of Lanes 2
Lane Width (ft) 12.0
Free-flow Speed (mph) 65
Obstructions 0
Distance from Edge (ft)
Type of Ramp

Analysis ramp is a right-hand ramp.
Length of acceleration lane is 150 ft.

=====
 File Name 5BEBONAM.HC5

B. Adjustment Factors

Terrain Type		E T	E R	F HV	F W	F P
Freeway	ROLLING	3.00	2.00	0.952	1.00	1.00
Ramp		3.00	2.00	0.952	1.00	1.00

C. Level of Service Results

Type	Vol (vph)	FFS (mph)	#of Lanes	Lane Width (ft)	f W	f HV	f P	Vol (pcph)
Freeway	4600	65	2	12.0	1.00	0.952	1.00	5086
Ramp	ON 890	35	2	12.0	1.00	0.952	1.00	984

Estimation of V12:

 PFM = 1.000 Using Equation: 1 V12 = 5086

Capacity Checks:

 VFO = 6070 VR12 = 6070

LOS, Speed, and Density:

 Level of Service (LOS) F
 Computed Density (pc/mi/ln) *
 Computed Speed (mph) *

*Unstable flow

HCS: Ramps Release 2.1d

=====
Center For Microcomputers In Transportat
University of Florida
512 Weil Hall
Gainesville, FL 32611-2083
Ph: (904) 392-0378
=====

File Name EXWBOFAM.H
Location..... US 50 WEST
Analyst..... FP
Time of Analysis..... AM PK HR
Driver Population Factor..... 1.00
Date of Analysis..... 8/6/98
Other Information..... 2005 CONDI

A. Ramp Configuration In

	Freeway
-----	-----
Traffic Volume	5070
Peak-Hour Factor	0.95
Percentage HV's	2.0
Percentage RV's	1.0
Number of Lanes	2
Lane Width (ft)	12.0
Free-flow Speed (mph)	65
Obstructions	0
Distance from Edge (ft)	
Type of Ramp	

Analysis ramp is a right-hand ramp.
Length of acceleration lane is 0 ft.
Distance to downstream ramp is 3200 ft.

=====
 File Name EXWBOFAM.HC5

B. Adjustment Factors

Terrain Type		E T	E R	F HV	F W	F P
Freeway	ROLLING	3.00	2.00	0.952	1.00	1.00
Ramp		3.00	2.00	0.952	1.00	1.00
Dnstrm		3.00	2.00	0.952	1.00	1.00

C. Level of Service Results

Type	Vol (vph)	#of FFS Lanes (mph)	Lane Width (ft)	f W	f HV	f P	Vol (pcph)	
Freeway	5070	65	2	12.0	1.00	0.952	1.00	5606
Ramp	OFF 890	30	1	12.0	1.00	0.952	1.00	984
Downstream	ON 1240			12.0	1.00	0.952	1.00	1371

Estimation of V12:

 PFD = 1.000 Using Equation: 6 V12 = 5606

Capacity Checks:

 VFO+VR = 5606 V12 = 5606

LOS, Speed, and Density:

 Level of Service (LOS) F
 Computed Density (pc/mi/ln) *
 Computed Speed (mph) *

*Unstable flow

HCS: Ramps Release 2.1d

=====
Center For Microcomputers In Transportation
University of Florida
512 Weil Hall
Gainesville, FL 32611-2083
Ph: (904) 392-0378

=====
File Name 5BWBOFAM.HC5
Location..... US 50 WESTBOUN
Analyst..... FP
Time of Analysis..... PM PK HR
Driver Population Factor..... 1.00
Date of Analysis..... 8/6/98
Other Information..... 2005 CONDITION:

A. Ramp Configuration Input :

	Freeway	Anal: Ra
Traffic Volume	2570	5
Peak-Hour Factor	0.95	0.
Percentage HV's	2.0	2
Percentage RV's	1.0	1
Number of Lanes	2	
Lane Width (ft)	12.0	12
Free-flow Speed (mph)	65	
Obstructions	0	
Distance from Edge (ft)		
Type of Ramp		0

Analysis ramp is a right-hand ramp.
Length of acceleration lane is 0 ft.
Distance to downstream ramp is 3200 ft.

13. *Notification:*

(a) *Timing:* Where required by the terms of the NWP, the prospective permittee must notify the District Engineer with a Pre-Construction Notification (PCN) as early as possible and shall not begin the activity:

(1) Until notified by the District Engineer that the activity may proceed under the NWP with any special conditions imposed by the District or Division Engineer; or

(2) If notified by the District or Division Engineer that an individual permit is required; or

(3) Unless 45 days have passed from the District Engineer's receipt of the notification and the prospective permittee has not received notice from the District or Division Engineer. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 30.5(d)(2).

(b) *Contents of Notification:* The notification must be in writing and include the following information:

(1) Name, address and telephone numbers of the prospective permittee;

(2) Location of the proposed project;

(3) Brief description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause; any other NWP(s), regional general permit(s) or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity; and

(4) The PCN must also include a delineation of affected special aquatic sites, including wetlands (see paragraph 13(f));

(c) *Form of Notification:* The standard individual permit application form (Form ENG 4345) may be used as the notification but must clearly indicate that it is a PCN and must include all of the information required in (b) (1)-(4) of General Condition 13. A letter may also be used.

(d) *District Engineer's Decision:* In reviewing the pre-construction notification for the proposed activity, the District Engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. The prospective permittee may, optionally, submit a proposed mitigation plan with the pre-construction notification to expedite the process and the District Engineer will consider any optional mitigation the applicant has included in the proposal in determining whether the net adverse environmental effects of the proposed work are minimal. If the District Engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse effects are minimal, the District Engineer will notify the permittee and include any conditions the District Engineer deems necessary.

Any mitigation proposal must be approved by the District Engineer prior to commencing work. If the prospective permittee elects to submit a mitigation plan, the District Engineer will expeditiously review the proposed mitigation plan, but will not commence a second 45-day notification procedure. If the net adverse effects of the project (with the mitigation proposal) are determined by the District Engineer to be minimal, the District Engineer will provide a timely written response to the applicant stating that the project can proceed under the terms and conditions of the nationwide permit.

If the District Engineer determines that the adverse effects of the proposed work are more than minimal, then he will notify the applicant either:

(1) That the project does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit;

(2) That the project is authorized under the NWP subject to the applicant's submitting a mitigation proposal that would reduce the adverse effects to the minimal level; or

(3) That the project is authorized under the NWP with specific modifications or conditions.

(e) *Agency Coordination:* The District Engineer will consider any comments from Federal and State agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the project's adverse environmental effects to a minimal level.

(i) For areas between 1 and 3 acres of impact, the District Engineer will, upon receipt of a notification, provide immediately, *e.g.*, facsimile transmission, overnight mail or other expeditious manner, a copy to the appropriate offices of the Fish and Wildlife Service, State natural resource or water quality agency, Environmental Protection Agency (EPA), State Historic Preservation Officer (SHPO), and, if appropriate, the National Marine Fisheries Service. These agencies will then have 5 calendar days from the date the material is transmitted to telephone or fax the District Engineer notice that they intend to provide substantive, site-specific comments. If so contacted by an agency, the District Engineer will wait an additional 16 calendar days before making a decision on the notification. The District Engineer will fully consider agency comments received within the specified time frame, but will provide no response to the resource agency. The District Engineer will indicate in the administrative record associated with each notification that the resource agencies' concerns were considered. Applicants are encouraged to provide multiple copies of notifications to expedite agency notification.

(ii) Optional Agency Coordination, 401 Denial. Where the state has denied its 401 water quality certification for activities with less than 1 acre of wetland impact, the EPA regional administrator may request agency coordination of PCNs between 1/3 and 1 acre. The request may only include acreage limitations within the 1/3 to 1 acre range for which the state has denied water quality certification. In cases where the EPA has requested coordination of projects as described here, the Corps will forward the PCN to EPA only. The PCN will then be forwarded to the Fish and Wildlife Service and the National Marine Fisheries Service by EPA under agreements among those agencies. Any agency receiving the PCN will be bound by the EPA timeframes for providing comments to the Corps.

(f) *Wetlands Delineations*: Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic site. There may be some delay if the Corps does the delineation. Furthermore, the 45 days will not start until the wetland delineation has been completed and submitted to the Corps, where appropriate.

(g) *Mitigation*: Factors that the District Engineer will consider when determining the acceptability of appropriate and practicable mitigation include, but are not limited to:

(i) To be practicable, the mitigation must be available and capable of being done considering costs, existing technology, and logistics in light of the overall project purposes;

(ii) To the extent appropriate, permittees should consider mitigation banking and other forms of mitigation including contributions to wetland trust funds, "in lieu fees" to organizations such as The Nature Conservancy, state or county natural resource management agencies, where such fees contribute to the restoration, creation, replacement, enhancement, or preservation of wetlands. Furthermore, examples of mitigation that may be appropriate and practicable include but are not limited to: reducing the size of the project; establishing wetland or upland buffer zones to protect aquatic resource values; and replacing the loss of aquatic resource values by creating, restoring, and enhancing similar functions and values. In addition, mitigation must address wetland impacts, such as functions and values, and cannot be simply used to offset the acreage of wetland losses that would occur in order to meet the acreage limits of some of the NWPs (*e.g.*, for NWP 26, 5 acres of wetlands cannot be created to change a 6-acre loss of wetlands to a 1 acre loss; however, 2 created acres can be used to reduce the impacts of a 3-acre loss.).

14. *Compliance Certification:* Every permittee who has received a Nationwide permit verification from the Corps will submit a signed certification regarding the completed work and any required mitigation. The certification will be forwarded to the Corps and will include:

- a. A statement that the authorized work was done in accordance with the Corps authorization, including any general or specific conditions;
- b. A statement that any required mitigation was completed in accordance with the permit conditions;
- c. The signature of the permittee certifying the completion of the work and mitigation.

15. *Multiple Use of Nationwide Permits:* In any case where any NWP number 12 through 40 is combined with any other NWP number 12 through 40, as part of a single and complete project, the permittee must notify the District Engineer in accordance with paragraphs a, b, and c on the "Notification" General Condition number 13. Any NWP number 1 through 11 may be combined with any other NWP without notification to the Corps, unless notification is otherwise required by the terms of the NWPs. As provided at 33 CFR 330.6(c) two or more different NWPs can be combined to authorize a single and complete project. However, the same NWP cannot be used more than once for a single and complete project.

B. SECTION 404 ONLY CONDITIONS:

In addition to the General Conditions, the following conditions apply only to activities that involve the discharge of dredged or fill material into waters of the U.S., and must be followed in order for authorization by the NWP's to be valid:

1. *Water Supply Intakes:* No discharge of dredged or fill material may occur in the proximity of a public water supply intake except where the discharge is for repair of the public water supply intake structures or adjacent bank stabilization.
2. *Shellfish Production:* No discharge of dredged or fill material may occur in areas of concentrated shellfish production, unless the discharge is directly related to a shellfish harvesting activity authorized by NWP 4.
3. *Suitable Material:* No discharge of dredged or fill material may consist of unsuitable material (*e.g.*, trash, debris, car bodies, asphalt, *etc.*) and material discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).
4. *Mitigation:* Discharges of dredged or fill material into waters of the United States must be minimized or avoided to the maximum extent practicable at the project site (*i.e.*, on-site), unless the District Engineer approves a compensation plan that the District Engineer determines is more beneficial to the environment than on-site minimization or avoidance measures.
5. *Spawning Areas:* Discharges in spawning areas during spawning seasons must be avoided to the maximum extent practicable.
6. *Obstruction of High Flows:* To the maximum extent practicable, discharges must not permanently restrict or impede the passage of normal or expected high flows or cause the relocation of the water (unless the primary purpose of the fill is to impound waters).
7. *Adverse Effects From Impoundments:* If the discharge creates an impoundment of water, adverse effects on the aquatic system caused by the accelerated passage of water and/or the restriction of its flow shall be minimized to the maximum extent practicable.
8. *Waterfowl Breeding Areas:* Discharges into breeding areas for migratory waterfowl must be avoided to the maximum extent practicable.
9. *Removal of Temporary Fills:* Any temporary fills must be removed in their entirety and the affected areas returned to their preexisting elevation.

C. FURTHER INFORMATION:

1. District Engineers have the authority to determine if an activity complies with the terms and conditions of a nationwide permit.
2. Nationwide permits do not obviate the need to obtain other Federal, state, or local permits, approvals, or authorizations required by law.
3. Nationwide permits do not grant any property rights or exclusive privileges.
4. Nationwide permits do not authorize any injury to the property or rights of others.
5. Nationwide permits do not authorize interference with any existing or proposed Federal project.

Appendix H. Endangered Species Act Compliance Documentation



December 22, 1998

Harry Mossman
U.S Fish and Wildlife Service
Sacramento Field Office
3310 El Camino Boulevard
Sacramento, CA 95821-6340

SUBJECT: Special-Status Species Information Request

Dear Mr. Mossman:

On behalf of El Dorado County Department of Transportation and the California Department of Transportation (Caltrans), Jones & Stokes Associates is requesting a list of all candidate, proposed, and listed endangered or threatened species that could occur on or near the U.S. Highway 50/El Dorado Hills Boulevard - Latrobe Road Interchange Project area. We are preparing an environmental assessment/environmental impact report for this project. The USGS quadrangle and site location is provided in Attachment A.

The proposed project involves reconstructing the El Dorado Hills Boulevard-Latrobe Road interchange on Highway 50, improving the vertical and horizontal alignment of the interchange on- and off-ramps, widening El Dorado Hills Boulevard-Latrobe Road underneath the existing undercrossing structure from 4 to 6 lanes to provide dual left-turn lanes at the eastbound and westbound on-ramp intersections, and realigning Saratoga Way to intersect with Park Drive to address the existing spacing problem between the westbound on-ramp and the Saratoga Way/El Dorado Hills Boulevard intersection. Work is scheduled to begin in fiscal year 2002-2003. Construction is estimated to require 15 months.

Habitat types within the alignments are identified as annual and ruderal grassland and perennial drainages.

Thank you for your attention to this matter. Please call me, or Edward Whisler, Wildlife Biologist, if you require additional information.

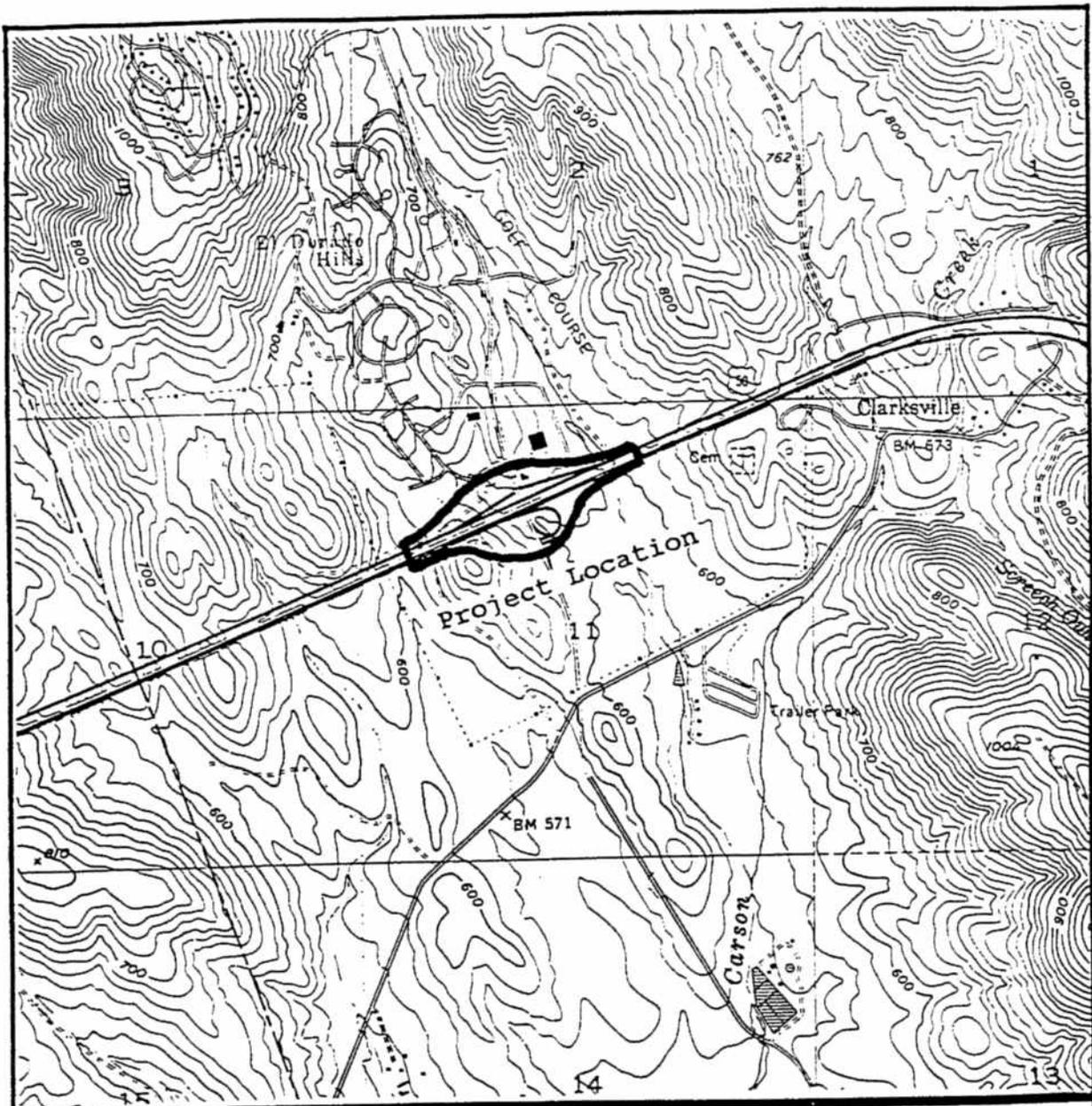
Sincerely,

David Bolland
Project Manager

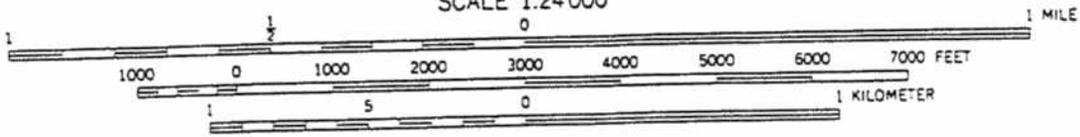
Enclosure

Jones & Stokes Associates, Inc.

2600 V Street, Suite 100 • Sacramento, CA 95818-1914 • Fax 916/737-3030 • 916/737-3000



SCALE 1:24 000



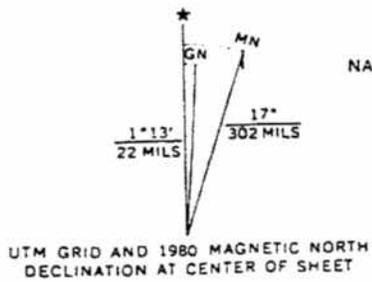
CONTOUR INTERVAL 20 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

CLARKVILLE, CALIF

N 3837.5—W 12100/7.5

1953

PHOTOREVISED 1980
DMA 1761 II NE—SERIES V895



Attachment A



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Sacramento Fish and Wildlife Office
3310 El Camino Avenue, Suite 130
Sacramento, California 95821-6340

IN REPLY REFER TO:
1-1-99-SP-484

February 4, 1999

RECEIVED

FEB - 5 1999

Mr. David Bolland
Jones & Stokes Associates, Inc.
2600 V Street, Suite 100
Sacramento, California 95818-1914

Subject: Species List for Reconstruction of the Highway 50/El Dorado Hills
Boulevard-Latrobe Road Interchange Project, El Dorado Hills, California

Dear Mr. Bolland,

We are sending the enclosed list in response to your December 22, 1998, request for information about endangered and threatened species (Enclosure A). The list covers the following U.S. Geological Survey 7½ minute quad or quads: Clarksville.

Please read *Important Information About Your Species List* (enclosed). It explains how we made the list and describes your responsibilities under the Endangered Species Act. If you have questions that are not answered by the enclosure, please call me at (916) 979-2749. For the fastest response to species list requests, address them to the attention of the Section 7 Biological Technician at this address. You may fax requests to 979-2723.

Sincerely,

Robert T. Pine
Chief, Forest-Foothills Branch

Enclosures

Important Information About Your Species List

How We Make Species Lists

We store information about endangered and threatened species lists by U.S. Geological Survey 7½ minute *quads*. The United States is divided into these quads, which are about the size of San Francisco. If you requested your list by quad name or number, that is what we used. Otherwise, we used the information you sent us to determine which quad or quads to use.

Animals

The animals on your species list are ones that occur within, *or may be affected by projects within*, the quads covered by the list. Fish and other aquatic species appear on your list if they are in the same watershed as your quad or if water use in your quad might affect them.

Plants

Any plants on your list are ones *that have actually been observed* in the quad or quads covered by the list. We have also included either a county species list or a list of species in nearby quads. We recommend that you check your project area for these plants. Plants may exist in an area without ever having been detected there.

Surveying

Some of the species on your list may not be affected by your project. A trained biologist or botanist, familiar with the habitat requirements of the species on your list, should determine whether they or habitats suitable for them may be affected by your project. We recommend that your surveys include any proposed and candidate species on your list. For plant surveys, we recommend using the enclosed *Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Species*. The results of your surveys should be published in any environmental documents prepared for your project.

State-Listed Species

Species listed as threatened or endangered by the California Department of Fish and Game do not appear on your species list unless they have also been listed by us or by the National Marine Fisheries Service. Call (916) 322-2493 or write Marketing Manager, California Department of Fish and Game, Natural Diversity Data Base, 1416 Ninth Street, Sacramento, California 95814 for information about state-listed species.

Your Responsibilities Under the Endangered Species Act

All plants and animals identified as *listed* on Enclosure A are fully protected under the Endangered Species Act of 1973, as amended. Section 9 of the Act and its implementing regulations prohibit the *take* of a federally listed wildlife species. Take is defined by the Act as "to harass, harm, pursue, hunt,

shoot, wound, kill, trap, capture, or collect" any such animal. Take may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or shelter (50 CFR §17.3).

Take incidental to an otherwise lawful activity may be authorized by one of two procedures:

If a Federal agency is involved with the permitting, funding, or carrying out of a project that may result in take, then that agency must engage in a *formal consultation* with the Service. Such consultation would result in a *biological opinion* addressing the anticipated effect of the project on listed and proposed species. The opinion may authorize a limited level of incidental take.

If no Federal agency is involved with the project, and federally listed species may be taken as part of the project, then you, the applicant, should apply for an *incidental take permit*. The Service may issue such a permit if you submit a satisfactory conservation plan for the species that would be affected by your project. Should your survey determine that federally listed or proposed species occur in the area and are likely to be affected by the project, we recommend that you work with this office and the California Department of Fish and Game to develop a plan that mitigates for the project's direct and indirect impacts to listed species and compensates for project-related loss of habitat. You should include the mitigation plan in any environmental documents you file.

Critical Habitat

When a species is listed as endangered or threatened, areas of habitat considered essential to its conservation may be designated as *critical habitat*. These areas may require special management considerations or protection. They provide needed space for growth and normal behavior; food, water, air, light, other nutritional or physiological requirements; cover or shelter; and sites for breeding, reproduction, rearing of offspring, germination or seed dispersal.

Although critical habitat may be designated on private or State lands, activities on these lands are not restricted unless there is Federal involvement in the activities or direct harm to listed wildlife.

If any species has proposed or designated critical habitat within a quad, this will be noted on the species list. Maps and boundary descriptions of the critical habitat may be found in the *Federal Register*. The information is also reprinted in the *Code of Federal Regulations* (50 CFR 17.95).

Candidate Species

We recommend that you address impacts to *candidate* species. We put plants and animals on our candidate list when we have enough scientific information to eventually propose them for listing as threatened or endangered. By considering these species early in your planning process you may be able to avoid the problems that could develop if one of these candidates was listed before the end of your project.

Your list may contain a section called *Species of Concern*. This term includes former *category 2 candidate species* and other plants and animals of concern to the Service and other Federal, State and

private conservation agencies and organizations. Some of these species may become candidate species in the future.

Wetlands

If your project will impact wetlands, riparian habitat, or other jurisdictional waters as defined by section 404 of the Clean Water Act and/or section 10 of the Rivers and Harbors Act, you will need to obtain a permit from the U.S. Army Corps of Engineers. Impacts to wetland habitats require site specific mitigation and monitoring. For questions regarding wetlands, please contact Mark Littlefield of this office at (916) 979-2113.

GUIDELINES FOR CONDUCTING AND REPORTING BOTANICAL INVENTORIES
FOR FEDERALLY LISTED, PROPOSED AND CANDIDATE PLANTS
(September 23, 1996)

These guidelines describe protocols for conducting botanical inventories for federally listed, proposed and candidate plants, and describe minimum standards for reporting results. The Service will use, in part, the information outlined below in determining whether the project under consideration may affect any listed, proposed or candidate plants, and in determining the direct, indirect, and cumulative effects.

Field inventories should be conducted in a manner that will locate listed, proposed, or candidate species (target species) that may be present. The entire project area requires a botanical inventory, except developed agricultural lands. The field investigator(s) should:

1. Conduct inventories at the appropriate times of year when target species are present and identifiable. Inventories will include all potential habitats. Multiple site visits during a field season may be necessary to make observations during the appropriate phenological stage of all target species.
2. If available, use a regional or local reference population to obtain a visual image of the target species and associated habitat(s). If access to reference populations is not available, investigators should study specimens from local herbaria.
3. List every species observed and compile a comprehensive list of vascular plants for the entire project site. Vascular plants need to be identified to a taxonomic level which allows rarity to be determined.
4. Report results of botanical field inventories that include:
 - a. a description of the biological setting, including plant community, topography, soils, potential habitat of target species, and an evaluation of environmental conditions, such as timing or quantity of rainfall, which may influence the performance and expression of target species
 - b. a map of project location showing scale, orientation, project boundaries, parcel size, and map quadrangle name
 - c. survey dates and survey methodology(ies)
 - d. if a reference population is available, provide a written narrative describing the target species reference population(s) used, and date(s) when observations were made
 - e. a comprehensive list of all vascular plants occurring on the project site for each habitat type
 - f. current and historic land uses of the habitat(s) and degree of site alteration
 - g. presence of target species off-site on adjacent parcels, if known
 - h. an assessment of the biological significance or ecological quality of the project site in a local

and regional context

5. If target species is(are) found, report results that additionally include:
 - a. a map showing federally listed, proposed and candidate species distribution as they relate to the proposed project
 - b. if target species is (are) associated with wetlands, a description of the direction and integrity of flow of surface hydrology. If target species is (are) affected by adjacent off-site hydrological influences, describe these factors.
 - c. the target species phenology and microhabitat, an estimate of the number of individuals of each target species per unit area; identify areas of high, medium and low density of target species over the project site, and provide acres of occupied habitat of target species. Investigators could provide color slides, photos or color copies of photos of target species or representative habitats to support information or descriptions contained in reports.
 - d. the degree of impact(s), if any, of the proposed project as it relates to the potential unoccupied habitat of target habitat.
6. Document findings of target species by completing California Native Species Field Survey Form(s) and submit form(s) to the Natural Diversity Data Base. Documentation of determinations and/or voucher specimens may be useful in cases of taxonomic ambiguities, habitat or range extensions.
7. Report as an addendum to the original survey, any change in abundance and distribution of target plants in subsequent years. Project sites with inventories older than three years from the current date of project proposal submission will likely need additional survey. Investigators need to assess whether an additional survey(s) is (are) needed.
8. Adverse conditions may prevent investigator(s) from determining presence or identifying some target species in potential habitat(s) of target species. Disease, drought, predation, or herbivory may preclude the presence or identification of target species in any year. An additional botanical inventory(ies) in a subsequent year(s) may be required if adverse conditions occur in a potential habitat(s). Investigator(s) may need to discuss such conditions.
9. Guidance from California Department of Fish and Game (CDFG) regarding plant and plant community surveys can be found in Guidelines for Assessing the Effects of Proposed Developments on Rare and Endangered Plants and Plant Communities, 1984. Please contact the CDFG Regional Office for questions regarding the CDFG guidelines and for assistance in determining any applicable State regulatory requirements.

ENCLOSURE A

Endangered and Threatened Species that May Occur in or
be Affected by Projects in the Selected Quads Listed Below
Highway 50/El Dorado Hills Blvd/Latrobe Road Interchange, El Dorado Hills
Reference File No. 1-1-99-SP-484
February 1, 1999

QUAD : 511A CLARKSVILLE

Listed Species

Birds

- American peregrine falcon, *Falco peregrinus anatum* (E)
- Aleutian Canada goose, *Branta canadensis leucopareia* (T)
- bald eagle, *Haliaeetus leucocephalus* (T)

Reptiles

- giant garter snake, *Thamnophis gigas* (T)

Amphibians

- California red-legged frog, *Rana aurora draytonii* (T)

Fish

- winter-run chinook salmon, *Oncorhynchus tshawytscha* (E)
- delta smelt, *Hypomesus transpacificus* (T)
- Central Valley steelhead, *Oncorhynchus mykiss* (T)

Invertebrates

- vernal pool fairy shrimp, *Branchinecta lynchi* (T)
- valley elderberry longhorn beetle, *Desmocerus californicus dimorphus* (T)

Plants

- Pine Hill ceanothus, *Ceanothus roderickii* (E)
- Pine Hill flannelbush, *Fremontodendron californicum ssp. decumbens* (E)
- El Dorado bedstraw, *Galium californicum ssp. sierrae* (E)
- Layne's butterweed, *Senecio layneae* (T)

Proposed Species

Fish

- Central Valley spring-run chinook salmon, *Oncorhynchus tshawytscha* (PE)
- Central Valley fall/late fall-run chinook salmon, *Oncorhynchus tshawytscha* (PT)
- Sacramento splittail, *Pogonichthys macrolepidotus* (PT)

QUAD : 511A CLARKSVILLE

Proposed Species

Fish

Candidate Species

Birds

mountain plover, *Charadrius montanus* (C)

Species of Concern

Mammals

Pacific western big-eared bat, *Corynorhinus (=Plecotus) townsendii townsendii* (SC)

spotted bat, *Euderma maculatum* (SC)

greater western mastiff-bat, *Eumops perotis californicus* (SC)

small-footed myotis bat, *Myotis ciliolabrum* (SC)

long-eared myotis bat, *Myotis evotis* (SC)

fringed myotis bat, *Myotis thysanodes* (SC)

long-legged myotis bat, *Myotis volans* (SC)

Yuma myotis bat, *Myotis yumanensis* (SC)

San Joaquin pocket mouse, *Perognathus inornatus* (SC)

Birds

tricolored blackbird, *Agelaius tricolor* (SC)

western burrowing owl, *Athene cunicularia hypugea* (SC)

ferruginous hawk, *Buteo regalis* (SC)

white-faced ibis, *Plegadis chihi* (SC)

Reptiles

northwestern pond turtle, *Clemmys marmorata marmorata* (SC)

California horned lizard, *Phrynosoma coronatum frontale* (SC)

Amphibians

western spadefoot toad, *Scaphiopus hammondi* (SC)

Fish

green sturgeon, *Acipenser medirostris* (SC)

QUAD : 511A CLARKSVILLE

Species of Concern

Fish

longfin smelt, *Spirinchus thaleichthys* (SC)

Invertebrates

South Forks ground beetle, *Nebria darlingtoni* (SC)

Plants

valley spearscale, *Atriplex joaquiniana* (SC)

Red Hills soaproot, *Chlorogalum grandiflorum* (SC)

El Dorado mule-ears, *Wyethia reticulata* (SC)

KEY:

- | | | |
|------|---------------------------|---|
| (E) | <i>Endangered</i> | Listed (in the Federal Register) as being in danger of extinction. |
| (T) | <i>Threatened</i> | Listed as likely to become endangered within the foreseeable future. |
| (P) | <i>Proposed</i> | Officially proposed (in the Federal Register) for listing as endangered or threatened. |
| (C) | <i>Candidate</i> | Candidate to become a <i>proposed</i> species. |
| (SC) | <i>Species of Concern</i> | May be endangered or threatened. Not enough biological information has been gathered to support listing at this time. |
| (*) | | Possibly extinct. |
| | <i>Critical Habitat</i> | Area essential to the conservation of a species. |

DEPARTMENT OF TRANSPORTATION

DISTRICT 3, SACRAMENTO AREA OFFICE - MS 41
P.O. BOX 942874
SACRAMENTO, CA 94274-0001
TDD Telephone (530) 741-4509
FAX (916) 323-7669
Telephone (916) 324-5150



May 21, 1999

Mr. Wayne White
Field Supervisor
Ecological Services, Sacramento Field Office
U.S. Fish and Wildlife Service
3310 El Camino Avenue, Suite 130
Sacramento, CA 95821-6430

SUBJECT: Proposed U.S. Highway 50/El Dorado Hills Boulevard-Latrobe Road Interchange
Project, El Dorado County, California

Dear Mr. White:

This letter is to inform you about the U.S. Highway 50/El Dorado Hills Boulevard-Latrobe Road interchange project and to request a letter from your office concurring with our conclusions regarding compliance with the federal Endangered Species Act.

The project is located in El Dorado County, approximately 1 mile east of the Sacramento County line and is being proposed by the El Dorado County of Department of Transportation. The project is being undertaken using federal funding and will be constructed in cooperation with the California Department of Transportation and Federal Highway Administration. A copy of the project description, hydrology and water quality, and biological resources sections of the administrative draft environmental impact report/environmental assessment (EIR/EA) are enclosed for your review.

Also enclosed is a copy of the species list provided by your office. Reconnaissance-level biological surveys were conducted on August 24, 1998, and February 19, 1999, by a Jones & Stokes Associates wildlife biologist to evaluate the existing habitat quality and determine the potential for occurrences of special-status species, including each species identified on your species list. Tables 1 1-1 and 1 1-2 specifically document the potential for the presence of each species in the study area. On the basis of this information, the project area does not contain federally listed species, species of concern, species proposed for listing, or suitable or critical habitat for these species and therefore would not jeopardize the continued existence of any endangered or threatened species.

The enclosed portions of the administrative draft EIR/EA include a description of the biological resources of the project area and potential impacts and mitigation measures. Impacts on biological resources from construction of the project would be minor because of the small scale of the project effects. Further, implementation of best management practices, including a Section 1601-03 streambed alteration agreement and compliance with Section 404 of the Clean Water Act, would minimize impacts on biological resources. A wetland delineation prepared by a Jones & Stokes Associates botanist/wetland biologist was verified by the U.S. Army Corps of Engineers (Corps). The Corps has determined that Nationwide Permit Number 26 authorizes the fill of 0.15 acre of waters of the United States, subject to

Mr. Wayne White
May 21, 1999
Page 2

obtaining a water certification or waiver from the Regional Water Quality Control Board.

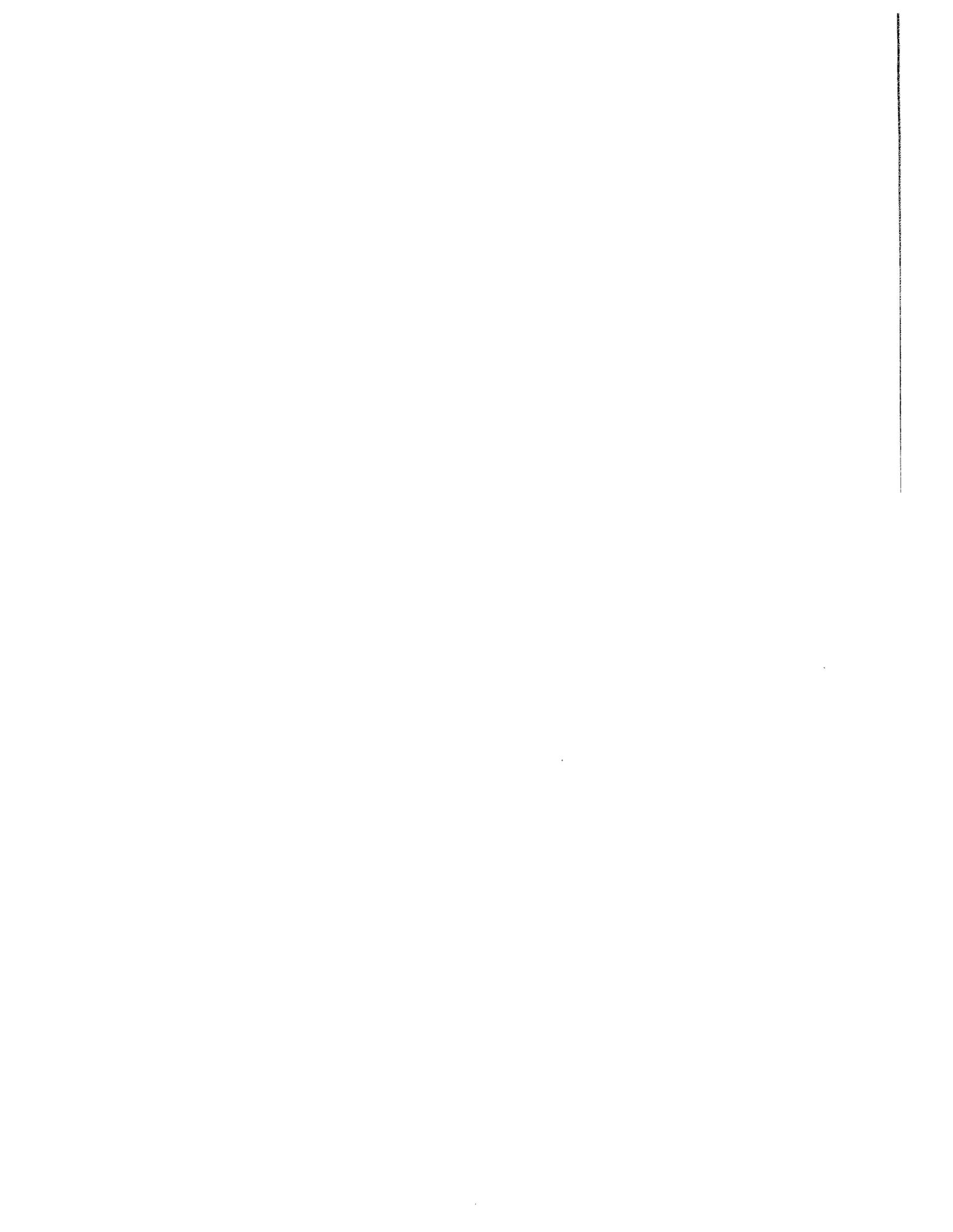
Please review the enclosed information and provide a letter of concurrence with these findings. If you have any questions, please call Debra Loh or Edward Whisler, the project wildlife biologist, at Jones & Stokes Associates (916/737-3000). Thank you for your attention to this matter.

Sincerely,

JOHN D. WEBB, Chief
Office of Environmental
Management, Sacramento

Enclosures

**Appendix I. Technical Memorandum on El Dorado Hills
Boulevard/U.S. 50 Interchange Alternatives**



TECHNICAL MEMORANDUM

Date: December 17, 1997

To: Project File

From:  Kris Payne, Project Manager

Re: El Dorado Hills Blvd. / US 50 Interchange Alternatives

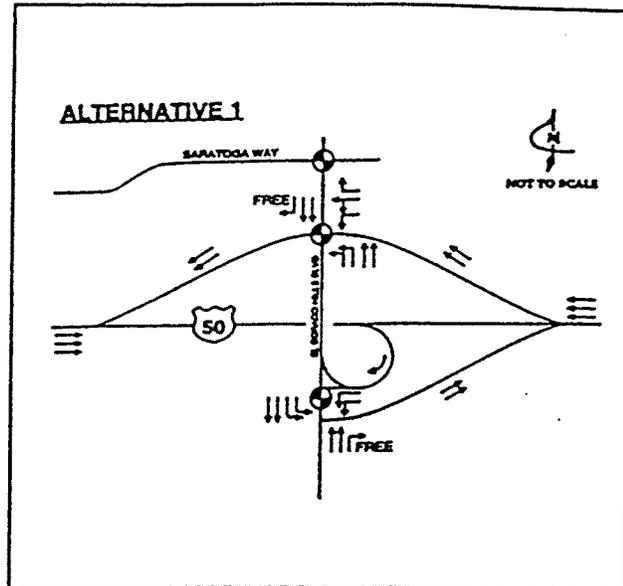
This memorandum discusses the alternatives studied as potential geometric configurations for the future El Dorado Hills Blvd. / US 50 Interchange. Reconstructing the interchange is necessary for improving vehicular access from the growing community of El Dorado Hills to the US 50 corridor, identified in the El Dorado County 1996 General Plan. It will improve the vertical and horizontal alignment of the interchange on- and off- ramps, and widen EL Dorado Hills Blvd / Latrobe Rd. The future geometric configuration includes planning for a vehicular capacity of eight lanes for US 50 and six lanes for El Dorado Hills Blvd / Latrobe Rd. Eight viable and seven nonviable alternatives were identified based on preliminary technical analysis which includes alignment geometrics, topographic constraints and historical resource sensitivity. The word "viable" only means the alternative is technically possible, it may or may not be operationally acceptable. Nor does it mean that the alternative should be or will it be selected as the "Preferred Alternative" of the interchange improvement process. A summary of each alternative analyzed and the reasons for accepting (PRO) or rejecting (CON) the alternatives are presented below.

The following seven alternatives were developed through the effort of the Project Development Team, are currently represented in the Draft Project Study Report / Project Report (PSR / PR) dated September 1996 and distinguished by a numeric character:



ALTERNATIVE 1:

Existing configurations-
Alternative 1 incorporates the existing interchange configuration with additional lanes to handle the expected demand in the year 2020. At the eastbound (EB) ramp intersection, additional left-turn lanes would be added to the loop off-ramp approach to southbound (SB) Latrobe Rd and to the SB Latrobe Rd approach to the EB on-ramp. Additional left-turn lanes would also be added to the northbound (NB) El Dorado Hills Blvd approach to the westbound (WB) on-ramp. Both intersections would be signalized.



This configuration is not considered viable because it does not significantly improve traffic operations and offers no solution to the intersection spacing problem between the WB ramp and Saratoga Way intersections. Specifically this alternative fails to operate acceptably at the WB ramp intersection during the PM peak period.

PROs -

- Results in acceptable levels of service at the EB ramp intersection
- Would not require earthwork in southwest (SW) quadrant to construct EB diagonal off-ramp
- Does not require relocation of Saratoga Way (west) to Park Dr

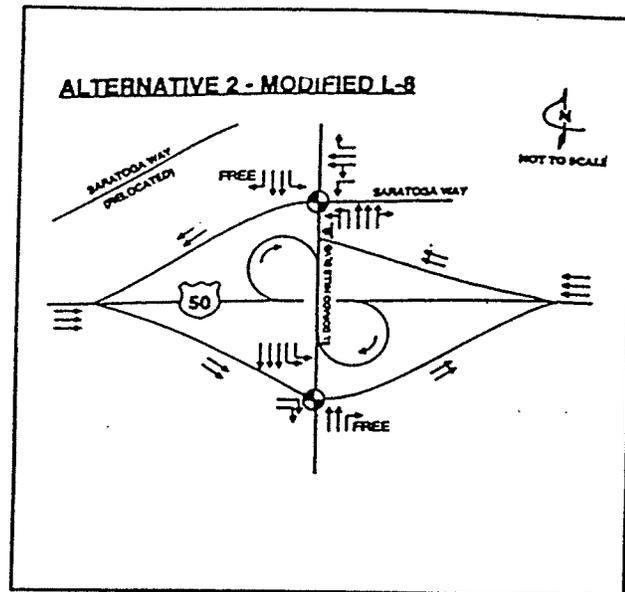
CONs -

- Lack of WB loop off-ramp in northwest quadrant results in LOS F during PM peak period
- Retains close spacing between the WB ramp and Saratoga Way intersections
- Loop off-ramps not desirable by CalTrans (southeast (SE) quadrant)

ALTERNATIVE 2:

New configuration -

Alternative 2 is a modified L-8 partial cloverleaf interchange configuration with loop off-ramps in the northwest (NW) and SE quadrants, and diagonal off-ramps and on-ramps for EB and WB traffic. The WB diagonal off-ramp would be stop-sign controlled and feed traffic into the NB El Dorado Hills Blvd / WB diagonal on-ramp / Saratoga Way (east) intersection.



This configuration is considered viable because it meets the operational goal of LOS C or better during the AM and PM peak periods in year 2020. The main concern with Alternative 2 is that the NB through traffic may back-up while stopping at the WB diagonal on-ramp / Saratoga Way (east) intersection blocking the WB diagonal off-ramp vehicles from turning right onto NB El Dorado Hills Blvd. It is not certain how much storage the ramp could hold when this situation occurs. Traffic may back-up onto US 50 which concerns CalTrans.

PROs -

- Results in acceptable levels of service at both EB and WB ramp intersections
- Relocation of Saratoga Way (west) to Park Dr improves intersection spacing
- Fewer conflicting movements at EB ramp intersection
- Partial fix of intersection spacing problem discussed in Alternative 1
- Commercial center outbound traffic lines up with WB on-ramp

CONs -

- WB diagonal off-ramp intersects EL Dorado Hills Blvd creating queuing problems
- Loop off-ramps not desirable by CalTrans (NW and SE quadrants)
- Generally a greater impact on residential areas in NW quadrant
- Would require earthwork in southwest quadrant to construct EB diagonal off-ramp

ALTERNATIVE 3:

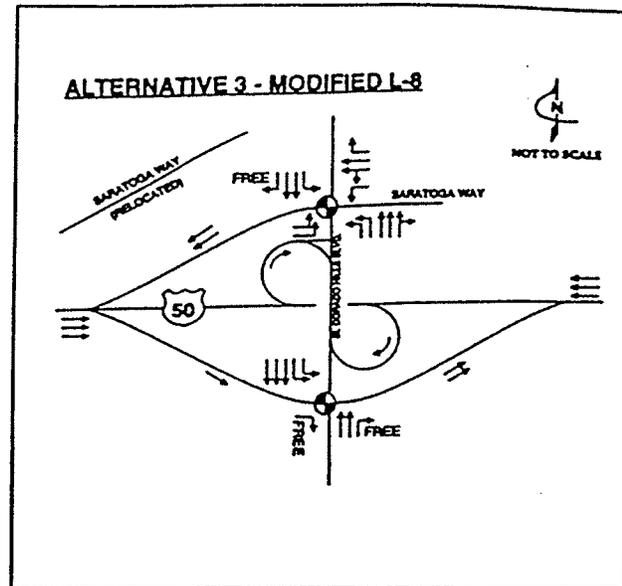
New configuration:

Alternative 3 is also a modified L-8 partial cloverleaf interchange configuration with loop off-ramps in the NW and SE quadrants, and diagonal off-ramps and on-ramps for EB traffic and diagonal on-ramp only for WB traffic. It is similar to Alternative 2, but excludes the WB diagonal off-ramp. Instead, this vehicular movement demand would be accommodated via two left-turn lanes in the WB loop off-ramp. All other aspects of Alternative 3 are identical to Alternative 2.

Alternative 3A: EB diagonal off-ramp with separate protected and free right-turn lanes.

Alternative 3B: EB diagonal off-ramp with single free right-turn lane only, no protected movement.

This configuration is considered viable because it meets the operational goal of LOS C or better during the AM and PM peak periods in year 2020.



PROs -

- Results in acceptable levels of service at both EB and WB ramp intersections
- Relocation of Saratoga Way (west) to Park Dr improves intersection spacing
- Fewer conflicting movements at EB ramp intersection
- Avoids need of WB diagonal off-ramp with only minor deterioration in LOS (B to C)
- Commercial center outbound traffic lines up with WB on-ramp

CONs -

- Loop off-ramps not desirable by CalTrans (NW and SE quadrants)
- Generally a greater impact on residential areas in NW quadrant
- Would require earthwork in SW quadrant to construct EB diagonal off-ramp

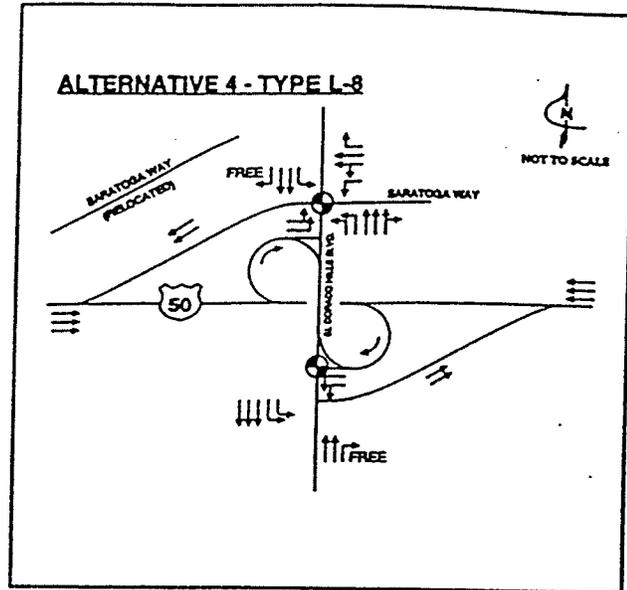
ALTERNATIVE 4:

New configuration:

Alternative 4 is a type L-8 cloverleaf interchange configuration with loop off-ramps in the NW and SE quadrants, and diagonal on-ramps for EB and WB traffic; no diagonal off-ramps. Two left-turn lanes with each loop off-ramp accommodates the vehicular movements created by the lack of diagonal off-ramps.

This configuration is considered viable because it meets the operational goal of LOS C or better during the AM and PM peak periods in year 2020.

Initially, Alternative 4 was not considered viable because a EB diagonal off-ramp was not included in the configuration, but further analysis as an Alternative 3C resulted in reconsideration.



PROs -

- Results in acceptable levels of service at both EB and WB ramp intersections
- Relocation of Saratoga Way (west) intersection to Park Dr improves intersection spacing
- Would not require construction of EB diagonal off-ramp
- Avoids need of WB diagonal off-ramp with only minor deterioration in LOS (B to C)
- Commercial center outbound traffic lines up with WB on-ramp

CONs -

- Loop off-ramps not desirable by CalTrans (NW and SE quadrants)
- Generally a greater impact on residential areas in NW quadrant
- Would not require earthwork in SW quadrant to construct EB diagonal off-ramp

ALTERNATIVE 5:

New configuration:

Alternative 5 is a type L-9 cloverleaf interchange configuration with loop on-ramps in the northeast (NE) and SW quadrants, and diagonal off-ramps and on-ramps for EB and WB traffic.

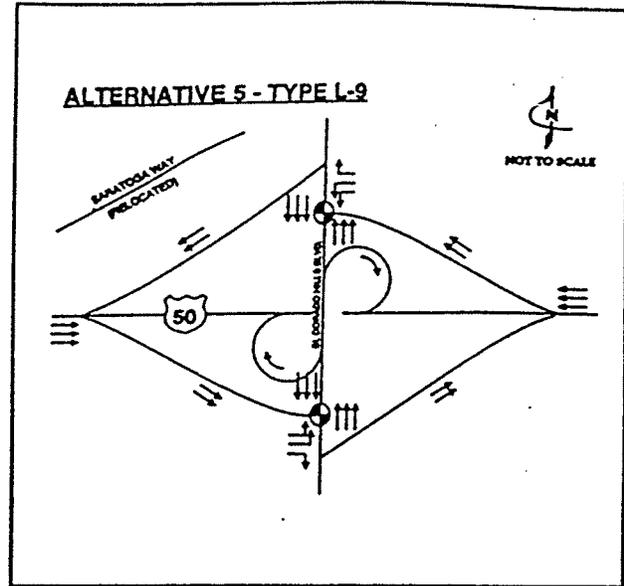
This configuration is considered viable because it meets the operational goal of LOS C or better during the AM and PM peak periods in year 2020.

PROs -

- Results in acceptable levels of service at both the EB and WB ramp intersections
- Relocation of Saratoga Way (west) to Park Dr improves intersection spacing
- Eliminates loop off-ramps
- Commercial center outbound traffic lines up with WB on-ramp

CONs -

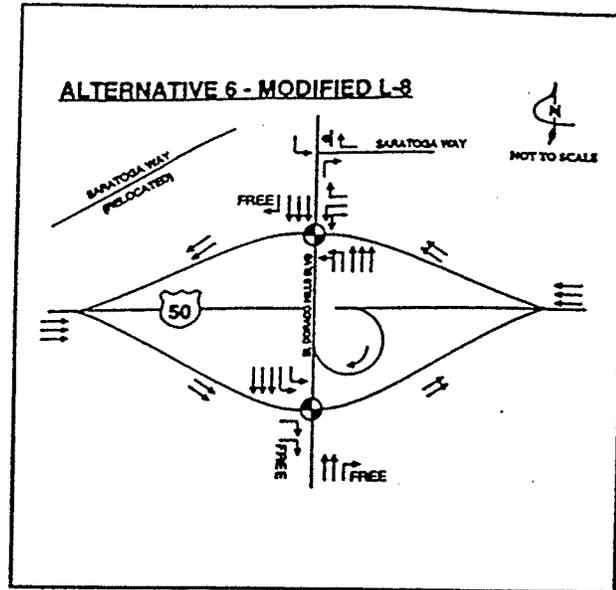
- Requires removal of existing commercial establishments in the NE quadrant and loss of direct outbound traffic link to WB on-ramp
- Would hinder access to remaining adjacent developments
- Would require greater earthwork in southwest quadrant to construct both EB diagonal off-ramp and loop on-ramp



ALTERNATIVE 6:

New configuration:

Alternative 6 is a modification of the existing configuration. Similar to Alternative 1, the primary differences are relocating Saratoga Way (west) to Park Dr and eliminating the Saratoga Way (east) left-turn out of the commercial center. The existing median would be extended to the south with an opening to allow SB El Dorado Hills Blvd left-turn in only.



This configuration is considered not viable because it meets the operational goal of LOS C or better during the AM and PM peak periods in year 2020 at the ramp intersections, but not at the Park Dr intersection. The resultant side effect of closing the median at Saratoga Way (east) to left-turns out of the commercial center is to require complete reconstruction of the Park Dr intersection to support the increased NB to SB U-turn movements on El Dorado Hills Blvd and traffic associated with vehicular movements leaving the commercial center.

PROs -

- Results in acceptable levels of service at both the EB and WB ramp intersections
- Relocation of Saratoga Way (west) to Park Dr improves intersection spacing
- Eliminates the need for a WB loop off-ramp

CONs -

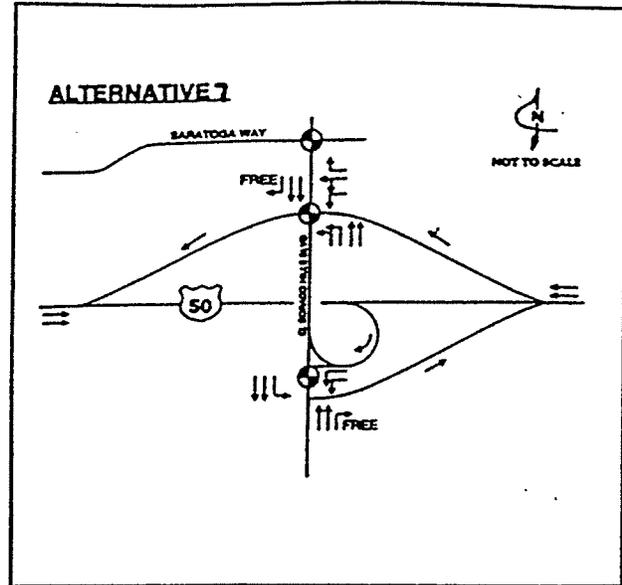
- Loop off-ramps not considered desirable by CalTrans (SE quadrant)
- Generally a greater impact on residential areas in NW quadrant
- Would require earthwork in southwest quadrant to construct EB diagonal off-ramp
- Unacceptable traffic operations at Park Dr intersection
- Changes to the existing access patterns of the commercial center

ALTERNATIVE 7:

Existing configuration:

Alternative 7 is a "No-Build" (signal added at EB ramp intersection only) Alternative.

This configuration is not considered viable. Selection of the No-Build Alternative would result in level of service deterioration with the existing interchange operation not adequately accommodating the projected traffic volumes. The No-Build Alternative was withdrawn from any further selection consideration because it would not improve existing conditions nor accommodate the land use development proposed in the El Dorado County 1996 General Plan.



The following seven additional alternatives were developed through the effort of the public outreach process and are distinguished by an alpha character:



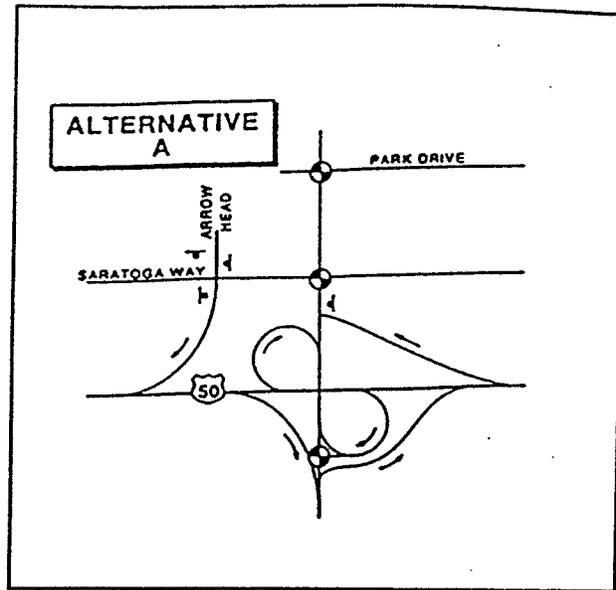
ALTERNATIVE A:

New configuration:

Alternative A is similar to Alternative 2. It includes the same configuration on the south side of US 50, but relocates the WB on-ramp to a hook ramp located on Saratoga Way (west) at Arrowhead intersection.

This configuration is not considered viable, but because of the importance of the public outreach process it was further analyzed. CalTrans prefers to avoid hook ramps or slip ramps.

The El Dorado Hills Blvd / Saratoga Way intersection would not operate at an acceptable level during the AM peak period because the heavy SB El Dorado Hills Blvd right-turn traffic volume onto Saratoga Way (west) would be controlled by a signal (no longer a free movement.) The resultant queues would back up past the Park Dr intersection.



In addition, the Saratoga Way (west) / Arrowhead Dr intersection would not operate at an acceptable level during AM peak periods even with a traffic signal and dual left-turn lanes at the WB on-ramp approach. Extensive queues results in blockage to the El Dorado Hills Blvd / Saratoga Way intersection. As a result of the queues 100-150 vehicles per hour during the peak period would divert through the neighborhood along Arrowhead Dr and Mammoth Way to avoid the congested area.

PROs -

- Does not require relocation of Saratoga Way (west) to Park Dr
- Partial fix of intersection spacing problem discussed in Alternative 1
- Fewer conflicting movements at EB ramp intersection

CONs -

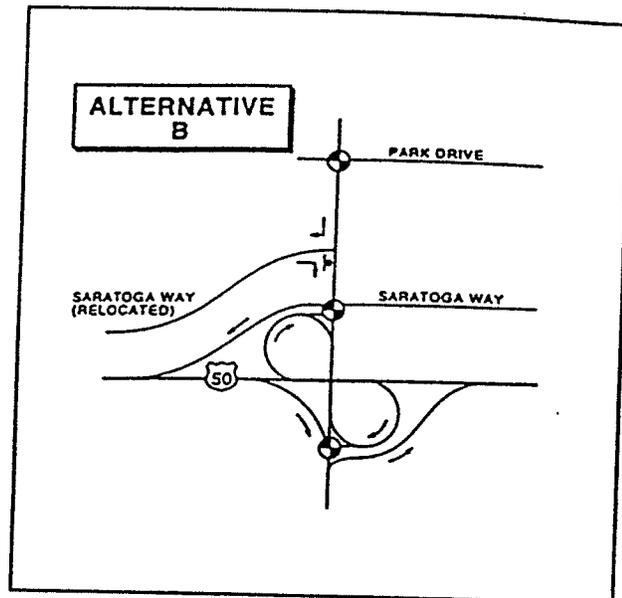
- Unacceptable operations at WB on-ramp approach intersections in AM peak period (queuing)
- Would likely cause cut-through traffic in adjacent neighborhoods
- WB diagonal off-ramp intersects EL Dorado Hills Blvd creating queuing problems
- Hook and slip ramps not desirable by Cal Trans (NW quadrant)
- Generally a greater impact on residential areas in NW quadrant
- Would require earthwork in SW quadrant to construct EB diagonal off-ramp

ALTERNATIVE B:

New configuration:

Alternative B is similar to Alternative 3, but the relocation of Saratoga Way (west) intersects El Dorado Hills Blvd between Park Dr and WB on-ramp intersection instead of at Park Dr. The new intersection would be limited to right-turn movements only to avoid signalization.

This configuration is considered viable. The proposed improvements provide acceptable operations at all intersections. However, because of the difficulties in weaving across three lanes of SB El Dorado Hills Blvd traffic and the delays associated with U-turns, it is anticipated that cut-through traffic will increase in the adjacent neighborhoods as much as 150 vehicles per hour during the peak periods.



PROs -

- Does not require relocation of Saratoga Way to Park Dr
- Results in acceptable levels of service at both EB and WB ramp intersections
- Relocation of Saratoga Way (west) to midway between Park Dr and WB diagonal on-ramp improves intersection spacing
- Fewer conflicting movements at EB ramp intersection
- Avoids need of WB diagonal off-ramp with only minor deterioration in LOS (B to C)
- Commercial center outbound traffic lines up with WB on-ramp

CONs -

- Weaving concerns for SB El Dorado Hills Blvd traffic wanting to U-turn at WB on-ramp / Saratoga Way (east) intersection to go onto NB El dorado Hills Blvd
- Would likely cause cut-through traffic in adjacent neighborhoods
- Loop off-ramps not considered desirable by CalTrans (NW and SE quadrants)
- Generally a greater impact on residential areas in NW quadrant
- Would require earthwork in SW quadrant to construct EB diagonal off-ramp

ALTERNATIVE C:

New configuration:

Alternative C is similar to Alternative B.

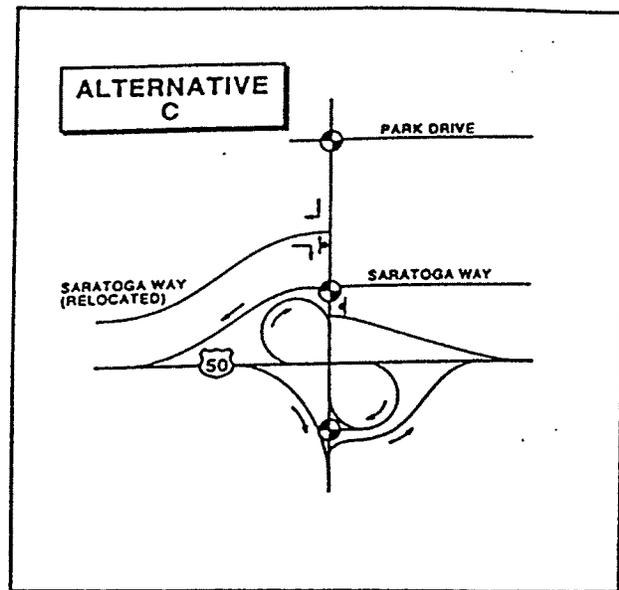
This configuration is considered viable. Ramp geometrics are tightened up, particularly in the NW quadrant. This increases the distance from the residences, approximately 35 feet.

PROs -

- Does not require relocation of Saratoga Way to Park Dr
- Results in acceptable levels of service at both EB and WB ramp intersections
- Relocation of Saratoga Way (west) to midway between Park Dr and WB diagonal on-ramp improves intersection spacing problem discussed in Alternative 1
- Fewer conflicting movements at EB ramp intersection
- Commercial center outbound traffic lines up with WB on-ramp

CONs -

- Weaving concerns for SB El Dorado Hills Blvd traffic wanting to U-turn at WB on-ramp intersection to go onto NB El Dorado Hills Blvd
- Would likely cause cut-through traffic in adjacent neighborhoods
- Loop off-ramps not considered desirable by CalTrans (NW and SE quadrants)
- Generally a greater impact on residential areas in NW quadrant
- Would require earthwork in southwest quadrant to construct EB diagonal off-ramp
- Ramp geometrics are tightened up, particularly in the NW quadrant

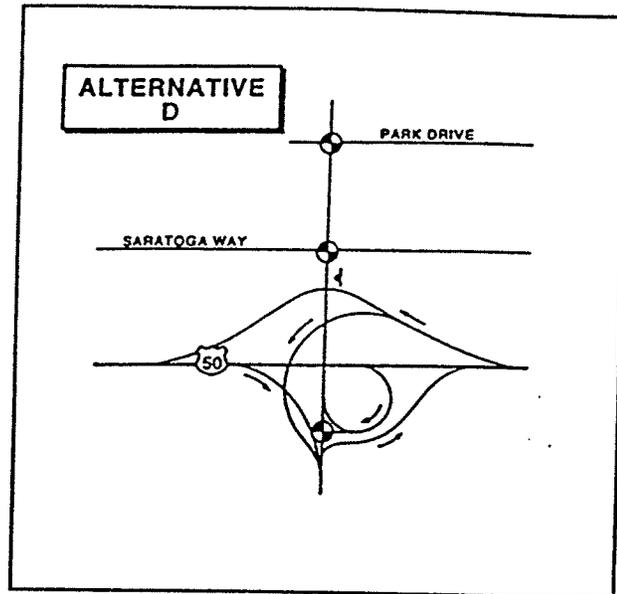


ALTERNATIVE D:

New configuration:

Alternative D is a modification of the existing configuration. Similar to Alternative 1, the primary differences are a flyover WB off-ramp to SB Latrobe Rd near Town Center Blvd and the inclusion of the EB diagonal off-ramp. All the traffic merges occur in the SW quadrant.

This configuration is not considered viable. Even with maximum vertical grades, the flyover ramp would not be able to connect with SB Latrobe Rd until just north of Town Center Blvd intersection creating unacceptable operational constraints. The cost of the ramp alone would be approximately \$3.5M.



PROs -

- Does not require relocation of Saratoga Way to Park Dr
- Results in acceptable levels of service at the EB ramp intersection

CONS -

- Retains close spacing between the WB ramp and Saratoga Way intersections
- Loop off-ramps not desirable by CalTrans (SE quadrant)
- The flyover ramp touch down distance creates operational constraints
- \$3.5 M cost of flyover ramp adds approximately 18% to overall project cost, based on a \$20 M project cost

ALTERNATIVE E:

New configuration:

Alternative E is similar to Alternative 3.

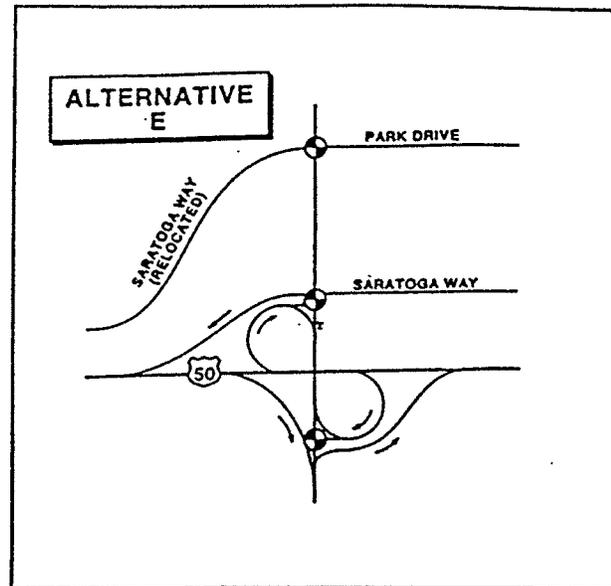
This configuration is considered viable. Ramp geometrics are tightened up, particularly for the ramps in the NW quadrant. This increases the distance from the residences, approximately 35 feet.

PROs -

- Results in acceptable levels of service at both EB and WB ramp intersections
- Relocation of Saratoga Way (west) to Park Dr improves intersection spacing
- Fewer conflicting movements at EB ramp intersection
- Avoids need of WB diagonal off-ramp with only minor deterioration in LOS (B to C)
- Commercial center outbound traffic lines up with WB on-ramp

CONs -

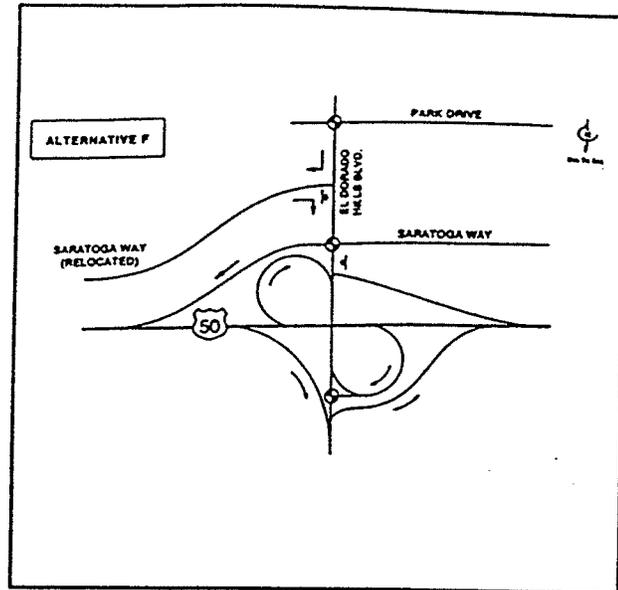
- Loop off-ramps not desirable by CalTrans (NW and SE quadrants)
- Generally a greater impact on residential areas, but lessen slightly with tighter geometrics
- Would require earthwork in southwest quadrant to construct EB diagonal off-ramp
- Ramp geometrics are tightened up, particularly in the NW quadrant



ALTERNATIVE F:

New configuration:

Alternative F is similar to Alternative 2, but the relocation of Saratoga Way intersects El Dorado Hills Blvd between Park Dr and WB on-ramp intersection instead of at Park Dr. The new intersection would be limited to right-turn movements only to avoid signalization.



This configuration is considered viable. The proposed improvements provide acceptable operations at all intersections. However, because of the difficulties in weaving across three lanes of SB El Dorado Hills Blvd traffic and the delays associated with U-turns, it is anticipated that cut-through traffic will increase in the adjacent neighborhoods as much as 150 vehicles per hour during the peak periods.

PROs -

- Does not require relocation of Saratoga Way to Park Dr
- Results in acceptable levels of service at both EB and WB ramp intersections
- Fewer conflicting movements at EB ramp intersection
- Partial fix of intersection spacing problem discussed in Alternative 1
- Commercial center outbound traffic lines up with WB on-ramp

CONs -

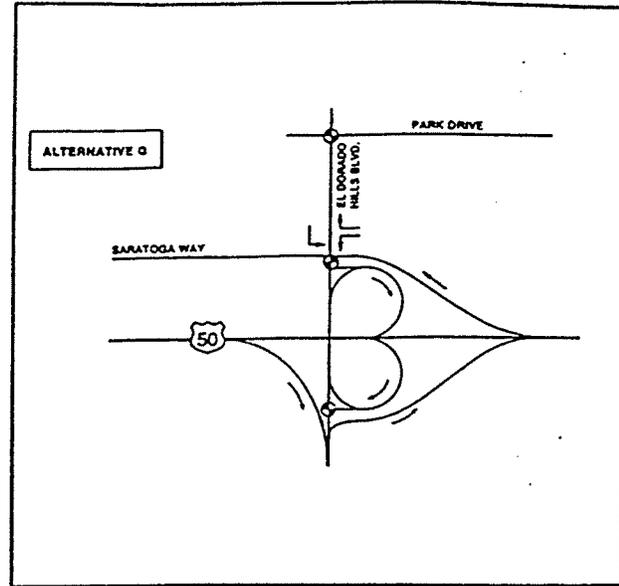
- WB diagonal off-ramp intersects EL Dorado Hills Blvd creating queuing problems
- Loop off-ramps not desirable by CalTrans (NW and SE quadrants)
- Generally a greater impact on residential areas in Northwest (NW) quadrant
- Would require earthwork in SW quadrant to construct EB diagonal off-ramp
- Weaving concerns for SB El Dorado Hills Blvd traffic wanting to U-turn at WB on-ramp / Saratoga Way (east) intersection to go onto NB El Dorado Hills Blvd
- Would likely cause cut-through traffic in adjacent neighborhoods

ALTERNATIVE G:

New configuration:

The South side configuration is similar to Alternative F, but the WB on- and off-ramps are like the NE quadrant of Alternative 5, a more standard type L-9 configuration, located across from existing Saratoga Way (west).

This configuration is not considered viable. The WB ramp intersection will operate at an unacceptable LOS F during both AM and PM peak periods. Due to the elimination of the eastern leg of Saratoga Way, traffic from the Raley's center will have to use Park Dr intersection to access El Dorado Hills Blvd. This would result in increase traffic on the WB approach of the Park Dr intersection causing the intersection to operate at LOS F during the PM peak period.



PROs -

- Does not require relocation of Saratoga Way to Park Dr
- Results in acceptable levels of service at both the EB and WB ramp intersections

CONs -

- Requires removal of existing commercial establishments in the NE quadrant
- Would hinder access to remaining adjacent developments
- Would require earthwork in SW quadrant to construct EB diagonal off-ramp
- Dual SB El Dorado Hills Blvd left-turn lanes are needed at WB ramp intersection approach, heavy queuing to occur at this intersection during both peak periods
- Park Dr intersection will operate unacceptably during the PM peak period because of the additional commercial center traffic

Source information for the above mentioned alternatives:

- Fehr & Peers Associates: Draft Final Traffic Analysis, August 16, 1996
- Fehr & Peers Associates: Analysis of Additional Alternatives, March 21, 1997
- Fehr & Peers Associates: Analysis of Additional Alternatives, April 10, 1997

The following additional alternative was developed through the effort of the Project Development Team:

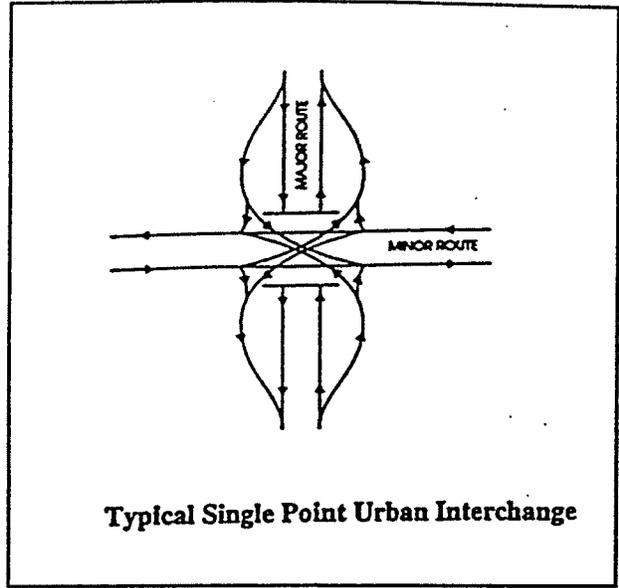


SINGLE POINT URBAN INTERCHANGE (SPUI) ALTERNATIVE:

New configuration:

The SPUI was discussed by the Project Development Team as a potential alternative based on work performed as part of El Dorado County's Missouri Flat Rd / US 50 Interchange PSR / PR. The SPUI is a configuration that consolidates all on- and off-ramps into a single point signalized intersection. The SPUI design is used in an urban situation when right-of-way is constrained and space for building more typical interchange ramps configurations does not exist.

This configuration is not considered viable. The spacing between the single point and the Saratoga Way intersections is not geometrically adequate and will cause operational deficiencies. The cost for a typical SPUI is higher than the more traditional alternatives reviewed. Estimated cost of Missouri Flat Rd / US 50 SPUI is \$23.5 M.



Appendix J. Community Process Report



**EL DORADO COUNTY
BOARD OF SUPERVISORS
AGENDA TRANSMITTAL**
Meeting of May 19, 1998

AGENDA TITLE: El Dorado Hills Blvd / US50 Interchange PSR/PR

DEPARTMENT: Transportation	DATE: 5-07-98	CAO USE ONLY
CONTACT: Kris Payne	PHONE: 5926	

DEPARTMENT SUMMARY AND REQUESTED BOARD ACTION: The Department of Transportation (DOT) presents the Community Process Report prepared by Thorpe, Van Camp & Associates including a discussion with video presentation. Dot recommends the Board direct staff to proceed with the preparation of an Environmental Impact Report as delineated in the Departmental Memo.

CAO RECOMMENDATION:

Financial impact? () Yes (X) No	Funding Source: () Gen Fund (X) Other
BUDGET SUMMARY:	CAO Office Use Only:
Total Est. Cost \$ <u>-0-</u>	415's Vote Req'd. () Yes () No
Funding	Change in Policy () Yes () No
Budgeted \$ <u>-0-</u>	New Personnel () Yes () No
New Funding \$ <u>-0-</u>	CONCURRENCES:
Savings \$ <u>-0-</u>	Risk Management _____
Other \$ <u>-0-</u>	County Counsel _____
Total Funding Available \$ <u>-0-</u>	Other _____
Change in Net County Cost \$ <u>-0-</u>	

BOARD ACTIONS:

Vote: Unanimous _____ Or
 Yes:
 Absences:
 Abstentions:
 Absent:

I hereby certify that this is a true and correct copy of an action taken and entered into the minutes of the Board of Supervisors.
 Date: _____
 Attest: DIXIE L. FOOTE, Board of Supervisors Clerk
 By: _____



COUNTY OF EL DORADO

DEPARTMENT OF TRANSPORTATION

MAINTENANCE DIVISION
2441 Headington Road
Placerville, CA 95667
Phone: (916) 642-4909
Fax: (916) 642-9238

MICHAEL STOLTZ,
Director of Transportation

MAIN OFFICE
2850 Fairlane Court
Placerville, CA 95667
Phone: (916) 821-5900
FAX: (916) 626-0387



May 7, 1998

Board of Supervisors
330 Fair Lane
Placerville, California 95667

Dear Board Members:

Subject: El Dorado Hills Blvd / US50 Interchange PSR/PR

Agenda Date/District: May 19, 1998 / District 1 - Supervisor Bradley

Recommendation:

The Department of Transportation (DOT) presents the Community Process Report (attached) prepared by Thorpe, Van Camp & Associates, including a discussion with video presentation. DOT recommends the Board direct staff to proceed with the preparation of an Environmental Impact Report.

Reason for Recommendation:

The BOS, on August 19, authorized the DOT to engage a mediator in an effort to reach an effective level of communication with concerned parties of interest (stakeholders.) The mediation firm of Thorpe, Van Camp and Associates (TVA) was retained and has engaged in a communicative effort (approximately 40 meetings) since October 10, 1997. The TVA has completed work on the Community Process Report and now returns to the Board with their conclusions.

From the onset it was anticipated that this would be a challenging process, and DOT staff want to commend TVA for their considerable efforts towards resolving the conflicts that exist with respect to the proposed improvements to the subject interchange.

DOT looked at this as the continuation of a community outreach process begun in February 1997, but as of August 1997 had not brought resolution to the conflict. The hope was that the presence of the mediation team would provide a fresh perspective on the problem, and hopefully the ability to

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create an atmosphere where new ideas and unanticipated solutions could present themselves. We feel that to a certain degree TVA accomplished that goal.

The report to be presented to your Board is the product of TVA, and represents their opinion as to the substance of the issues, and the recommendations listed are their own. DOT staff did not exercise any editorial control over the reports format or content. We are encouraged by the conclusion they reached, concurring that our originally proposed preferred alternative (Alternative 3A) remains the preferred alternative for the interchange itself. We do feel, however, that their recommendation, with respect to the improvements to Saratoga Way, is based upon a technically incorrect assumption, and therefore warrants DOT comment.

On page 7 of their report they state:

" - Realignment of Saratoga Way. We examined planning documents to try to determine when the realignment of Saratoga Way was first proposed. It was not mentioned in the El Dorado Hills Specific Plan. (The Specific Plan did not address the already-developed area west of El Dorado Hills Boulevard.) Volume II of the General Plan calls for "an extension of Saratoga Road to connect to the City of Folsom" (pages 3-19), but does not specify the number of lanes, or change in alignment."

The adopted General Plan Circulation Element, Volume 1, Chapter 3 (page 49) references the Circulation Map which indicates Saratoga is to be a four lane road extending to the City of Folsom. The General Plan Draft EIR references the Future Regional Transportation System (Figure V-9-1) also showing Saratoga as four lanes. To reduce the roadway to a two lane width, as proposed by TVA, would be inconsistent with the General Plan, and would potentially result in LOS F conditions on Saratoga, or other parallel road systems in El Dorado Hills.

Because of these and other potential ramifications of TVA's recommendations, DOT staff concurs with the recommendation that an Environmental Impact Report (EIR) be prepared that would look at both DOT's and TVA's proposed alignments to Saratoga, and that your Board defer making a decision on Saratoga Way issues until all environmental analysis is complete.

Fiscal Impact:

Additional financial requirements will be funded through the El Dorado Hills Salmon Falls (EDHSF) Road Improvement Fees (RIF).

Net County Cost:

There is no net County cost.

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Action to be Taken Following Approval:

Upon approval of the recommendations, DOT will:

1. Return to the Board with a contract amendment for the preparation of an EIR
2. Prepare an EIR and complete the PSR/PR

Sincerely,



for Michael T. Stoltz
Director of Transportation

MTS:KP:kp

El Dorado Hills Blvd. - Highway 50
Interchange

Community Process Report
for
The El Dorado County Board of Supervisors

May 12, 1998

Final (Revised)

Prepared by
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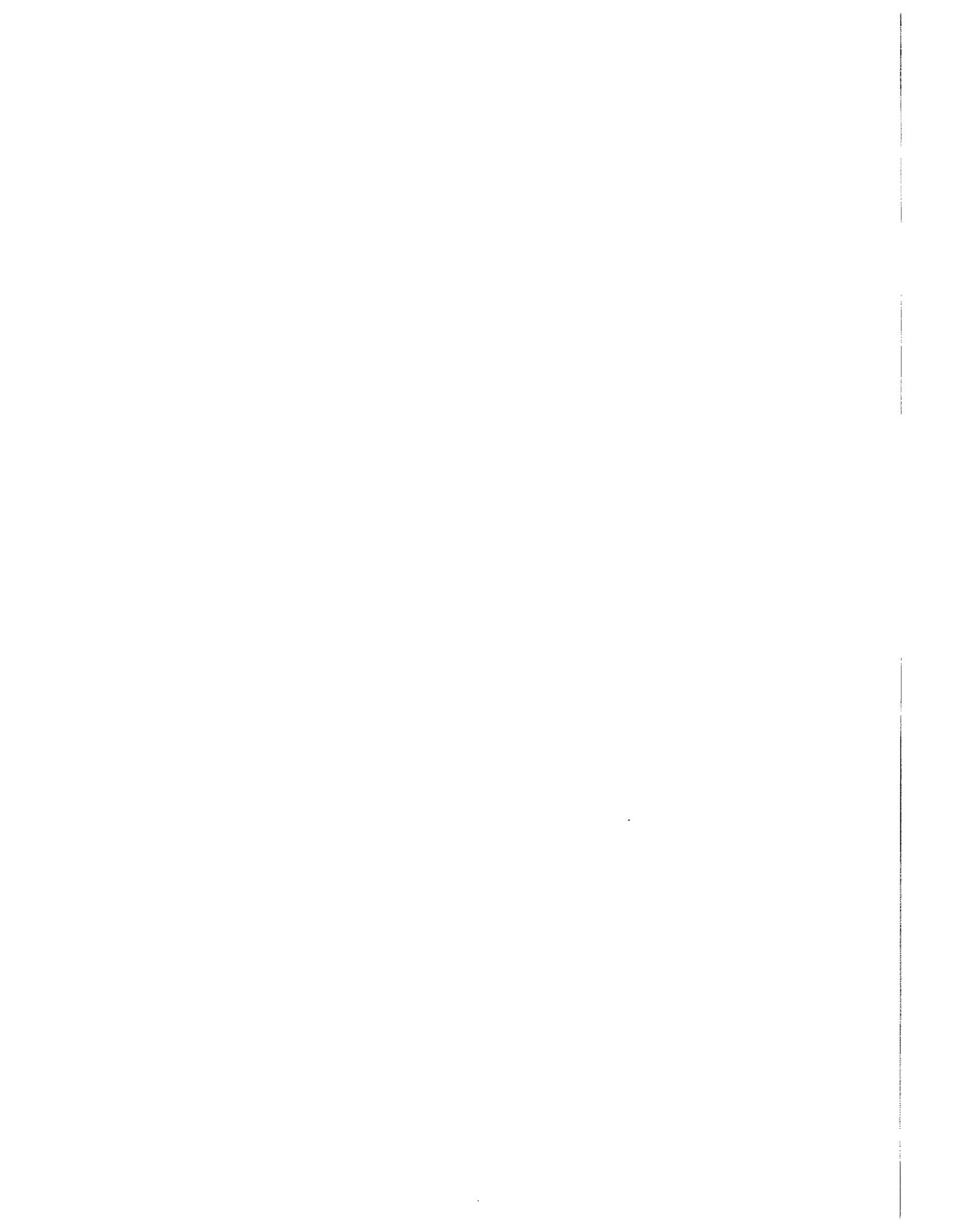


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APPENDICES

- A: INTERCHANGE ALTERNATIVES 1-6 AND A-G
- B: LIST OF MEETINGS WITH INTEREST GROUPS
- C: ALTERNATIVES H, I, AND J
- D: POSSIBILITY MATRIX
- E: NEW CONFIGURATION MAPS FOR SARATOGA WAY

EXECUTIVE SUMMARY

In October 1997, Thorpe, Van Camp & Associates/Strategic Design Associates entered into a contract with the County of El Dorado to facilitate a process to seek consensus and reduce contention around proposed improvements to the Highway 50 interchange at El Dorado Hills Boulevard. During the course of the process, over 30 meetings were held with individual interest groups and others knowledgeable about the improvements, a day-long Open Session was held at the El Dorado Hills Community Center, and two meetings (one full-day, one half-day) were held to allow the various parties to meet face to face, express their concerns to a larger forum, and explore new ideas and possibilities.

The following summarizes recommendations developed at the conclusion of that process. The reader is referred to the body of the report for a more complete discussion of the recommendations, and of the findings on which they were based.

- **Saratoga Way.** Select S-curve alternative (Appendix E) for realignment of Saratoga Way. Construct Saratoga Way as a two-lane road east of Wilson Way, four lanes west of Wilson Way.
- **Interchange.** Continue to support the "preferred alternative" (Alternative 3-E) for interchange design.
- **Related improvements.** Place high priority on construction of the Silva Valley interchange, and improvements to White Rock Road. Work with the Folsom-El Dorado Joint Powers Authority on related improvements in Sacramento County.
- **Impact Assessment.** Prepare an environmental impact report (EIR) on the proposed project. Prepare a financial impact assessment, either as part of the EIR, or as a separate study.
- **Impact Mitigation.** Design impact mitigation measures with attention to community perceptions and preferences, phasing to minimize construction impact, and provisions to monitor implementation and effectiveness. Focus new efforts on community-wide trip mitigation, to reduce the cumulative impacts of proposed new developments in the Folsom-El Dorado Hills area.
- **Community Design.** Combine use of emerging communication technologies, with development of an attractive mix of employment, retail, recreational and cultural opportunities, to reduce the number of out-of-county trips generated by the residents of El Dorado Hills, and to position El Dorado Hills as a model community for the 21st century.
- **Process.** Develop a more proactive, community-oriented process for design and approval of proposed transportation improvements, including provisions for better community notification, earlier involvement, improved access to information, and addition of the role of "community outreach advocate", to enhance communication between project staff and community.

PROCESS

- **The Intention**

In October 1997, Thorpe, Van Camp & Associates/Strategic Design Associates (TVA/SDA) entered into a contract with the County of El Dorado to participate in the process of preparing the way for improvements to the Highway 50 interchange at El Dorado Hills Boulevard. Department of Transportation (DOT) staff had taken the interchange design to the community to explain proposed improvements, and had worked with the community to examine a number of alternatives, but had been unable to reach consensus. TVA/SDA was asked to facilitate a process through which to seek consensus and reduce contention around the proposed project.

- **Prior Events**

In the months preceding the current process, DOT staff had held or participated in various meetings and workshops involving the community. First, the DOT "Preferred Alternative" (the most viable design from an engineering standpoint) was presented and explained to the residents. Included with the Preferred Alternative were five other alternatives showing other possible configurations for the interchange (See Appendix A). Each of these alternatives had been analyzed by the Project Development Team, and Alternative 3 (with some modifications) had been deemed the most viable. The residents expressed concern that each of the alternatives except #1 (the existing interchange configuration with added lanes) required the widening and realignment of Saratoga Way to a location which was within a few feet of several homes. The residents (and other stakeholders) asked DOT to develop a number of new alternatives, some of which explored different alignments for Saratoga Way. From that discussion, Alternatives A-G were developed. These seven new alternatives were analyzed by the Project Development Team, and all except E were considered non-viable. Alternative E was very similar to Preferred Alternative 3, except the off-ramp loop had been tightened to pull it slightly farther away from the homes. DOT staff were very firm in stating that Alternative 3-E was the only possible option. The residents believed that other options should still be explored. This is the point at which TVA/SDA became involved.

- **Laying the Ground Work**

The first task undertaken was to meet with all of the involved stakeholders for the purpose of identifying and clarifying the issue, and understanding the position of each party. (A complete list of the meetings may be found in Appendix B.) At each meeting, a statement of intent (Appendix B) was read, the situation was reviewed and outlined to set the stage, then detailed notes were taken as each participant was invited to express related views and concerns. It was stressed that no idea would be discounted and no comment lost.

- **Isolating the Issue**

The crossing of Highway 50 over El Dorado Hills Boulevard creates four distinct quadrants. The northeast and southeast quadrants consist primarily of developing and established commercial retail properties. The southwest quadrant is devoted primarily to proposed light industrial development. The northwest quadrant is currently comprised solely of residential neighborhoods. It is the northwest residential quadrant that is receiving the majority of impact from the proposed changes to the interchange.

As we spoke to the interest groups in this quadrant, it became clear that the heart of the issue was the relocation of Saratoga Way, a result of the expansion of the footprint of the interchange. Residents throughout Park Village and Crescent Ridge were opposed to the plan to realign and widen Saratoga Way, putting it in close proximity to several single family homes and townhouses. Concerns were expressed over the impact of the interchange design, and the dangers of a higher volume of traffic on Saratoga Way bringing the potential for increased noise, air pollution, and other issues.

- **Exploring Possibilities**

TVA/SDA met with the Project Development Team to become familiar with each Alternative (1-6 and A-G) in order to fully understand what was viable and what could not work for geographic, economic, safety or engineering reasons. In an effort to promote consensus and to work through possibilities, TVA/SDA held a day-long meeting with as many stakeholders as could reasonably work effectively in a room (25-30). That meeting (held January 9, 1998 at the Rescue Community Center) allowed the various parties to meet face to face, to express concerns to a larger forum, and to hear each other's positions. The task of TVA/SDA was to foster civil dialogue and to encourage the exploration of ideas and possibilities with all of the players in a position to hear and contribute.

The day-long meeting resulted in a few new avenues to explore, in the clarification of some concerns, and in the elimination of some alternatives. Three new alternatives were proposed (H, I and J, see Appendix C). All of the participants agreed to return for a half-day follow-up meeting to discuss the results of the new alternatives.

- **Mapping and Imaging**

The key to the exploration of additional alternatives was the use of maps and computer imaging to study possibilities and to "play" with ideas. These maps and images were carried alternately to each stakeholder group, and used as a working platform for ideas and concerns. This kind of imaging assisted in the clarification of proposed alternatives, and in the possibilities and limitations they presented. TVA/SDA continued to meet with

various groups before the follow-up session to clarify each view and each idea on the table. In this manner, TVA/SDA was able to develop a wide perspective on the range of issues and positions involved.

- **The Possibility Matrix**

At the follow-up meeting (held at the Serrano Visitor's Center on March 6, 1998) the results of the newest alternative to the interchange (Alternative H, The Single Point Urban Interchange) were presented. Responses to other alternatives (I and J) which had emerged from the January 9 meeting were also discussed. Following these presentations, the focal point became a Possibility Matrix (Appendix D) which included the various elements related to the core of the issue. Using the matrix, the key aspects of each element were discussed and added where appropriate. The intent of this exercise was to find areas of strength and weakness in order to assist in the process of discovering the most reasonable outcome.

- **Fine Tuning the Possibilities**

After the follow-up meeting, TVA/SDA met with specific groups to clarify questions which had been raised during the process of developing the Possibility Matrix. Ultimately, each of the stakeholder groups was met with at least one more time. During this process, there emerged a path toward a solution which TVA/SDA deemed worthy of consideration. TVA/SDA supported and encouraged the parties involved to pursue the possibility, a revised alignment of Saratoga Way (Appendix E). Although no final resolution has been achieved, we have included this solution as one of our final recommendations.

FINDINGS

The following general findings provide the basis for the recommendations included in the final section of this report. They highlight key understandings that we have developed during the course of talking with all of the interest groups represented in this process.

Perhaps the most important finding is that each perspective (County staff, residents, technical consultants, developers, businesses, members of local advisory groups) brings vital input to the process. The final decision must integrate and balance, to the extent possible, the input of all. The greater the degree of balance that can be achieved, the less need there will be for the litigation and ballot initiatives that have come to characterize the planning process in this County during recent years.

It is our considered opinion that the physical planning process in most communities (not just El Dorado County) has become weighted toward the perspectives of (1) the professionals, who bring the technical knowledge essential to project design; and (2) the developers, who bring the motivation and financial resources to initiate change in the built environment. These are the individuals who participate in the process on a continuing basis and, therefore, have the greatest impact on its outcome. They also have the best access to information. Residents who may disagree with, or have concerns about, the plans that are presented, are automatically thrust into an antagonistic, polarized stance. In addition, they must invest considerable uncompensated time, effort, and financial resources to access information, develop technical understanding, attend meetings, and pursue other avenues (contacting elected officials, organizing neighbors) needed to participate effectively in the process. Even then, they seldom feel that they are participating on a "level playing field", and so turn to litigation and ballot initiatives as ways to inject their concerns more forcefully into the process.

When County department officials determine a need for community outreach, it is essential that the intent of that effort be very clear. If the intent is to promote and convince regarding a single, immutable option, then the effort should not be framed as a consensus building or collaborative process. If it is, then the outreach effort will result in frustration on the part of involved community members, when it becomes clear that their input has had no impact, and on the part of department officials, who will feel that they have wasted time and effort to no avail.

The current process has certainly resulted in some feelings of frustration. At the same time, however, we believe that it has opened new channels of communication, and has generated at least a few new ideas and understandings. We have attempted to present findings and recommendations that incorporate those ideas, and that reflect (as much as possible) the concerns of the wide range of participants involved. We hope that, as the process surrounding the proposed interchange proceeds, the effort will continue to involve all perspectives equally in a creative process.

CONTEXT

- **Traffic impacts**

As building continues in El Dorado Hills and surrounding communities, traffic will increase, with associated increases in congestion, travel times, noise and air pollution. Everyone interviewed during the course of this process agreed that facility improvements will be needed to handle projected traffic increases. The specific concerns that were raised varied by interest group, however.

- ▷ **Technical concerns.** The primary concern of the transportation professionals (County staff, Caltrans staff, consulting traffic engineer) is the need to build well-designed, safe, attractive street and highway facilities to accommodate projected traffic demand. They are concerned that efforts to accommodate the concerns of local residents will compromise their ability to accomplish these objectives, and are frustrated that delays in the process are hindering their ability to respond in a timely fashion.
- ▷ **Equity of impact.** Residents agree with the importance of improving facilities to accommodate future traffic demand, but are equally concerned about environmental impacts on surrounding neighborhoods, and about the equity of impact distribution. During our interviews in the community, those living in the neighborhoods directly adjacent to the proposed improvements were quite vocal in stating that impacts are being focused on El Dorado Hills Boulevard, and (more specifically) on the residential neighborhoods located in the northwest quadrant of the existing interchange. They were not alone in expressing these concerns, however. In fact, they were supported by residents and businesspeople from many parts of El Dorado Hills, who felt that it was unfair for a small number of residents to bear the brunt of traffic generated throughout the community.
- ▷ **Cumulative impacts.** With respect to the larger community, many of the individuals interviewed (residents and businesspeople) mentioned the substantial number of projects in El Dorado Hills and surrounding communities that have been approved in recent years with site-specific EIR's. They expressed concern that the cumulative impacts of proposed development may not yet have been fully identified and addressed. A few suggested that an areawide plan and EIR be prepared for the Folsom-El Dorado County area east to Bass Lake Road.

- **Community character**

Proposed changes would have the greatest impact on the residential areas in the northwest quadrant of the interchange: (1) the townhomes located just west of El Dorado Hills Boulevard, (2) Park Village, and (3) Crescent Ridge. The residents of

these neighborhoods (some of whom have been living in their homes for two decades) bought (literally and figuratively) into a dream of country living in the peace, quiet and beauty of El Dorado County. This is the image that was contained in the planning documents of the time, and is still used in promoting sales of new developments in the El Dorado Hills area. It is a vision that most of us in the county can relate to and feel is worth preserving. Although residents of these neighborhoods knew that changes would occur over time, the changes currently being proposed are far more intrusive than they expected.

- **Process**

Certain qualities of the planning process contribute to confusion and polarization.

- ▷ **Notification.** Residents complained that they were not properly notified of proposed interchange improvements, including realignment of Saratoga Way.
 - **Initial awareness.** Residents never received direct notice of proposed changes to the interchange and Saratoga Way. Townhouse residents did receive notice of a January 8, 1997, hearing to be held by the Zoning Administrator on the adjacent commercial parcel. While inquiring about the proposed land use action, they became aware of proposed changes to Saratoga Way and the interchange, and of a hearing to be held January 28 by the Board of Supervisors to consider approval of the Negative Declaration on those proposals.
 - **Initial DOT meeting.** DOT staff had, in fact, held a public meeting in October 1995 to present project alternatives to the community. Public awareness was not drawn to that meeting, however, because it conflicted with a concurrent meeting with greater visibility. When the initial meeting was not attended, DOT assumed that the public was not interested in the project.
 - **Realignment of Saratoga Way.** We examined planning documents to try to determine when the realignment of Saratoga Way was first proposed. It was not mentioned in the El Dorado Hills Specific Plan. (The Specific Plan did not address the already-developed area west of El Dorado Hills Boulevard.) Volume II of the General Plan calls for “an extension of Saratoga Road to connect to the City of Folsom” (page 3-19), but does not specify the number of lanes, or change in alignment. Volume I of the General Plan references the General Plan Circulation Map, which is included as a figure in the Draft EIR. The map, and an accompanying chart in the Draft EIR, indicate that Saratoga Way is assumed to be four lanes, but do not mention the proposed change in alignment. In sum, although references to the proposed changes do exist in the General Plan, they are fairly obscure (from the perspective of most members of the community), and do not include an aspect of the project (realignment) that is particularly objectionable to the residents.

- **Escrow disclosure.** One of the people who attended our November 19, 1998, Open Session purchased a townhouse adjacent to the proposed project during the fall of 1998, and was not informed of the proposed interchange modifications and realignment of Saratoga Way at any time during the escrow process.
- ▷ **Interactive involvement.** County staff and consultants made a significant attempt to work with the public during workshops held in February and March 1997. (During the course of these workshops, Alternatives A-G were developed and analyzed.) From the perspective of the community participants, however, the process was artificially truncated and produced no effective result.
- ▷ **“Burden” of public involvement.** Many of the residents commented on the time and effort that they had expended participating in the interchange process in recent months (ferreting out information, educating themselves about technical issues, attending meetings). They pointed out that time spent on the process is not only not compensated, but in some cases required them to take time off of work.
- ▷ **Accessibility of information.** Although a great deal of information about the local planning process is available in the public library in El Dorado Hills, it is difficult for the lay public to access effectively. In some cases, it is technical information that can be difficult for the community to interpret without assistance. In other cases, the sheer volume of information requires so much time and effort to digest and analyze that it hinders effective involvement.
- ▷ **Trust in government.** Most of the residents expressed the opinion that they are not being taken seriously by government, that representatives of government pretend to “take another look” but never really listen or change anything, and that the residents have been wasting their time and energy trying to have input to the process. Many spoke of wanting to have their belief and trust in government restored.

- **Mitigation**

- ▷ **Environmental documentation.** A Mitigated Negative Declaration was prepared on the project at the end of 1996, and modified and recirculated early in 1997. The residents were dissatisfied with the findings in this document, and began requesting preparation of an Environmental Impact Report (EIR). As the process has continued, DOT staff have also begun to favor production of an EIR, to lay the groundwork for a potential legal defense.
- ▷ **Mitigation measures.** A number of measures (berms, sound walls, landscaping, dual-pane windows) are available to mitigate potential environmental impacts associated with the proposed project. There is concern on the part of many of the residents as to the practical effectiveness of some of these measures, particularly at

the second-story level and for homes located at a higher elevation. In addition, there is concern about whether adopted mitigation measures will be implemented in a timely fashion.

- ▷ **Community-wide trip mitigation.** Ultimately, the traffic impacts of new development occurring in El Dorado Hills and surrounding communities will depend on the numbers of automobile trips generated. To the extent that trips are reduced by the shift to other modes (walking, bicycling, ridesharing, transit, light rail) or by increased telecommuting, total traffic impact (congestion, noise, air pollution) can be reduced. Traditionally, these options have played a fairly limited role, particularly in low density, auto-oriented communities such as El Dorado Hills. As limited financial resources restrict our ability to expand highway facilities, and as public sensitivity to environmental impacts increases, it may be time to place increased emphasis on some of these alternatives.
- ▷ **Financial impact assessment.** Alternatives considered as part of this project could have varied financial impacts on residents, commercial interests, and public tax revenues. Environmental documents do not usually address financial impacts, and there is a reluctance to “open Pandora’s box” by addressing the issue of financial compensation. Concern about possible financial impacts has been an important factor inhibiting resolution of this process, however, and one of the individuals interviewed has suggested a model process used in another community to assess and resolve financial impact issues.

INTERCHANGE DESIGN

- **Alternatives**

- ▷ **Alternative 2.** This alternative is very similar to The Preferred Alternative (3-E), except that it retains the diagonal westbound off-ramp in the north-east quadrant. This was explored further because the residents believed it would reduce the volume of traffic on the loop off-ramp in the north-west quadrant. The engineers explained, however, that traffic entering northbound El Dorado Hills Blvd. from the diagonal off-ramp would need to weave into the farther lanes, and would also be frequently blocked by the flow of traffic on El Dorado Hills Blvd. This could cause cars to stack up back onto the freeway, posing a danger to westbound traffic.
- ▷ **Single-Point Urban Interchange (SPUI).** This option was eliminated because of the cost to elevate Highway 50 to allow for signalization under the freeway structure; because of the extensive retaining wall requirements and earth moving needed; and because it would not eliminate the problem of two signals in close proximity (Saratoga Way and the single point signal under the freeway.)

- ▷ **Alternative 3-E (Preferred Alternative).** After examining each alternative, this continued to be the most generally viable in terms of cost, safety and traffic flow.
- **Remaining concerns**
 - ▷ **The Business Park.** There continues to be a concern that the Preferred Alternative does not adequately address the needs of the El Dorado Hills Business Park. Currently, more than 100 trucks leave the IBS facility daily. They must travel north on Latrobe Road, go through a signal at White Rock Road, stop at a stop sign at the on-ramp on the south side, stop at another signal on the north side of the freeway, and then enter the westbound on-ramp to access Highway 50 and points west. When this project is complete, these vehicles will encounter signals at White Rock Road, Town Center Drive, the freeway on-off ramps on the south side of the highway, and the on-ramp left turn signal on the north side of the freeway. In other words, they will have four signals to pass through instead of the two signals and one stop sign they have now. It is important to remember that the El Dorado Hills Business Park is only 15% built out, and that additional traffic will be added as the Town Center area continues to grow.

Administrators from IBS, Cable Data and other businesses, that we met with, are concerned about the adequacy of access along Latrobe Road and through the interchange to Highway 50. Many felt that more emphasis should be placed on the Silva Valley Interchange and improvements to White Rock Road to improve access to the area south of the freeway. Although these improvements are a part of DOT's plan to respond to projected traffic demand, more communication seems needed regarding the planned phasing of these improvements, and the criteria that will trigger their implementation.

- ▷ **The Raley's Complex .** Concern was expressed about traffic congestion at the Saratoga Way entrance to the Raley's Complex. Improvements to the interchange and El Dorado Hills Blvd. will do little to alleviate the congestion that sometimes occurs there now. Access to the two service stations is awkward and traffic from the fast food restaurants sometimes backs up onto Saratoga Way from the drive-through lanes. Congestion in this area will likely be a growing problem as traffic volumes increase with new development.

SARATOGA WAY

- **Alignment (See maps in Appendix E.)**
 - ▷ **Against townhomes (Preferred Alternative).** From an engineering standpoint, this would seem to be the most logical alignment. From the perspective of the residents, this alignment would bring fast moving, high volume traffic in very close

proximity to their back doors. The townhomes have small back patios and no "backyards" at all.

- ▷ **Against El Dorado Hills Boulevard.** While this configuration moves Saratoga away from the townhomes, it creates the possibility of 8 to 10 lanes of continuous pavement, with two opposing lanes, passing on the passenger side of the vehicle. The connection to Park Avenue requires a widely swinging "hook" to achieve the proper alignment with the El Dorado Hills Blvd. intersection. This results in a loss of usable property at the north end of the open land area.
- ▷ **Middle.** There was a suggestion that Saratoga Way be aligned straight up the middle of the open space. This created a problem at the Park Avenue juncture, and made surrounding land unusable for commercial purposes.
- ▷ **S-curve.** In this configuration, Saratoga Way swings east, away from the townhomes in the south, and curves back through the property to create proper alignment with Park Avenue. Though it comes close to the townhomes in the north, the owners have stated that it is more acceptable than the "Preferred Alternative". It allows usable space for commercial buildings within the two curved areas created.

- **Two or Four Lanes**

- ▷ **Impact.** If Saratoga Way is widened to four lanes, it draws a higher volume of traffic, which elevates noise and air quality deterioration, and increases danger to children and others in the area. Construction of a four-lane road (or even reservation of a four lane right-of-way) would also reduce the land area available for construction of commercial buildings.
- ▷ **Accommodating trips.** If Saratoga is kept to two lanes, there will be a need to find other ways to accommodate traffic wanting to avoid congestion on the freeway. These accommodations could include additional freeway capacity, an extension of light rail from Folsom, telecommuting to reduce peak hour traffic, and diversion of traffic to White Rock Road.

RECOMMENDATIONS

- **Saratoga Way**

- ▷ **S-curve.** Select the S-curve alternative (Appendix E) for realignment of Saratoga Way. The S-curve configuration reduces impact on the townhomes, without eliminating the potential for development of the commercial property. It also has an aesthetic quality more consistent with the expressed vision for the El Dorado Hills Area.
- ▷ **Two lanes (four west of proposed Wilson Way).** Allow Saratoga Way to remain two lanes, to reduce traffic-related impacts on adjacent residences, to make the statement that this is a neighborhood access, slower speed area, and to retain as much property as possible for commercial development.
- ▷ **Commercial property.** With this configuration, the County need only negotiate with one property owner, Serrano Partners. If Serrano is not amenable to modifying the proposed development, the property might be sold to the County, or to another developer. The recommendation is that the land be used for professional offices or other similar use, and that high volume retail such as quick marts and service stations not be considered for the area. There is concern on the part of those living in surrounding neighborhoods that these businesses are not appropriate so close to a residential area. The residents have never objected to professional buildings on the property, and environmental reports indicate that the buildings will act to buffer the homes from traffic noise.
- ▷ **Equity of impact.** At the present time, there is a perception within the El Dorado Hills community that the County is placing greater value on existing and proposed commercial development, and on proposed but undeveloped residential subdivisions, than it is on existing residential neighborhoods. Alignment of Saratoga next to the townhomes (as recommended in DOT's Preferred Alternative) would aggravate this perception, because it focuses impact on adjacent residences. The revised alignment proposed here would have a more equitable impact on surrounding commercial and residential properties.

In addition, although there is an apparent need to add capacity on roads parallel to Highway 50, right-of-way was not reserved (and no subsequent provision has been made) to extend Old Bass Lake/Tong Road west of Silva Valley Parkway, through the commercial and developer-owned properties north of Highway 50 to El Dorado Hills Blvd. Since extension of a parallel route east of El Dorado Hills Blvd. has not been set forth as a priority, it would seem both reasonable and appropriate to respond to the concerns of residents west of El Dorado Hills Blvd., by restricting the width of Saratoga Way as far as the intersection of Wilson Way.

- **Interchange**

- ▷ **As proposed.** Continue to support the “preferred alternative” (Alternative 3-E) for interchange design.

- **Related Improvements**

- ▷ **Monitor phasing.** High priority should be given to construction of the Silva Valley Interchange and improvements to White Rock Road, to provide additional parallel capacity to Highway 50, improve access to properties south of Highway 50, and circulate traffic more evenly throughout the area.
- ▷ **Joint Powers.** Work with the Folsom-El Dorado Joint Powers Authority on related improvements (White Rock Road and Russell Ranch interchange) in Sacramento County.

- **Impact Assessment**

- ▷ **EIR.** Prepare an environmental impact report on the proposed project.
- ▷ **Financial impact assessment.** Prepare a financial impact assessment, either as part of the EIR or as a separate study, focused on alternative alignments for Saratoga Way. Include assessment of potential impacts to (1) residential property values, (2) developability (and resulting value) of commercial property adjacent to Saratoga Way, and (3) expected tax revenues. Based on the findings of this assessment, provide appropriate financial compensation for the alternative selected.

- **Impact Mitigation**

- ▷ **Mitigation measures.** Buffer affected residential areas with berms, sound walls, landscaping and other appropriate mitigation measures, as determined through environmental analysis. Work with the community to design mitigation measures that they will perceive to be most effective and aesthetically pleasing. Plan phasing so that berms and soundwalls, or other appropriate measures, are in place prior to the start of roadway construction. Incorporate provisions to monitor implementation and effectiveness of adopted mitigation measures.
- ▷ **Community-wide trip mitigation.** Focus new efforts on community-wide trip mitigation to reduce the cumulative impacts of proposed new developments in the Folsom-El Dorado Hills area.

- **Community Design**

The challenge posed to all of those involved in the development process is clear: to create new opportunities for people to live, work and shop in El Dorado County in ways that maintain and enhance, as much as possible, the quality and character of existing communities.

Increased use of emerging communications technologies, continued development of the business park, and the addition of attractive retail opportunities in the new Town Center development, can dramatically reduce the number of out-of-county trips generated by the residences in El Dorado Hills. Imaginative attention invested now in the mix of employment and retail opportunities developed, design of the internal circulation system, preservation of open space, and creation of new recreational and cultural opportunities can position El Dorado Hills as a model community for the 21st century.

- **Process**

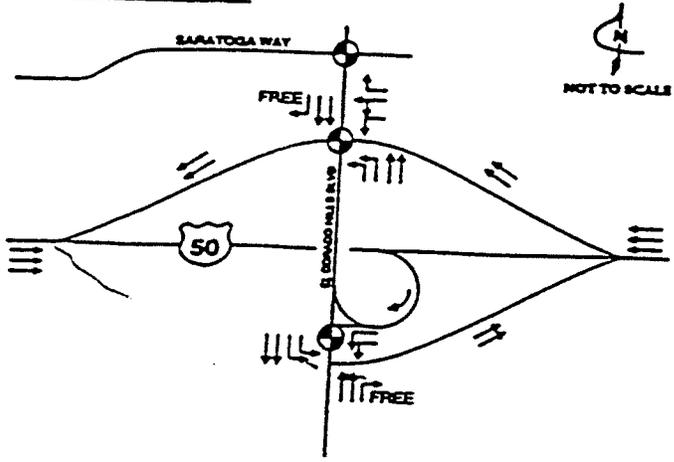
Develop a more proactive, community-oriented process for design and approval of proposed transportation improvements.

- ▷ **Stage of public involvement.** The earlier that the public can be involved in the planning process, the more that their interests and concerns can be taken into account in the project design process. From the perspective of the planning professional, it is often difficult to generate public interest early on. This is probably less true in the case of a project, such as the proposed interchange, that will have a clear impact on the surrounding neighborhood.
- ▷ **Notice of proposed transportation improvements.** Mail notification of proposed transportation improvements to adjacent property owners.
- ▷ **Accessibility of information.** Clearly designate locations (County libraries, County Planning Department resource room) where information will be available, and make sure that information provided is up-to-date, accurate, and readily accessible.
- ▷ **Community outreach advocate.** Add the role of "community outreach advocate" to the transportation planning and design process. This would improve communication and understanding between project staff and members of the community, and would alleviate the burden currently placed on project staff, who are time-constrained in their ability to respond to community needs and concerns. This role should be contracted out, in a manner similar to that used for environmental assessments, in order to allow DOT staff to participate fully as stakeholders in the process.

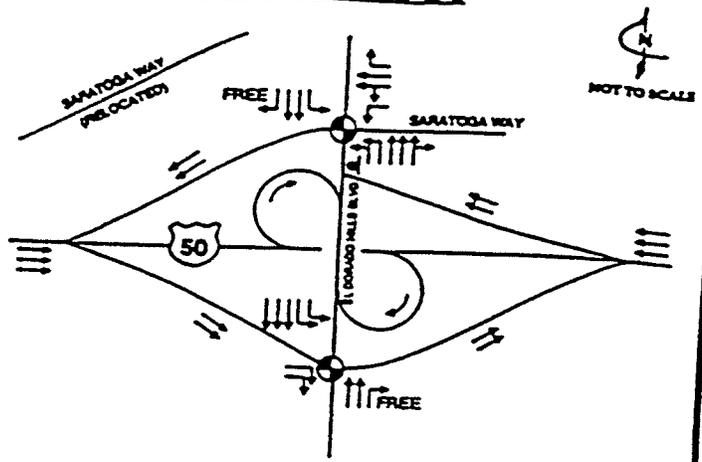
Appendix A

Interchange Alternatives 1-6 and A-G

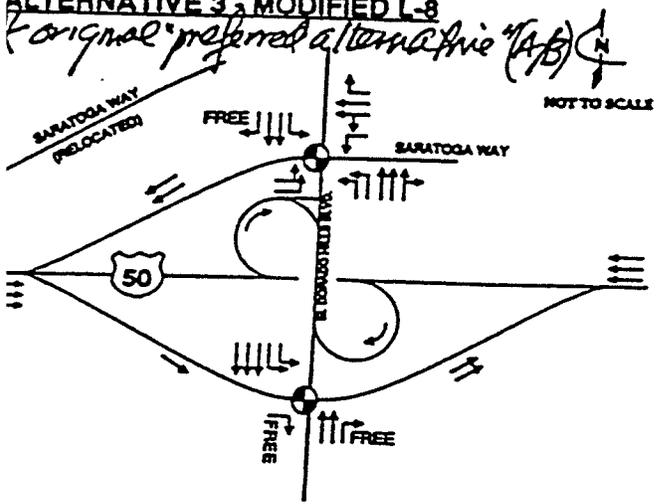
ALTERNATIVE 1



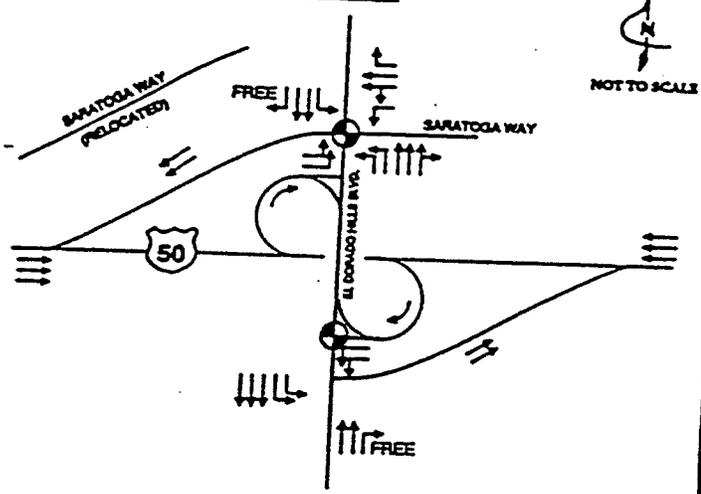
ALTERNATIVE 2 - MODIFIED L-8



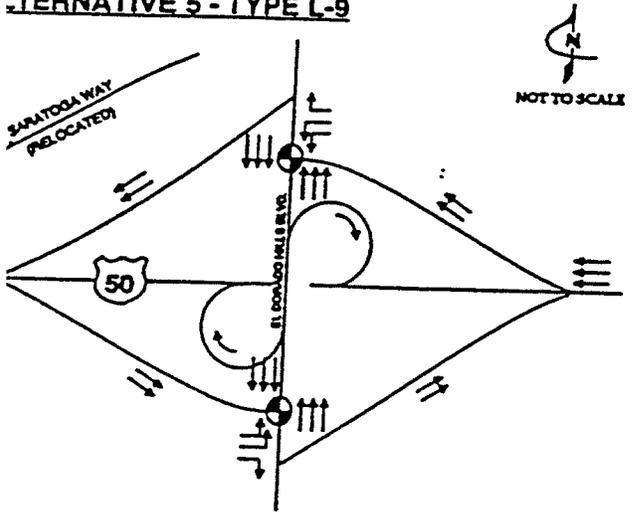
ALTERNATIVE 3 - MODIFIED L-8



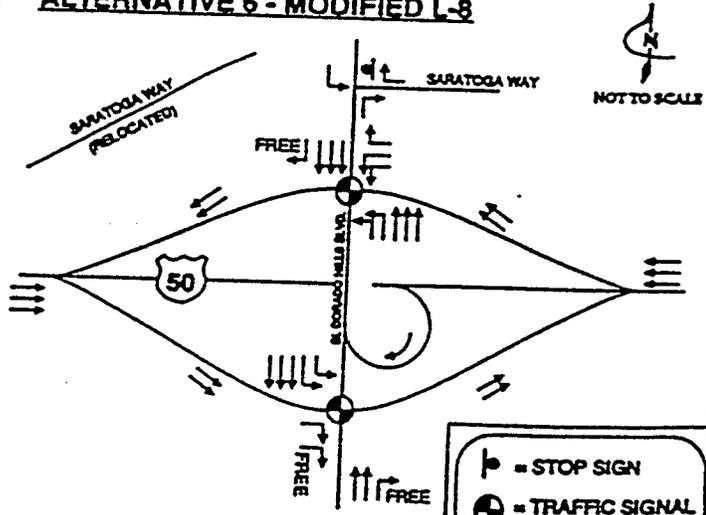
ALTERNATIVE 4 - TYPE L-8



ALTERNATIVE 5 - TYPE L-9



ALTERNATIVE 6 - MODIFIED L-8



= STOP SIGN
 = TRAFFIC SIGNAL

FIGURE 4

PRELIMINARY INTERCHANGE ALTERNATIVES

fp Fehr & Peers Associates, Inc.
Transportation Consultants

Original SR/PA Alternatives

Commitments

The County of El Dorado is committed to funding the construction and right-of-way costs of the proposed interchange with local moneys. The project will be consistent with the El Dorado County RTIP/FTIP and is included in the biennial 1996 MTP.

PROPOSAL DESCRIPTION

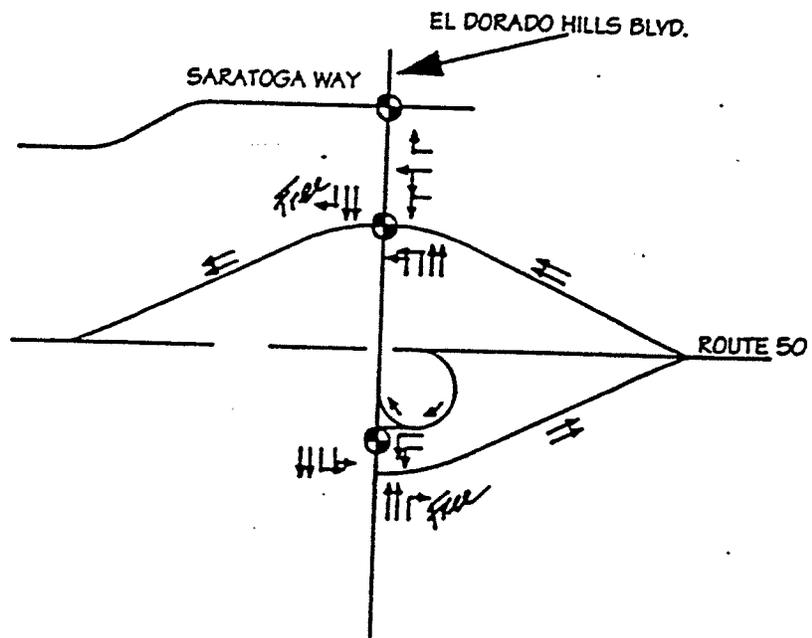
PROPOSAL AND ALTERNATIVES

Initially, seven alternatives were considered for the reconstruction of the El Dorado Hills Boulevard/Latrobe Road Interchange. The general operational characteristics of each alternative were analyzed to determine the advantages and disadvantages of each. These results are discussed in Attachment 2, page 14. The seven alternatives were then screened based on the operational analysis and input from Caltrans and El Dorado County staff. The alternatives provide for a future eight lane Route 50 freeway section consisting of the existing lanes plus the proposed future widening of one outside lane and the addition of a median High Occupancy Vehicle (HOV) lane in each direction. A future auxiliary lane is planned between the El Dorado Hills Boulevard interchange and the proposed Silva Valley Parkway interchange for both eastbound and westbound Route 50. This auxiliary lane is also provided for in all the project alternatives.

The seven alternatives initially identified are described below, along with a discussion of the advantages and disadvantages of each.

Alternative 1

Alternative 1 incorporates the existing interchange configuration with additional lanes to handle the expected demand in 2020. At the south side of the interchange, additional left-turn lanes will be added to the loop off-ramp approach and the southbound Latrobe

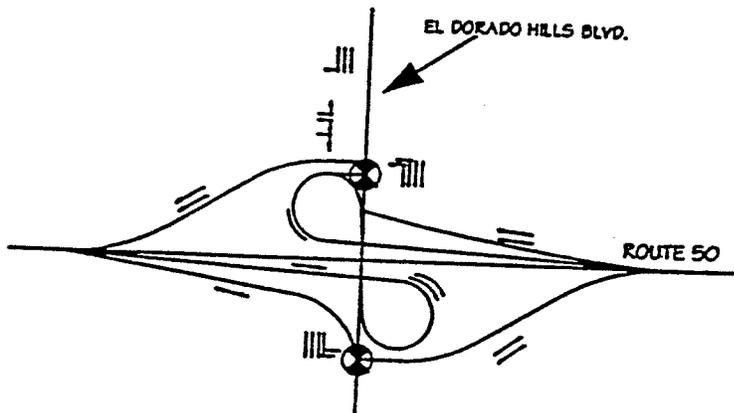


Road approach to the eastbound ramp intersection. The eastbound diagonal on-ramp will be widened to three lanes, transition to two lanes at the entrance and conform to the planned auxiliary lane up to Silva Valley Parkway. At the north side of the interchange additional left turns lanes would also be added to El Dorado Hills Boulevard at the northbound approach to the westbound ramp intersection. The westbound diagonal on-ramp will be widened to accommodate two lanes and a free right turn from the southbound approach of El Dorado Hills Boulevard. The westbound diagonal off-ramp will be widened to two lanes, with two left turn lanes, one through and one right turn at the ramp terminal. Both the eastbound ramp intersection and westbound ramp intersection will be signalized. Saratoga Way will remain signalized and at the existing location.

Preliminary analysis of Alternative 1 revealed that it was not desirable for the ultimate interchange configuration. Alternative 1 does not significantly improve traffic operations and offers no solution to the signal spacing problem between the westbound ramp intersection and Saratoga Way. Specifically this alternative fails to operate acceptably at the westbound ramp intersection during the p.m. peak hour. Alternative 1 was eliminated from further study because it presented no advantages when compared to the other five build alternatives.

Alternative 2

Alternative 2 is a modified L-8 partial cloverleaf interchange configuration with loop off-ramps in the northwest and southeast quadrants and diagonal off-ramps and on-ramps for eastbound and west bound traffic. (See Attachment 7).



North Side of Interchange--

The west leg of Saratoga Way will be realigned to Park Drive. The westbound diagonal on-ramp will be located across from the east leg of Saratoga Way. Dual left turn lanes will be provided for northbound traffic on El Dorado Hills Boulevard to the on-ramp. A westbound loop off-ramp will be added with an exclusive right turn to southbound El

Dorado Hills Boulevard in the northwest quadrant. The westbound diagonal off-ramp will be reconstructed to serve westbound to northbound traffic on El Dorado Hills Boulevard. The intersection at the westbound diagonal off-ramp terminal will have stop sign control. The intersection of the westbound on-ramp and Saratoga Way will be signalized.

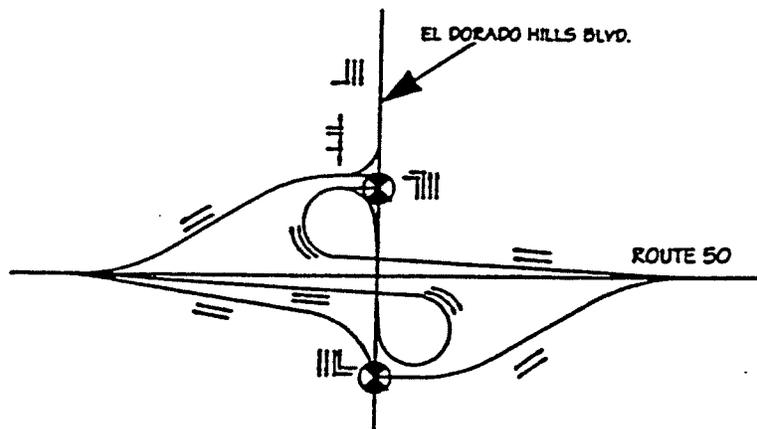
South Side of Interchange--

An eastbound diagonal off-ramp with a free right turn to southbound Latrobe Road will be added in the southwest quadrant. The free right turn lane will continue as a through lane along southbound Latrobe Road to the entrance at the Corporate Center (Village U) where the lane will become an exclusive right turn lane into the development. The eastbound loop off-ramp will provide an exclusive right turn lane to service the eastbound to northbound traffic on El Dorado Hills Boulevard/Latrobe Road. Southbound El Dorado Hills Boulevard will be widened to provide dual left turn lanes to the eastbound on-ramp. The eastbound on-ramp will be widened for three lanes and transition to two lanes at the ramp entrance. The eastbound on-ramp will conform to the auxiliary lane to be added up to Silva Valley Parkway. The intersection at the eastbound ramps will be signalized.

This alternative was considered to be a viable build alternative. The spacing problem between the westbound off-ramp and Saratoga Way would still exist. There is also a potential for traffic traveling northbound on El Dorado Hills Boulevard to back up and block the intersection of the westbound off-ramp during peak hours. This situation may lead to traffic queuing problems on the off-ramp extending back to the freeway mainline. Because this alternative does not address the spacing problem between Saratoga Way and the westbound ramps and has a potential for queuing problems, Alternative 2 is not proposed as the preferred alternative.

Alternative 3

Alternative 3 is also a modified type L-8 configuration. It is similar to Alternative 2, but excludes the diagonal westbound off-ramp. (See Attachments 4).



North Side of Interchange--

The west leg of Saratoga Way will be realigned as in Alternative 2. The westbound diagonal on-ramp will be located opposite the east leg of Saratoga Way as in Alternative 2. A retaining wall will be constructed adjacent to the outside edge of pavement at the 61 meter radius curve at the free right turn for southbound traffic entering the westbound on-ramp. The wall will be set back to provide a 40 kilometer per hour (km/h) stopping sight distance at the curve. A westbound loop off-ramp will be constructed in the northwest quadrant serving westbound to northbound and southbound traffic on EL Dorado Hills Boulevard. The loop off-ramp and diagonal on-ramp will be signalized at the intersection with Saratoga Way.

South Side of Interchange--

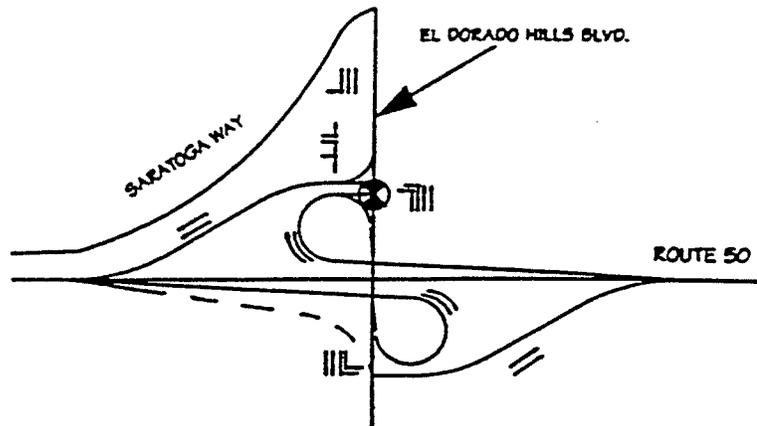
Three different options are proposed for the eastbound diagonal off-ramp in the southwest quadrant. Option A proposes a two lane ramp with a single free right turn and a signalized right turn at the terminal. Traffic in the left lane will be required to stop at the signal before turning right. Traffic in the right lane will be allowed a free right turn into an exclusive lane which would continue to the intersection of A Street where it becomes a exclusive right turn lane into the Corporate Center (Village U). The advantage of an option consisting of a free right turn lane and a signalized right turn lane is to eliminate any potential weaving problems south of the intersection. The signalized left most right-turn lane from the eastbound off-ramp would be dedicated for vehicles turning left at A Street or White Rock Road. Option B (See Attachments 4) proposes to construct the off-ramp with a single free right turn as described in Alternative 2. Option C (See Attachment 6) will propose an interchange configuration without the eastbound diagonal off-ramp. This alternative will consist of dual left turn lanes from the eastbound loop off-ramp (see Alternative 4 described below).

Alternative 3 is proposed as the preferred alternative for this project. Alternative 3 results in acceptable levels of services at the ramp intersections and improves the signal spacing on the north side. This alternative also avoids the need for the westbound diagonal off-ramp. Traffic analysis of each of the options A, B, and C proposed for Alternative 3 indicate that the interchange and the El Dorado Hills Boulevard/Latrobe Road corridor would operate acceptably into the year 2020 with each of the configurations in place (See Attachment 2, Table 19). For purposes of this PSR/PR Alternative 3, Option A will be presented as the preferred alternative. This configuration is chosen as the basis for reserving right-of-way for the project and programming project funds.

Alternative 4

Alternative 4 is a type L-8 configuration, which excludes the eastbound diagonal off-ramp in the southwest quadrant.

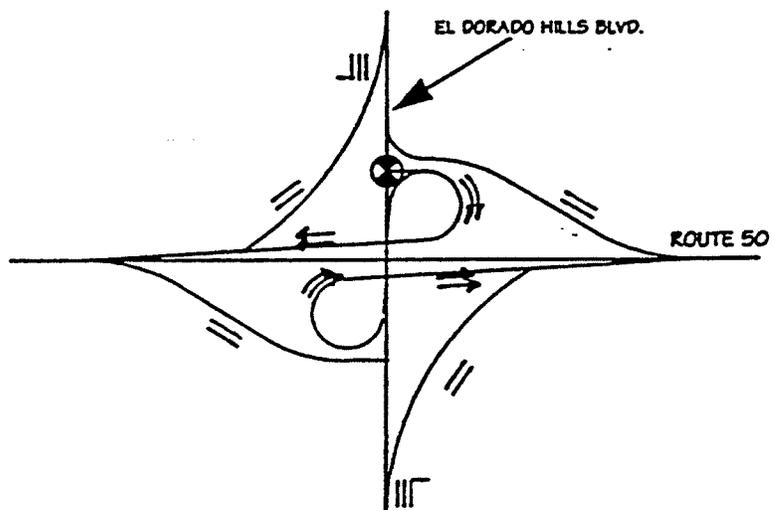
Alternative 4 is described above as Option C for Alternative 3. In this alternative, the eastbound loop off-ramp will consist of two left-turn lanes to serve the eastbound to northbound El Dorado Hills Boulevard demand. (See Attachment 6).



Alternative 4 was eliminated from the alternatives identified for further analysis during the initial alternatives screening process. Alternative 4 was not considered to be a viable alternative because it did not include the eastbound diagonal off-ramp in the southwest quadrant. At the time it was determined that the preferred alternative proposed for this project should reserve the necessary right-of-way to construct an eastbound diagonal off-ramp in the southwest quadrant. The traffic operations analysis determined that Alternative 4 would provide acceptable traffic operations for the year 2020 and that the alternative should be carried forward as a viable build alternative. Alternative 4 was analyzed further as an option of Alternative 3 (Option C).

Alternative 5

Alternative 5 is a standard type L-9 configuration. This alternative consists of loop on-ramps in the northeast and southwest quadrants and diagonal off-ramps and on-ramps for eastbound and west bound traffic on Route 50. The intersections of the westbound diagonal off-ramp and eastbound



diagonal off-ramp termini at El Dorado Hills Boulevard will be signalized. The west leg of Saratoga Way will be realigned to Park Drive and the east leg of Saratoga Way would be eliminated.

Alternative 5 was considered to have more disadvantages than advantages when compared with the other proposed build alternatives and was eliminated in the initial alternatives screening. Cited disadvantages included the removal of existing commercial establishments at Saratoga Way and El Dorado Hills Boulevard, and the elimination of access to adjacent existing and planned developments along El Dorado Hills Boulevard between Saratoga Way and Park Drive. This alternative involves substantial land use/property impacts and did not provide substantially improved operations in comparison to the other build alternatives.

Alternative 6

Alternative 6 is a modification of the current interchange configuration. (See Attachment 8).

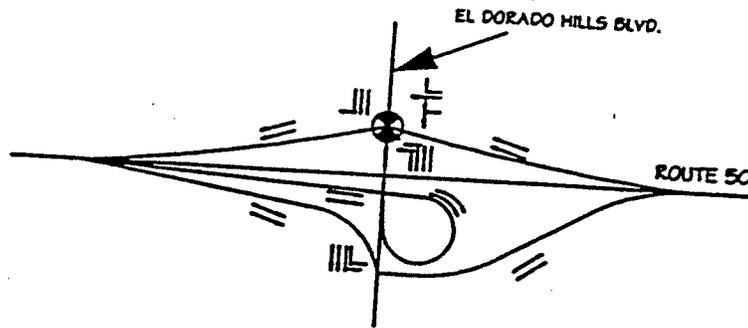
North Side of Interchange--

The westbound on-ramp and westbound off-ramp will be reconstructed as a tight diamond configuration. The intersection of the westbound ramp termini and El Dorado Hills Boulevard will be signalized. The west leg of Saratoga Way will be relocated to Park Drive. The signal at the east leg of Saratoga Way will be eliminated and access would be limited to entering and exiting right turn movements. An unsignalized left turn would be allowed from southbound El Dorado Hills Boulevard into the east leg of Saratoga Way. Traffic from Saratoga Way wanting to travel southbound on El Dorado Hills Boulevard or access the westbound on-ramp would be required to make a U-turn at the Park Drive intersection.

South Side of Interchange--

The interchange configuration proposed for Alternative 6 is identical to the configuration proposed for Alternative 2.

Alternative 6 offers a possible solution to the signal spacing problem at the Route 50 westbound ramps and Saratoga Way. This alternative would also minimize construction costs by eliminating the need for a westbound loop off-ramp structure. However,



preliminary traffic analysis for this alternative showed that the intersection at Park Drive and El Dorado Hills Boulevard would not be able to handle the increase in traffic without capacity increasing modifications. The traffic analysis revealed that the existing intersection would not be capable of handling the large number of vehicles expected to make U-turns at the signal. This alternative would also limit the access to the east leg of Saratoga Way. Based on the above disadvantages, Alternative 6 is not proposed as the preferred alternative, but was considered to be a viable build alternative after the initial alternatives screening.

Alternative 7

Alternative 7 is the No-Build Alternative. Selection of the No-Build Alternative would result in the level of service deterioration and the existing interchange operation would not be adequate to accommodate projected traffic volumes. The No-Build Alternative was withdrawn because it would not improve existing conditions and accommodate development proposed in the 1996 El Dorado County General Plan.

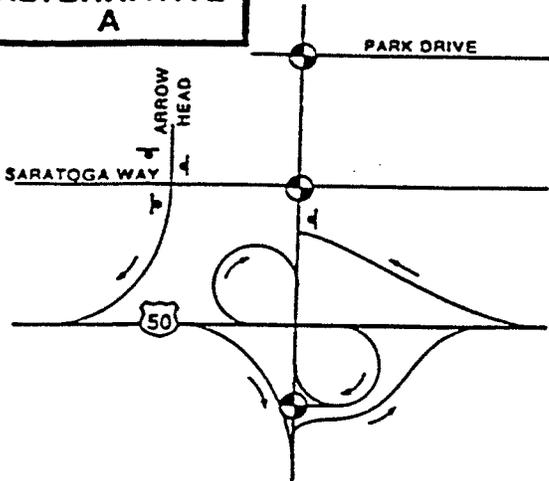
Preferred Alternative

A three step process was undertaken to evaluate alternative interchange configurations and to select a preferred interchange. The seven alternatives described above were initially identified for preliminary evaluation. After the initial evaluation the three viable build alternatives, Alternatives 2, 3, and 6 were identified and analyzed in more detail under both year 2005 and 2020 traffic conditions. Based on the results of this second analysis the preferred alternative, Alternative 3, specifically Alternative 3A, was selected.

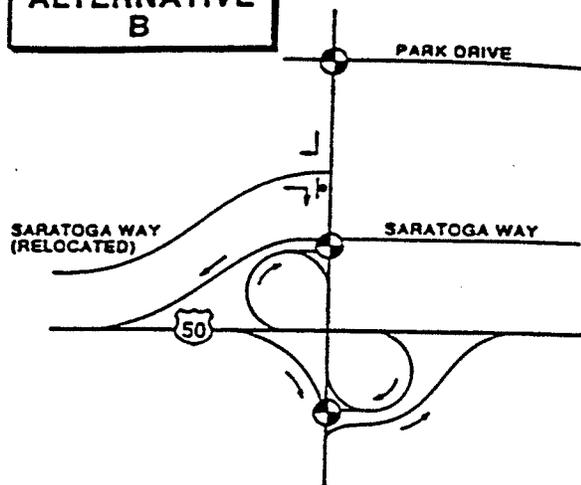
Alternative 3A, the preferred project alternative, will provide standard acceleration and deceleration lanes and standard auxiliary lanes at the interchange on- and off-ramps to improve ramp junction operations. The ramp tapers with Route 50 will provide for the future widening of Route 50 and the future addition of proposed auxiliary lanes between the El Dorado Hills Boulevard interchange and the Silva Valley interchange to the east.

Roadway drainage design for the preferred alternative will follow the flow patterns of the existing project area. The existing culverts will be extended and replaced as necessary to convey roadway drainage to existing outlet areas. Existing ditches will also be examined for proper drainage flows. Landscaping will consist of standard erosion control and highway planting that will be drought resistance, low-maintenance, complementary to the existing vegetation, and not obstruct sight distance. Permanent erosion control

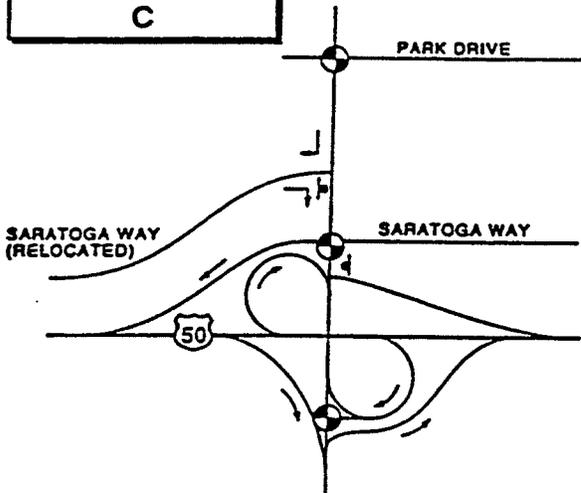
ALTERNATIVE A



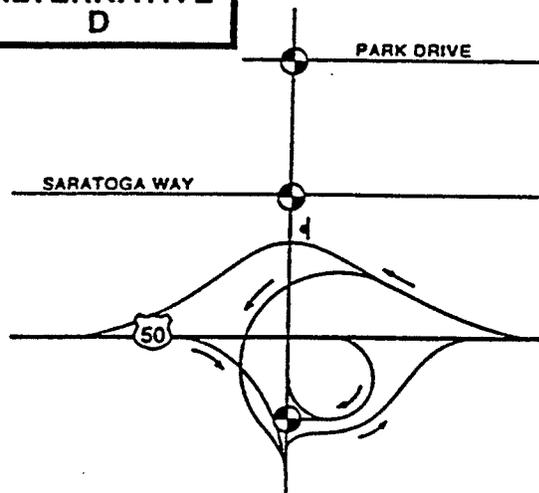
ALTERNATIVE B



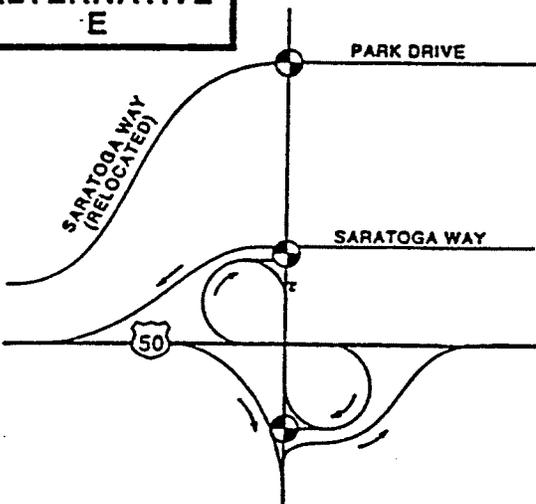
ALTERNATIVE C



ALTERNATIVE D



ALTERNATIVE E



Not To Scale

LEGEND:

-  = STOP SIGN
-  = TRAFFIC SIGNAL

FIGURE 1

INTERCHANGE ALTERNATIVES

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Transportation Consultants

ALTERNATIVE F

SARATOGA WAY
(RELOCATED)



PARK DRIVE

EL DORADO
HILLS BLVD.



SARATOGA WAY

ALTERNATIVE G

SARATOGA WAY



PARK DRIVE

EL DORADO
HILLS BLVD.

LEGEND:

- STOP SIGN
- TRAFFIC SIGNAL

FIGURE 1

INTERCHANGE
ALTERNATIVES F & G

fp Fehr & Peers Associates, Inc.
Transportation Consultants

Appendix B

List of Meetings with Interest Groups

A Community Intensive

THE EL DORADO HILLS BLVD. FREEWAY INTERCHANGE OCTOBER 1997

INTRODUCTORY STATEMENT

Thorpe, Van Camp, Strategic Design Associates (TVSDA) will conduct a Community Intensive concerning the El Dorado Hills Boulevard freeway interchange. The time frame for this effort is the two month period between mid-October and mid-December.

This intensive is an inquiry into the decision-making and selection process of the "Preferred Alternative", and an opportunity to receive unrestricted community input pertaining to the proposed interchange project.

The primary objective of this inquiry is to listen, question, clarify and accurately document the various perspectives about the issue. An atmosphere will be created that fosters open, respectful communication, allowing the exploration of possibilities and the encouragement of ideas.

The outcome of this process will evolve as input is received from the various participants. At the conclusion of the intensive, a final presentation will be made to the County Board of Supervisors.

LIST OF MEETINGS CONDUCTED DURING THE PROCESS

1997	
October 10	DOT (Michael Stoltz, Kris Payne, Randy Pesses)
October 16	Kris Payne, Project Coordinator
October 29	The Mansour Company
October 29	Sam Miller, Serrano El Dorado
October 30	Raley's Shopping Center Association
October 30	Project Development Team (HDR, DOT, CALTRANS, etc.)
November 5	El Dorado Hills Community Council
November 6	Residents
November 6	Residents
November 12	Attended APAC meeting
November 18	IBS
November 19	Day-long Open Session at the EDH Community Center
November 20	El Dorado Hills Business Park Association
December 1	DOT
December 2	Matt Boyer - Transportation Commission
December 3	El Dorado Hills Chamber of Commerce
December 5	Residents
December 8	Harry Norris - Union 76 Station
1998	
January 7	DOT
January 8	Residents
January 9	Day-long meeting at Rescue Community Center - 30 Stakeholders
January 14	DOT
January 23	Tony Mansour and Company
February 3	Attended BOS Meeting
February 4	Tony and Louis Mansour
February 9	Sam Miller and Tom Howard, Serrano El Dorado
February 11	DOT
February 13	Matt Boyer, Transportation Commission
February 20	Residents
February 23	Sam Miller
February 23	Residents
March 4	Kris Payne
March 6	Half-day meeting with Stakeholders at Serrano El Dorado
March 18	EDAW - Julia LeBoeuf and Doug Brown
March 18	Fehr & Peers - Matt Henry
March 23	DOT
March 25	Tony Mansour, Louis Mansour, Albert Hazbun, Hillary Krogh
March 31	John Upton, District 5 Supervisor
April 27	DOT
April 30	Completion of report to Board of Supervisors
May 19	Proposed date of Presentation to Board of Supervisors

The above list of meetings does not include internal staff meetings or time spent on documentation and phone calls.

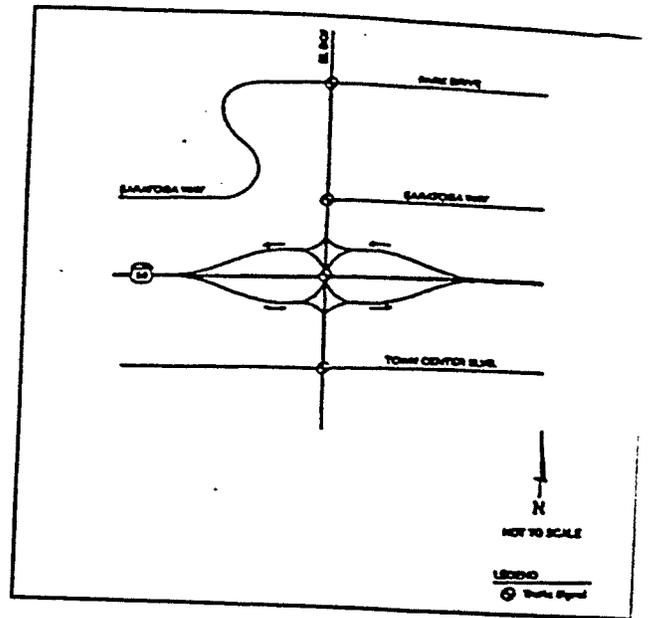
Appendix C

Alternatives H, I, and J

ALTERNATIVE H:

New configuration:

Alternative H is similar to Alternatives I and J. Generally, Alternative H includes the same type of Single Point Urban Interchange (SPUI) configuration as does the other two alternatives, but additionally requires the realignment of Saratoga Way to Park Drive.



This configuration is not considered viable because of problems with alignment geometrics, but due to the importance of the public outreach process it was further analyzed.

The El Dorado Hills Blvd / US 50 project site does not represent a site where a SPUI would objectively be proposed, because vertical clearance is presently a problem with the existing Undercrossing structure. The reduced minimum vertical clearance of the Undercrossing structure over El Dorado Hills Blvd and the additional height needed for the signalization of the SPUI requires the raising of US 50. The following estimated costs for constructing the SPUI include design and construction administration, environmental clearance, and right-of-way purchase - \$36.1M.

The features of SPUI that make it more expensive than the more traditional interchange configurations are 1) raising the mainline US 50 profile 10 feet at the Undercrossing structure then tapering approximately one-half mile in both directions back to grade, 2) constructing a long span Undercrossing structure to allow for sufficient horizontal clearances for the four ramps, and 3) constructing four relatively tall and long retaining walls to contain the mainline fill, one in each quadrant.

Pros -

- Partial fix of intersection spacing problem discussed in Alternative 1
- Fewer conflicting movements at EB ramp intersection
- Eliminates Loop off-ramps

Cons -

- Poor alignment geometrics
- High project cost - \$36.1M
- Extensive queuing on NB El Dorado Hills Blvd (p.m.) Spills back into the ramp intersection causing LOS F operations
- Substantial queuing at WB off-ramp caused by close spacing to Saratoga Way intersection
- SB queue on El Dorado Hills Blvd (a.m.) from Saratoga Way intersection approaches the Park Dr intersection
- Close proximity of ramps intersection to Saratoga Way intersection creates weaving concerns for NB movements
- Relocates Saratoga Way in closer proximity to the townhouses

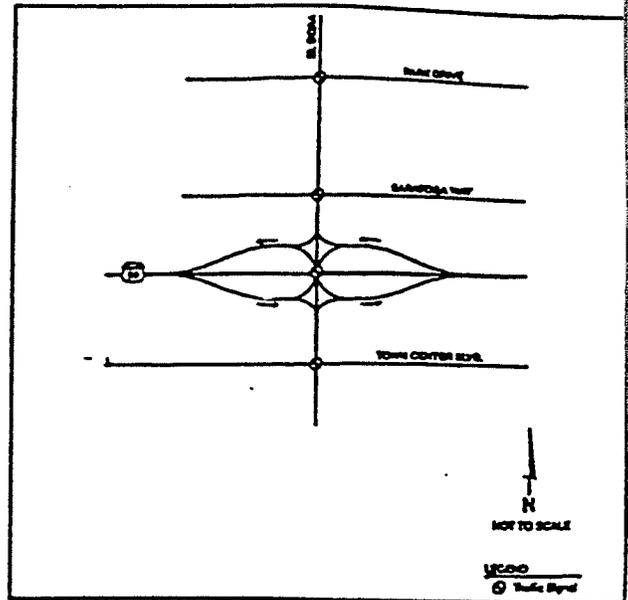
ALTERNATIVE I:

New configuration:

Alternative I is similar to Alternatives H and J. Generally, Alternative I includes the same type of Single Point Urban Interchange (SPUI) configuration as does the other two alternatives, but does not require the realignment of Saratoga Way to Park Drive.

This configuration is not considered viable because of problems with alignment geometrics, but due to the importance of the public outreach process it was further analyzed.

The El Dorado Hills Blvd / US 50 project site does not represent a site where a SPUI would objectively be proposed, because vertical clearance is presently a problem with the existing Undercrossing structure. The reduced minimum vertical clearance of the Undercrossing structure over El Dorado Hills Blvd and the additional height needed for the signalization of the SPUI requires the raising of US 50. The following estimated costs for constructing the SPUI include design and construction administration, environmental clearance, and right-of-way purchase - \$33.8M.



The features of SPUI that make it more expensive than the more traditional interchange configurations are 1) raising the mainline US 50 profile 10 feet at the Undercrossing structure then tapering approximately one-half mile in both directions back to grade, 2) constructing a long span Undercrossing structure to allow for sufficient horizontal clearances for the four ramps, and 3) constructing four relatively tall and long retaining walls to contain the mainline fill, one in each quadrant.

PROs -

- Does not require the relocation of Saratoga Way (west) to Park Dr
- Fewer conflicting movements at EB ramp intersection
- Eliminates Loop off-ramps

CONs -

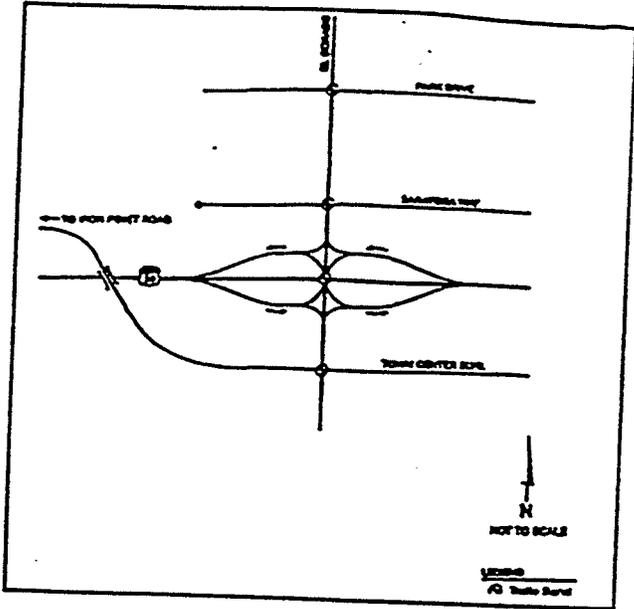
- Poor alignment geometrics
- High project cost - \$33.8M
- Extensive queuing on NB El Dorado Hills Blvd (p.m.) Spills back into the ramp intersection causing LOS F operations
- Substantial queuing at WB off-ramp caused by close spacing to Saratoga Way intersection
- SB queue on El Dorado Hills Blvd (a.m.) from Saratoga Way intersection approaches the Park Dr intersection
- Close proximity of ramps intersection to Saratoga Way intersection creates weaving concerns for NB movements

ALTERNATIVE I:

New configuration:

Alternative J is similar to Alternatives H and I. Generally, Alternative J includes the same type of Single Point Urban Interchange (SPUI) configuration as does the other two alternatives, but additionally requires the extension of Iron Point Road to Town Center Blvd using a new Overcrossing constructed as part of the proposed interchange project.

This configuration is not considered viable because of problems with alignment geometrics, but due to the importance of the public outreach process it was further analyzed.



The El Dorado Hills Blvd / US 50 project site does not present a site where a SPUI would objectively be proposed, because vertical clearance is presently a problem with the existing Undercrossing structure. The reduced minimum vertical clearance of the undercrossing structure over El Dorado Hills Blvd and the additional height needed for the realization of the SPUI requires the raising of US 50. The following estimated costs for constructing the SPUI include design and construction administration, environmental clearance, and right-of-way purchase - \$43.0M.

The features of SPUI that make it more expensive than the more traditional interchange configurations are 1) raising the mainline US 50 profile 10 feet at the Undercrossing structure then tapering approximately one-half mile in both directions back to grade, 2) constructing a long span Undercrossing structure to allow for sufficient horizontal clearances for the four ramps, and 3) constructing four relatively tall and long retaining walls to contain the mainline fill, one in each quadrant.

- Os -
 - Does not require the relocation of Saratoga Way (west) to Park Dr
 - Eliminates through-traffic on Saratoga Way (west)
 - Partial fix of intersection spacing problem discussed in Alternative 1
 - Fewer conflicting movements at EB ramp intersection
 - Eliminates Loop off-ramps
 - Would reduce overall traffic volume passing through the interchange by 3 to 5 percent

- Ns -
 - Poor alignment geometrics
 - High project cost - \$43.0M
 - Extensive queuing on NB El Dorado Hills Blvd (p.m.) Spills back into the ramp intersection causing LOS F operations
 - Substantial queuing at WB off-ramp caused by close spacing to Saratoga Way intersection
 - SB queue on El Dorado Hills Blvd (a.m.) from Saratoga Way intersection approaches the Park Dr intersection
 - Close proximity of ramps intersection to Saratoga Way intersection creates weaving concerns for NB movements
 - Would divert approximately 2,000 vehicles per day to Wilson Blvd (residential area)

ALTERNATIVE I:

New configuration:

Alternative J is similar to Alternatives H and I. Generally, Alternative J includes the same type of Single Point Urban Interchange (SPUI) configuration as does the other two alternatives, but additionally requires the extension of Iron Point Road to Town Center Blvd using a new Overcrossing constructed as part of the proposed interchange project.

This configuration is not considered viable because of problems with alignment geometrics, but due to the importance of the public outreach process it was further analyzed.

The El Dorado Hills Blvd / US 50 project site does not represent a site where a SPUI would objectively be proposed, because vertical clearance is presently a - problem with the existing Undercrossing structure. The reduced minimum vertical clearance of the Undercrossing structure over El Dorado Hills Blvd and the additional height needed for the signalization of the SPUI requires the raising of US 50. The following estimated costs for constructing the SPUI include design and construction administration, environmental clearance, and right-of-way purchase - \$43.0M.

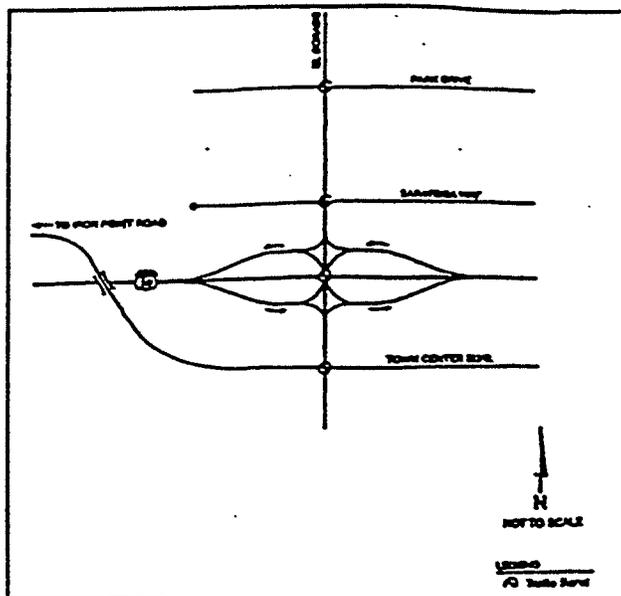
The features of SPUI that make it more expensive than the more traditional interchange configurations are 1) raising the mainline US 50 profile 10 feet at the Undercrossing structure then tapering approximately one-half mile in both directions back to grade, 2) constructing a long span Undercrossing structure to allow for sufficient horizontal clearances for the four ramps, and 3) constructing four relatively tall and long retaining walls to contain the mainline fill, one in each quadrant.

PROs -

- Does not require the relocation of Saratoga Way (west) to Park Dr
- Eliminates through-traffic on Saratoga Way (west)
- Partial fix of intersection spacing problem discussed in Alternative 1
- Fewer conflicting movements at EB ramp intersection
- Eliminates Loop off-ramps
- Would reduce overall traffic volume passing through the interchange by 3 to 5 percent

CONs -

- Poor alignment geometrics
- High project cost - \$43.0M
- Extensive queuing on NB El Dorado Hills Blvd (p.m.) Spills back into the ramp intersection causing LOS F operations
- Substantial queuing at WB off-ramp caused by close spacing to Saratoga Way intersection
- SB queue on El Dorado Hills Blvd (a.m.) from Saratoga Way intersection approaches the Park Dr intersection
- Close proximity of ramps intersection to Saratoga Way intersection creates weaving concerns for NB movements
- Would divert approximately 2,000 vehicles per day to Wilson Blvd (residential area)



Appendix D

Possibility Matrix

	TRAFFIC FLOW	GENERAL ENVIRON. IMPACTS	POSSIBLE FINANCIAL IMPACTS	COMMUNITY WELL-BEING	MITIGATIONS POSSIBLE	COST TO EDH COMMUNITY	MISC. COMMENTS
SPUI INTER-CHANGE	SIGNALS TOO CLOSE - LOS F PATTERN DIFFICULT TO LEARN	DECREASED AIR QUALITY FROM IDLING CARS MORE VIS. IMPACT	IMPACTS BUSINESS IN NE QUAD. -LONG TIME TO BUILD - + \$20MIL TO CONST.	MANY WALLS. HOMES LESS IMPACTED-MORE EARTH MOVING	LANDSCAPING WALLS	\$34 - 43 MIL MAY DELAY SILVA VALLEY	RESIDENTS LIKE IT BETTER (AS WELL AS FULL CLOVER-LEAF)
SILVA VALLEY INTERCHGE.	WILL HELP DIVERT TRAFFIC FROM EDH BLVD. - ALREADY PLANNED	LESS PROPERTY IMPACTED-MORE ROOM TO BUILD- PHASING POSS.	N/A	N/A	N/A	NOT CONSIDERED AN ALTERNATIVE TO IMPROVING EDH BLVD.	WOULD IT BE BETTER TO BUILD IT FIRST ?
DOT ALT. 3	MEETS CALTRANS STANDARDS- LOS D - WB DIAG. OFF RAMP GONE	INCREASED NOISE DECREASED AIR QUALITY	IMPACTS PROP VALUES - LESS TIME TO BUILD	LOOP IS DISTRESSING TO RESIDENTS	CAN HEALTH ISSUES BE MITIGATED?	\$20MIL NEEDS EIR	EXIT TO UNION 76 STATION AFFECTED
DOT ALT. 2	KEEPS WB OFF RAMP -TOO MUCH QUEUING POSS. ON WB OFF RAMP	SAME AS OTHER ALTERNATIVES. -- MAY SEEM BETTER	UNION 76 BETTER SERVED- RES. PROPERTY AFFECTED	LESS TRAFFIC ON THE LOOP - PREFERRED BY RESIDENTS	CONCERN OVER HEALTH ISSUES THE SAME	\$20 MIL NEEDS EIR	LIGHTS FROM LOOP SAFETY ISSUES FROM TRUCKS ON LOOP
SARATOGA NEAR HOMES	LOS C OR D DESIGNED FOR HIGHER SPEEDS	HIGH TRAFFIC INCREASED NOISE DECREASED AIR QUALITY	LOWERS PROPERTY VALUES- INCREASES DANGER	CHANGES CHARACTER OF COMMUNITY-VERY DISTRESSING	8 FT WALLS/BERMS LANDSCAPING 2 PANE WINDOWS \$ COMPENSATION	COST OF POSS. LITIGATION- EIR DEMANDED	NOTIFICATION OF RESIDENTS POOR- WILL BRING MORE PROBLEMS
SARATOGA MIDWAY	LOS C OR D LOWER SPEEDS IF 'S' CURVE USED	LESS IMPACT ON HOMES-STILL ROOM FOR OFFICES WHICH BUFFER	IMPACTS COMMERCIAL PROPERTY	ACCEPTABLE TO MOST RESIDENTS - LESS OFFENSIVE	WALLS / BERMS LANDSCAPING 2 PANE WINDOWS	LOSS OF COMM. PROP VALUE - MAY ALLOW PUBLIC SPACE	SHOULD OR SHOULD NOT CONNECT TO FOLSOM?
SARATOGA ALONG EDH BLVD.	LOWER SPEEDS LOS C OR D	VISUAL IMPACT UNACCEPTABLE - LESS IMPACT ON HOMES	SIGNIFICANT IMPACT ON COMMERCIAL PROPERTY	OPPOSING TRAFFIC A SAFETY ISSUE - RESIDENTS LESS IMPACTED	LESS NEEDED FOR RESIDENTS - MORE FOR COMMERCIAL PROPERTY	INCREASED COST IF COUNTY BUYS PROPERTY	HOOK AT END MAKES PROPERTY LESS USABLE
SARATOGA 2 LANES	COULD REDUCE LEVEL OF SERVICE - LOWER SPEEDS - EASIER ACCESS TO OFFICES AND SIDE STREETS	LESS NOISE AND AIR QUALITY IMPACT - BETTER VISUALLY	LESS IMPACT ON COMMERCIAL PROPERTY	BETTER VISUALLY AND AESTHETICALLY - RESIDENTS PREFER	GREEN BELT NEAR HOMES - SOME WALLS OR BERMS - LANDSCAPING	COSTS LESS THAN 4 LANES TO BUILD - DOES NOT DESTROY CHAR. OF NEIGHBORHOOD	REDUCES TRAFFIC IMPACT TO WHOLE QUADRANT - MAKE 4 LANES W. OF WILSON
SARATOGA 4 LANES	LOS C OR D HIGHER SPEEDS DIFFICULT INGRESS AND EGRESS	INCREASED NOISE AND AIR QUALITY IMPACT - MORE VISUAL IMPACT	INCREASED IMPACT ON COMMERCIAL PROPERTY AND SOME HOMES	NOT FAVORED BY RESIDENTS	8 FT WALLS / BERMS LANDSCAPING 2 PANE WINDOWS \$ TO RESIDENTS ?	COSTS MORE THAN 2 LANES - RUINS CHAR. OF AREA	MORE IMPACT ON CRESCENT RIDGE RESIDENTS

See attached maps of various configurations for both the interchange and for Saratoga Way.

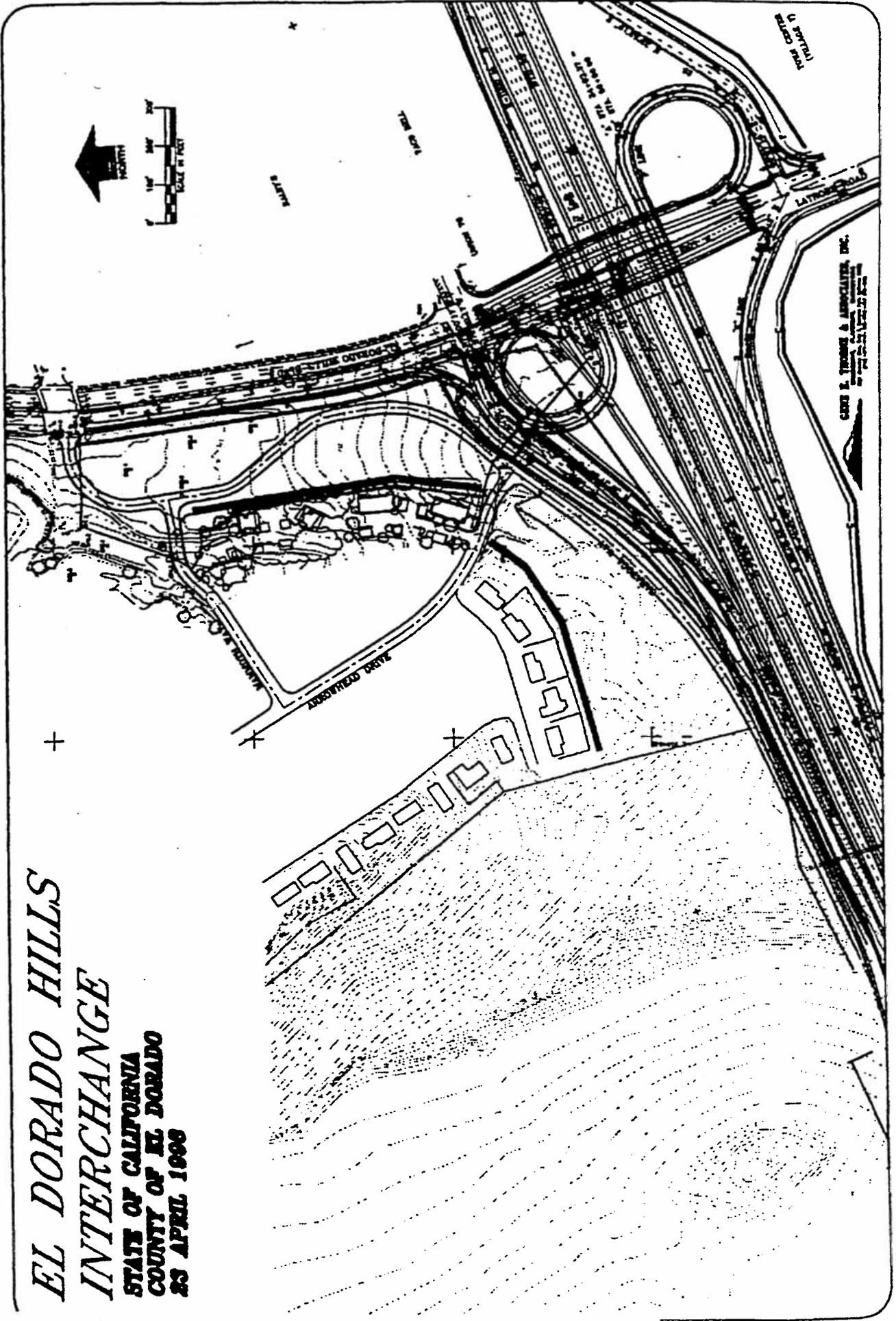
Appendix E

New Configurations for Saratoga Way



(two lanes)
Recommended Alternative

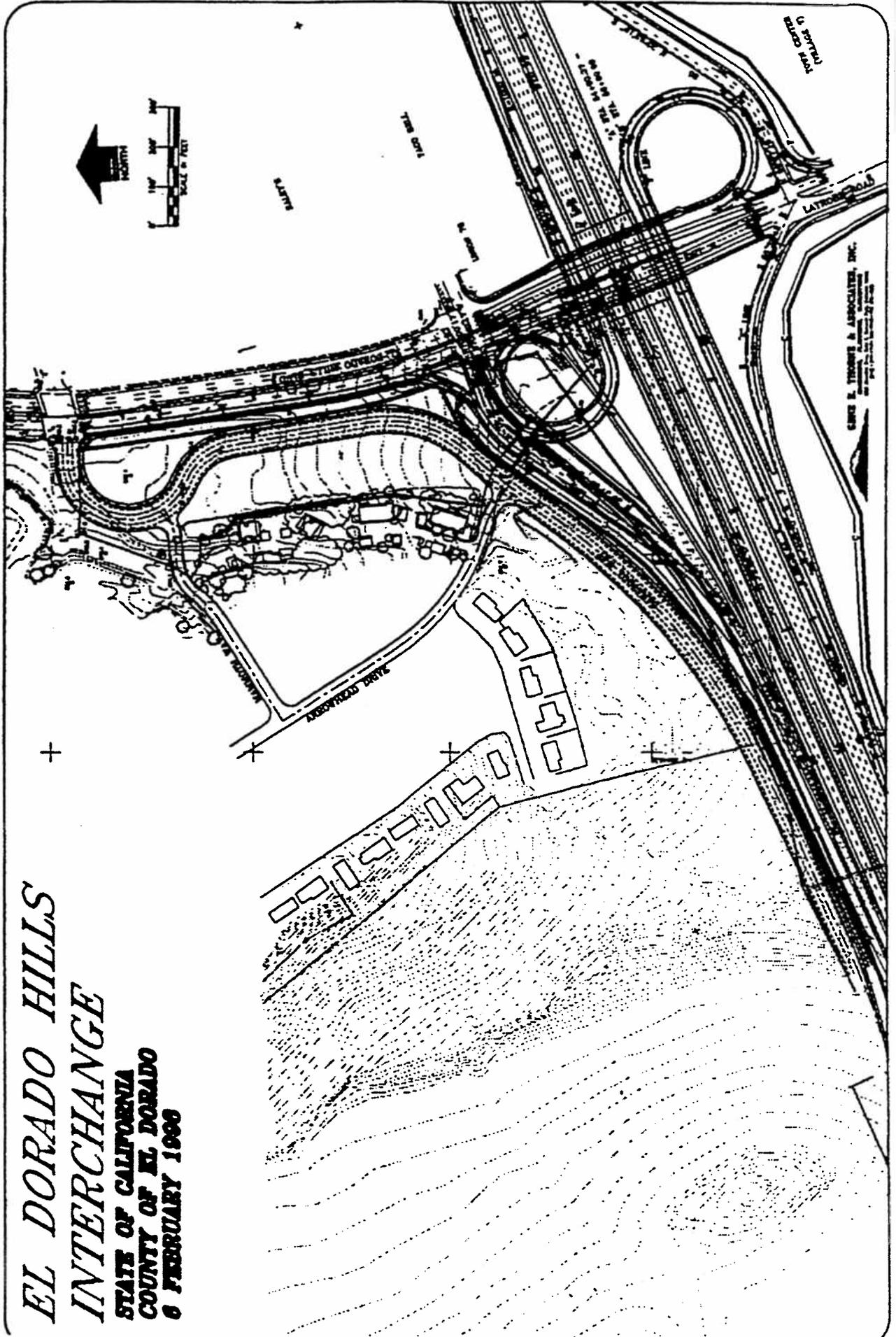
**EL DORADO HILLS
INTERCHANGE**
STATE OF CALIFORNIA
COUNTY OF EL DORADO
23 APRIL 1999



SARATOGA WAY ADJACENT TO EL DORADO HILLS BLVD.
(four lanes with "hook" at Park Ave. junction)

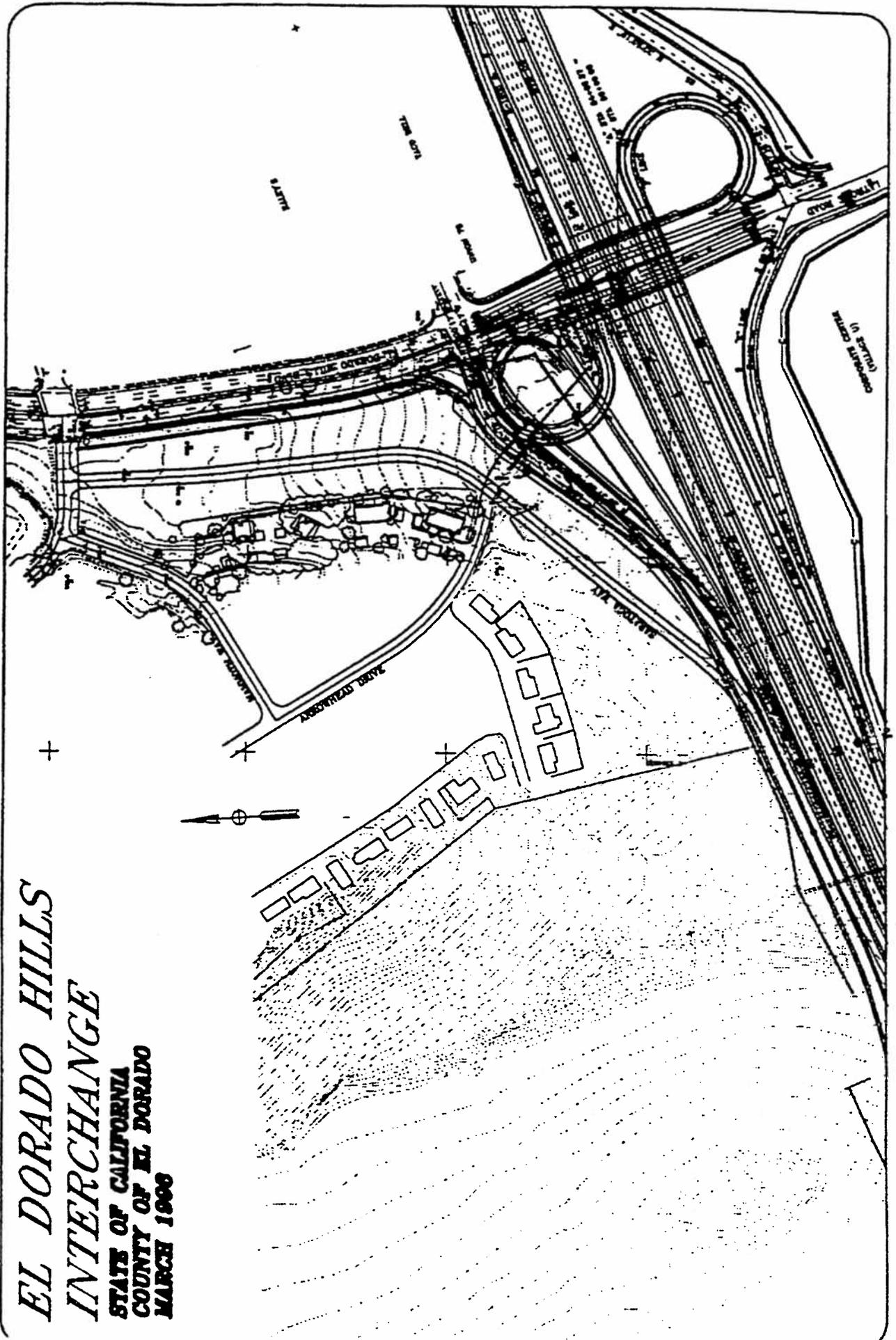
**EL DORADO HILLS
INTERCHANGE**

STATE OF CALIFORNIA
COUNTY OF EL DORADO
6 FEBRUARY 1966



SARATOGA WAY THROUGH MIDDLE OF PROPERTY
(two lanes - T junction with Park Ave.)

**EL DORADO HILLS
INTERCHANGE
STATE OF CALIFORNIA
COUNTY OF EL DORADO
MARCH 1906**



**Appendix K. CEQA Findings of Fact and Statement of
Overriding Considerations for the
Valley View Specific Plan**

ATTACHMENT 3

CEQA FINDINGS OF FACT

and

**STATEMENT OF OVERRIDING
CONSIDERATIONS**

**OF THE BOARD OF SUPERVISORS
OF EL DORADO COUNTY**

for the

VALLEY VIEW SPECIFIC PLAN

December 1998

I.
INTRODUCTION

The Final Environmental Impact Report (“Final EIR”) prepared for the Valley View Specific Plan (the “Project”) addresses the potential environmental effects associated with a mixed-use urban development for a site in the El Dorado County, California. These findings have been prepared to comply with requirements of the California Environmental Quality Act (“CEQA”) (Pub. Resources Code, § 21000 *et seq.*) and the CEQA Guidelines (Cal. Code Regs., tit. 14, § 15000 *et seq.*).

II.
DEFINITIONS

“APCD” means the El Dorado County Air Pollution Control District.

“BMPs” means best management practices.

“Board of Supervisors” or “Board” refers to the El Dorado County Board of Supervisors.

“BUSD” means Buckeye Union School District.

“CC&Rs” refers to the projects covenants, conditions and restrictions.

“CDFG” means the California Department of Fish & Game.

“cfd” means cubic feet per day.

“cfs” means cubic feet per second.

“CIP” means Capital Improvement Program.

“CIWMB” means California Integrated Waste Management Board.

“CO” means carbon monoxide.

“CR” means core residential.

“CVRWQCB” means Central Valley Regional Water Quality Control Board.

“dBA” means A-weighted decibels.

“DBH” means diameter at breast height.

“Draft EIR” means the Draft Environmental Impact Report for the Valley View Specific Plan (July 1998).

“EDHFD” refers to El Dorado Hills Fire Department.

“EDUHSD” refers to El Dorado Union High School District.

“EDHWWTP” refers to El Dorado Hills Wastewater Treatment Plant.

“EDU” means equivalent dwelling unit.

“ERWQA” means Effluent and Receiving Water Quality Assessment.

“FEMA” refers to the Federal Emergency Management Agency.

“Final EIR” means the Final Environmental Impact Report for the Valley View Specific Plan.

“gpd” means gallons per day.

“LOS” means level of service.

“mgd” means million gallons per day.

“MMRP” means Mitigation Monitoring and Reporting Program.

“mu” means mixed use.

“NO_x” means nitrogen oxide.

“NPDES” means National Pollutant Discharge Elimination System.

“PFFP” means Public Facilities Financing Plan.

“Plan Area” means the Valley View Specific Plan Area.

“PM₁₀” means particulate matter with a diameter of 10 microns or less.

“PPM” means parts per million.

“P.U.E.” means public utility easements.

“RIF” means the El Dorado Hills/Salmon Falls Road Impact Fee.

“ROC” means Reactive Organic Compounds.

“ROG” means reactive organic gases.

“RWQCB” means Regional Water Quality Control Board.

“SFR” means single family residential.

“SO_x” means sulfur dioxide.

“STIP” means State Transportation Improvement Program.

“SWRCB” means the State Water Resources Control Board.

“SWPPP” means Storm Water Pollution Prevention Plan.

“TDM” means travel demand management.

“TIM” means the County’s State System Capacity and Interchange Transportation Impact Fee.

“TSM” means Transportation System Management.

“UBC” means the Uniform Building Code.

“USACE” means the U.S. Army Corps of Engineers.

“USDA SCS” means U.S. Department of Agricultural Soil Conservation Service.

“USFWS” means the U.S. Fish and Wildlife Service.

“VELB” means Valley Elderberry Longhorn Beetle.

“VVSP” means Valley View Specific Plan.

“VC” means Village Center.

III. PROJECT DESCRIPTION

The project site is a 2,037-acre property located in western El Dorado County in the southern portion of El Dorado Hills, approximately one mile south of US Highway 50, southeast of the intersection of Latrobe Road and White Rock Road. The site is an irregularly-shaped area consisting primarily of undeveloped, non-native grassland, oak woodland, and oak savannah used for cattle grazing. Most of the site is currently designated for High Density Residential (1-5 units per acre) on the 1996 El Dorado County General Plan Land Use Map. Additional existing onsite General Plan designations include Multi-Family Residential (5-24 units per acre), Research and Development (about 170 acres), and Public Facilities.

The project is a specific plan that provides for the following future uses:

- approximately 1,279 acres of residential uses, including a maximum of 2,840 homes (2,409 single-family and 431 multi-family units);
- approximately 10.9 acres of commercial/office uses, including a maximum of approximately 107,000 square feet of floor area for retail, service, and/or office uses;
- approximately 24 acres of public/semi-public uses, including two school sites;
- approximately 87 acres of major roadways;
- approximately 77 acres of parks and recreation uses, including a 52-acre community park, a 12-acre “oak tree” park, and four smaller neighborhood parks; and
- approximately 559 acres of permanent open space/buffer land.

(DEIR, p. II-1.)

The project requires (1) amendment of the El Dorado County General Plan to change the current General Plan Land Use Map designations to Adopted Plan (AP) (which is required for areas with specific plans); (2) adoption of the Valley View Specific Plan, which sets forth the above land use

parameters and associated development standards and infrastructure provisions; and (3) rezoning of the property to reflect the specific plan land use designations and associated development controls (see El Dorado County file #AZ98-01). Following these approvals, subsequent discretionary actions required for the project will include approval of a development agreement, tentative and final subdivision maps, changes in service district boundaries, and other actions and permits. (DEIR, p. II-1.)

Location

Regional access to the site is provided by US Highway 50. The City of Placerville is located approximately 20 miles to the east via Highway 50; and the City of Sacramento is located approximately 25 miles to the west via Highway 50. The City of Folsom is located approximately seven miles to the east via Highway 50. (DEIR, p. III-1.)

The 126-acre Town Center East site is located north of the site across White Rock Road. Town Center East has been partially developed with retail commercial uses, and will ultimately contain over one million square feet of commercial space. A park-and-ride facility is located on the northeast corner of White Rock Road and Latrobe Road. Town Center West is on the west side of Latrobe Road and contains a compact disc case manufacturing plant. The Sunset Mobile Home Park is located adjacent to the northwest corner of the site. The El Dorado Hills Wastewater Treatment Plant is located immediately west of the site; and the approximately 854-acre El Dorado Hills Business Park is located west of the site across Latrobe Road. The business park has been partially developed with office and light industrial space. The Carson Creek Specific Plan area, located immediately west of the business park, has been approved for development of 2,434 single-family houses, 13.8 acres of commercial use, and 48.4 acres of research and development use. Rural residential development, consisting of homes on five-, ten-, and 20-acre lots, is located northeast, east, and southeast of the project site, and includes the Marble Mountain area to the northeast and the Ryan Ranch area to the southeast (see Figure III-2 of the Draft EIR). The approved Marble Valley project will be located immediately east of the project site. (DEIR, pp. III-1 - III-4.)

The community of Cameron Park is located east of El Dorado Hills on the north side of Highway 50, and the community of Shingle Springs is located east of El Dorado Hills on the south side of Highway 50. The community of Latrobe is located approximately four miles south of the site near the intersection of Latrobe Road and South Shingle Road. (DEIR, p. III-4.)

Site Characteristics

The eastern portion of the property contains evidence of previous surface mining activity that presumably occurred during the California Gold Rush era. The gold rush town of "Clarksville" was

located just north of the project site. The site has been used for cattle grazing since about 1860. (DEIR, p. III-8.) Existing project site characteristics, including topographic, hydrologic, vegetative, and agricultural features, and existing infrastructure, are illustrated on Figures III-3 and III-4 in the Draft EIR and described below.

- a. Topography. The topography of the project site is varied, and includes a prominent north-south ridgeline, two valleys, wooded canyons, and natural rock outcroppings. Elevations on-site range from approximately 530 feet above sea level near the western boundary of the site to 1,240 feet above sea level at the northeastern edge of the site. A slope analysis map prepared for the applicant indicates that the majority of the 2,037-acre site (1,133 acres, or 56 percent of the site) contains 11 to 30 percent slopes. Much of this area lies on the western portion of the site. Approximately 795 acres, or 39 percent of the site, contains slopes of zero to ten percent, and a total of 110 acres, or five percent of the site, contains slopes of 31 percent or greater. (DEIR, p. III-4.)
- b. Existing Hydrology. The site is located within the Plunkett and Carson Creek watersheds, both of which direct storm water runoff to Carson Creek. Plunkett Creek traverses the eastern portion of the site; Carson Creek runs through the western portion of the site; and a branch of Screech Owl Creek traverses the northern portion of the site.
- c. Existing Vegetation. Vegetation on the site primarily consists of non-native annual grassland, oak woodland, and oak savannah. The site also contains cottonwood-willow riparian woodland, mixed riparian woodland, wetlands, and vernal pool communities. The greatest concentrations of trees are located on the east-facing hill slopes in the central and northeastern areas of the site. The property contains approximately 14.5 acres of wetland habitat, consisting of 2.21 acres of seep habitat, 0.08 acre of vernal pool habitat, 5.76 acres of seasonal wetland, 0.30 acre classified as perennial stream, and 6.12 acres classified as intermittent drainage. (DEIR, pp. III-4 and III-8.)
- d. Existing Road System. Latrobe Road forms the western and southern boundary of the project site and provides access to US Highway 50. White Rock Road forms the northern boundary of the project site, and will eventually connect with the planned Silva Valley Parkway freeway interchange east of the Latrobe Road interchange. Existing onsite roadways consist of unpaved ranching roads. (DEIR, p. III-8.)
- e. Existing Land Uses. Existing use of the site is limited to dry land cattle grazing, which has been the primary use of the site since about 1860. In addition, a two-acre landfill that has been inactive for the last 20 years is located at the southeastern boundary of the site. A 1.6-acre parcel of land containing a water tank that provides water to El Dorado Hills Business Park is located at

the northern edge of the site. This parcel is owned by the El Dorado Irrigation District. (DEIR, p. III-8.)

f. Utilities. The closest public water supply line is a 12-inch transmission main in Latrobe Road that feeds the water storage tank located onsite. The El Dorado Hills Wastewater Treatment Plant is located adjacent to the site. The closest sanitary sewer interceptor line is located just north of the treatment plant. There are no existing electrical or natural gas distribution or transmission facilities onsite. (DEIR, p. III-8.)

Project Objectives

The County has articulated the following project objectives to guide its decision with respect to the Specific Plan:

1. *To ensure comprehensive planning for development on the site consistent with the intent, purpose, and policy direction of the General Plan.*
2. *To create a new, balanced community in an area suitable for intensive development due to the availability of adequate infrastructure and services.*
3. *To provide cohesive design criteria that support the creation and maintenance of community character.*
4. *To place the primary emphasis on clustering intensive land uses and incorporation of modern planning techniques to minimize impact on various natural and man-made resources, minimize public health concerns, minimize aesthetic concerns, and provide for the creation of open space lands and other community land uses.*
5. *To maintain the visual integrity of hillsides and ridgelines.*
6. *To protect and maintain native trees, including oaks and landmark and heritage trees.*
7. *To ensure that safe and efficient transportation and circulation facilities, both locally and internally, are provided concurrent with new development.*

8. *To provide safe and efficient bicycle and pedestrian circulation that connect residential areas to one another, as well as residential areas to employment, retail, school, community facilities and recreation areas.*
9. *To designate appropriate sites for commercial uses to provide opportunities for County residents to shop and work within the county.*
10. *To provide a variety of housing opportunities by type, tenure, price and neighborhood character in order to meet County housing needs.*
11. *To conserve wetland, riparian areas, natural drainage, and other wildlife habitat of significant biological, scenic, and recreational values.*
12. *To provide adequate park and recreation facilities.*
13. *To grant development approvals consistent with the applicant's existing development agreement with the County.*

In addition to these objectives, the applicant has identified the following as its own project objectives:

1. *To provide for the planning of the site's development in a comprehensive manner, avoiding "piecemeal" approaches to infrastructure planning and development in conformance with the intent, purpose and policy direction provided by the El Dorado County General Plan;*
2. *To develop a project that will complement the overall development of the El Dorado Hills community by providing for a residential base south of Highway 50 that will enhance the viability of the El Dorado Hills Business Park and the various existing and planned commercial developments within the El Dorado Hills community;*
3. *To include lot sizes within the project that are generally larger than those available in existing areas of El Dorado Hills, without promoting a project that requires the construction of custom homes;*
4. *To include a variety of lot sizes within the project consistent with sound planning principles and with applicable policies of the El Dorado County General Plan;*

5. *To develop a project that considers the existing development patterns on adjacent properties in order to facilitate a development that does not adversely impact lifestyles presently enjoyed on surrounding properties; and*
6. *To develop the project in a manner that takes advantage of long distance views that exist on the site, without significant impacts on existing views of the property from the remainder of the community.*

(DEIR, pp. III-9 - III-11.)

IV. BACKGROUND

Application History

In 1981, Anthony Mansour formed a partnership and acquired approximately 7,000 acres of land in El Dorado Hills, including the 2,037-acre Valley View site, from the John Hancock Insurance Company.

In December 1983, El Dorado County adopted the El Dorado Hills/Salmon Falls Area Plan, which established land use designations for the project site. In April 1985, the County and the Mansour Company entered into a development agreement that created vested rights to develop the Valley View site consistent with the land use designations of the El Dorado Hills/Salmon Falls Area Plan.

In April 1994, the Mansour Company filed an application with El Dorado County for approval of a specific plan that would permit the development of up to 4,100 dwelling units, three village centers containing 40 acres of commercial uses, three school sites, and 400 acres of open space. In January 1996, El Dorado County adopted an updated General Plan. In September 1997, the Mansour Company revised the 1994 specific plan in response to land use and development policies contained in the updated General Plan.

(DEIR, pp. III-8 - III-9.)

Required Permits and Approvals

In order to implement the project, the County must approve the following:

- a. General Plan Amendment. The project requires approval of an amendment of the El Dorado County General Plan to change existing project site land use designations to *Adopted Plan (AP)*.

The General Plan requires that the *AP* designation be applied to areas with specific plans. Under the *AP* designation, specific plans are incorporated into the General Plan and the specific plan land use map is thereby adopted as the General Plan map for the area.

b. Specific Plan Adoption. The project requires County approval of a specific plan for the project site.

c. Rezoning. The project requires County approval of a rezoning of the project site to reflect the specific plan land use designations.

(DEIR, p. III-35.)

V. RECORD OF PROCEEDINGS

For purposes of CEQA and these Findings, the Record of Proceedings for the Project consists of the following documents, at a minimum:

- The Notice of Preparation and all other public notices issued by the County in conjunction with the Project;
- The Final EIR for the Valley View Specific Plan (as described immediately above);
- All comments submitted by agencies or members of the public during the 45-day public comment periods on the Draft EIR;
- All comments and correspondence submitted to the County with respect to the Project, in addition to timely comments on the Draft EIR;
- The mitigation monitoring and reporting program for the Project;

- All findings and resolutions adopted by County decisionmakers in connection with the Project, and all documents cited or referred to therein;
- All reports, studies, memoranda, maps, staff reports, or other planning documents relating to the Project prepared by the County, consultants to the County, or responsible or trustee agencies with respect to the County's compliance with the requirements of CEQA and with respect to the County's actions on the Project;
- All documents submitted to the County by other public agencies or members of the public in connection with the Project, up through the close of the Board of Supervisors' public hearing;
- Minutes and/or verbatim transcripts of all information sessions, public meetings, and public hearings held by the County in connection with the Project;
- Any documentary or other evidence submitted to the County at such information sessions, public meetings, and public hearings;
- Matters of common knowledge to the County, including, but not limited to Federal, State, and local laws and regulations;
- El Dorado County General Plan (Volumes I and II) (January 23, 1996);
- Circulation Element and Land Use Element Maps for the El Dorado County General Plan;
- El Dorado County General Plan Update Draft Environmental Impact Report (December 1994);
- El Dorado County General Plan Update Supplement to the Draft Environmental Impact Report (September 1995);
- El Dorado County General Plan Final Environmental Impact Report (Volumes I through V) (December 1995);
- El Dorado County General Plan Findings (January 23, 1996, revised January 26, 1996);
- El Dorado County Hiking and Equestrian Trails Master Plan (April 1990);
- The El Dorado County Zoning Code;

- El Dorado Grading, Erosion and Sediment Control Ordinance No. 4071 (Ch. 15-14);
- The El Dorado County Drainage Manual (March 1995);
- The El Dorado County Design and Improvement Standards Manual;
- El Dorado County Supplemental Hillside Land Use and Hillside Road Standards;
- The El Dorado County Public Water Planning Ordinance, No. 4325;
- El Dorado County Integrated Waste Management Plan;
- El Dorado County Design and Improvement Standards Manual (released May 18, 1990);
- Board of Supervisors Resolution No. 199-91, Oak Tree and Wetlands Preservation (June 18, 1991);
- Board of Supervisors Resolution No. 322-92, Hillside Design Standards (October 20, 1992);
- Board of Supervisors Resolution No. 69-93, Water Conserving Landscape Standards (February 23, 1993);
- Board of Supervisors Resolution No. 58-94, Subdivision Improvements and Security (March 8, 1994);
- Board of Supervisors Resolution No. 175-96, Amending the El Dorado Hills/Salmon Falls Area Road Impact Fees (July 23, 1996), and all reports, studies, and analyses submitted to the Board of Supervisors in connection therewith and all testimony received thereon;
- Board of Supervisors Resolution No. 201-96, Amending West Slope Area of Benefit Traffic Impact Mitigation (TIM) Fees (August 20, 1996), and all reports, studies, and analyses submitted to the Board of Supervisors in connection therewith and all testimony received thereon;
- Board of Supervisors Resolution No. 202-96, Setting a Transportation Impact Mitigation Fee for the State System's Capacity & Interchanges (August 20, 1996), and all reports, studies, and analyses submitted to the Board of Supervisors in connection therewith and all testimony received thereon;

- Letter from Michael T. Stoltz to Board of Supervisors re El Dorado Hills/Salmon Falls Area Road Impact Fee (RIF) Revision (July 11, 1996);
- Interoffice Communication from Michael T. Stoltz to Board of Supervisors re "El Dorado Hills/Salmon Falls Road Impact Fee (RIF) Board of Supervisors Agenda Item #70, July 23, 1996" (July 22, 1996);
- El Dorado County Five Year Capital Improvement Program (January 1998);
- El Dorado County Twenty Year Capital Improvement Program (1995);
- Silva Valley Road Interchange Project Study Report (January 1991);
- Project Report for Silva Valley Parkway Interchange (January 1991);
- Final EIR for Silva Valley Parkway Interchange with U.S. Highway 50 (February 1990);
- El Dorado County Transportation Commission Regional Transportation Plan 1994 for El Dorado County (February 1995, reaffirmed December 1996);
- El Dorado County Transportation Commission Resolution No. 96/97.17, adopting 1998/1999 - 2004/05 Regional Transportation Improvement Program;
- Final Report, U.S. 50 Highway Interchange Planning Study through Folsom and Western El Dorado County (November 1995);
- Project Study Report on Route 50 from Sunrise Boulevard to El Dorado Hills Boulevard (December 1997);
- Sacramento Area Council of Governments, U.S. 50 Corridor Major Investment Study (December 1997);
- Draft State Route 50 Transportation Concept Report (October 1997);
- The Addendum to the Final EIR for the Carson Creek Specific Plan, including the appendices attached thereto (January 1997);
- El Dorado County Water Agency Water Program and El Dorado Project for the El Dorado Irrigation District Service Area Draft Environmental Impact Report (September 30, 1992);

- El Dorado County Water Agency Water Program and El Dorado Project for the El Dorado Service Area Final Environmental Impact Report (March 1993);
- Draft Supplement to El Dorado County Water Agency: Water Program and El Dorado Project Environmental Impact Report (July 1995);
- Final Supplement to El Dorado County Water Agency: Water Program and El Dorado Project Environmental Impact Report (October 1995);
- EID Policy Statement No. 22 (revised 1992);
- EID Policy Statement No. 41 (revised 1992);
- State Water Resources Control Board, Decision 1635 (Oct. 2, 1996);
- Notice of Appeal in League to Save Sierra Lakes et al. v. El Dorado County Water Agency et al. (El Dorado County Superior Court No. 93-3324) (now Third District Court of Appeal, 3 Civil C027948);
- Supplement No. 2 to the Preliminary Design Report for El Dorado Irrigation District Assessment District No. 3 (January 1991);
- 1996 Urban Water Management Plan, El Dorado Irrigation District (February 26, 1996);
- Crawford Ditch Improvement Project Final Environmental Impact Report (February 1990);
- Water Reclamation Master Plan, El Dorado Irrigation District (July 1994);
- El Dorado Irrigation District Water Supply and Demand Evaluation (August 29, 1997);
- Agenda Item Summary for March 27, 1995, El Dorado Irrigation District Board Meeting;
- Final Environmental Impact Report for the Crawford Ditch Improvement Project;
- El Dorado Hills Master Facilities Plan (November 1995);

- Draft Environmental Impact Statement/Environmental Impact Report for Central Valley Project Water Supply Contracts Under Public Law 101-514 (Section 206) (and Appendices I-III) (September 1997);
- U.S. Highway 50 Interchange Planning Study through Folsom and Western El Dorado County (Nov. 1995);
- Board of Supervisors Resolution No. 77-85 (April 16, 1985) and attachments (Measure A);
- "Lockwood Regional Landfill Facts";
- "Agreement - Lockwood Landfill," between Western El Dorado Recovery Systems and Refuse, Inc. (January 16, 1997);
- Any documents expressly cited in these findings, in addition to those cited above; and
- Any other materials required to be in the record of proceedings by Public Resources Code section 21167.6, subdivision (e).

The custodian of the documents comprising the record of proceedings is Dixie Foote, Clerk to the Board of Supervisors, whose office is located at 330 Fairlane Court, Building A, Placerville, California, 95667.

The Board of Supervisors has relied on all of the documents listed above in reaching its decision on the Valley View Specific Plan, even if not every document was formally presented to the Board or County Staff as part of the County files generated in connection with the Valley View Specific Plan. Without exception, any documents set forth above not found in the Project files fall into one of two categories. Many of them reflect prior planning or legislative decisions with which the Board was aware in approving the Valley View Specific Plan. (See City of Santa Cruz v. Local Agency Formation Commission (1978) 76 Cal.App.3d 381, 391-392 [142 Cal.Rptr. 873]; Dominey v. Department of Personnel Administration (1988) 205 Cal.App.3d 729, 738, fn. 6 [252 Cal.Rptr. 620].) Other documents influenced the expert advice provided to County Staff or consultants, who then provided advice to the Board. For that reason, such documents form part of the underlying factual basis for the Board's decisions relating to the adoption of the Valley View Specific Plan. (See Pub. Resources Code, § 21167.6, subd. (e)(10); Browning-Ferris Industries v. City Council of City of San Jose (1986) 181 Cal.App.3d 852, 866 [226 Cal.Rptr. 575]; Stanislaus Audubon Society, Inc. v. County of Stanislaus (1995) 33 Cal.App.4th 144, 153, 155 [39 Cal.Rptr.2d 54].)

VI.
FINDINGS REQUIRED UNDER CEQA

Public Resources Code section 21002 provides that “public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would *substantially lessen* the significant environmental effects of such projects[.]” (Emphasis added.) The same statute states that the procedures required by CEQA “are intended to assist public agencies in systematically identifying both the significant effects of proposed projects and the feasible alternatives or feasible mitigation measures which will *avoid* or *substantially lessen* such significant effects.” (Emphasis added.) Section 21002 goes on to state that “in the event [that] specific economic, social, or other conditions make infeasible such project alternatives or such mitigation measures, individual projects may be approved in spite of one or more significant effects.”

The mandate and principles announced in Public Resources Code section 21002 are implemented, in part, through the requirement that agencies must adopt findings before approving projects for which EIRs are required. (See Pub. Resources Code, § 21081, subd. (a); CEQA Guidelines, § 15091, subd. (a).) For each significant environmental effect identified in an EIR for a proposed project, the approving agency must issue a written finding reaching one or more of three permissible conclusions. The first such finding is that “[c]hanges or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.” (CEQA Guidelines, § 15091, subd. (a)(1).) The second permissible finding is that “[s]uch changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.” (CEQA Guidelines, § 15091, subd. (a)(2).) The third potential conclusion is that “[s]pecific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the final EIR.” (CEQA Guidelines, § 15091, subd. (a)(3).) Public Resources Code section 21061.1 defines “feasible” to mean “capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social and technological factors.” CEQA Guidelines section 15364 adds another factor: “legal” considerations. (See also Citizens of Goleta Valley v. Board of Supervisors (“Goleta II”) (1990) 52 Cal.3d 553, 565 [276 Cal. Rptr. 410].)

The concept of “feasibility” also encompasses the question of whether a particular alternative or mitigation measure promotes the underlying goals and objectives of a project. (City of Del Mar v. City of San Diego (1982) 133 Cal.App.3d 410, 417 [183 Cal.Rptr. 898].) “[F]easibility’ under CEQA encompasses ‘desirability’ to the extent that desirability is based on a reasonable balancing of the relevant economic, environmental, social, and technological factors.” (Ibid.; see also

Sequoyah Hills Homeowners Assn. v. City of Oakland (1993) 23 Cal.App.4th 704, 715 [29 Cal.Rptr.2d 182].)

The CEQA Guidelines do not define the difference between “avoiding” a significant environmental effect and merely “substantially lessening” such an effect. The County must therefore glean the meaning of these terms from the other contexts in which the terms are used. Public Resources Code section 21081, on which CEQA Guidelines section 15091 is based, uses the term “mitigate” rather than “substantially lessen.” The CEQA Guidelines therefore equate “mitigating” with “substantially lessening.” Such an understanding of the statutory term is consistent with the policies underlying CEQA, which include the policy that “public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects.” (Pub. Resources Code, § 21002.)

For purposes of these findings, the term “avoid” refers to the effectiveness of one or more mitigation measures to reduce an otherwise significant effect to a less than significant level. In contrast, the term “substantially lessen” refers to the effectiveness of such measure or measures to substantially reduce the severity of a significant effect, but not to reduce that effect to a less than significant level. These interpretations appear to be mandated by the holding in Laurel Hills Homeowners Association v. City Council (1978) 83 Cal.App.3d 515, 519-527 [147 Cal.Rptr. 842], in which the Court of Appeal held that an agency had satisfied its obligation to substantially lessen or avoid significant effects by adopting numerous mitigation measures, not all of which rendered the significant impacts in question (e.g., the “cultural resource and visual factor problem”) less than significant.

Although CEQA Guidelines section 15091 requires only that approving agencies specify that a particular significant effect is “avoid[ed] or substantially lessen[ed],” these findings, for purposes of clarity, in each case will specify whether the effect in question has been reduced to a less than significant level, or has simply been substantially lessened but remains significant.

Moreover, although section 15091, read literally, does not require findings to address environmental effects that an EIR identifies as merely “potentially significant,” these findings will nevertheless fully account for all such effects identified in the Final EIR.

In short, CEQA requires that the lead agency adopt mitigation measures or alternatives, where feasible, to substantially lessen or avoid significant environmental impacts that will otherwise occur. Project modification or alternatives are not required, however, where such changes are infeasible or where the responsibility for modifying the project lies with some other agency. (CEQA Guidelines, § 15091, subd. (a), (b).)

With respect to a project for which significant impacts are not avoided or substantially lessened either through the adoption of feasible mitigation measures or feasible environmentally superior alternative, a public agency, after adopting proper findings, may nevertheless approve the project if the agency first adopts a statement of overriding considerations setting forth the specific reasons why the agency found that the project's "benefits" rendered "acceptable" its "unavoidable adverse environmental effects." (CEQA Guidelines, §§ 15093, 15043, subd. (b); see also Pub. Resources Code, § 21081, subd. (b).) The California Supreme Court has stated that, "[t]he wisdom of approving . . . any development project, a delicate task which requires a balancing of interests, is necessarily left to the sound discretion of the local officials and their constituents who are responsible for such decisions. The law as we interpret and apply it simply requires that those decisions be informed, and therefore balanced." (Goleta II, 52 Cal.3d at p. 576.)

VII. LEGAL EFFECTS OF FINDINGS

To the extent that these findings conclude that various proposed mitigation measures outlined in the Final EIR are feasible and have not been modified, superseded or withdrawn, the County hereby binds itself to implement these measures. These findings, in other words, are not merely informational, but rather constitute a binding set of obligations that will come into effect when County decisionmakers formally approve the Project.

The mitigation measures are referenced in the mitigation monitoring program adopted concurrently with these findings, and will be effectuated through the process of constructing and implementing the Project.

VIII. MITIGATION MONITORING AND REPORTING PROGRAM

A Mitigation Monitoring and Reporting Program ("MMRP") has been prepared for the Project and has been adopted concurrently with these Findings. (See Pub. Resources Code, § 21081.6, subd. (a)(1).) The County will use the MMRP to track compliance with Project mitigation measures. The MMRP will remain available for public review during the compliance period.

IX. SIGNIFICANT EFFECTS AND MITIGATION MEASURES

The Final EIR identified several significant environmental effects (or “impacts”) that the Valley View Specific Plan will cause. Some of these significant effects can be fully avoided through the adoption of feasible mitigation measures. Others cannot be avoided by the adoption of feasible mitigation measures or feasible environmentally superior alternatives; however, these effects are outweighed by overriding considerations set forth in Section XI below. This Section (IX) presents in greater detail the Boards’ findings with respect to the environmental effects of the Project.

A. LAND USE AND OPEN SPACE

Standards of Significance

Based on the CEQA Guidelines, the project may be considered to have a significant adverse land use and open space impact if it will:

- (a) Conflict with applicable environmental plans or policies adopted by agencies with jurisdiction over the project such that the conflict will lead to decreased environmental protection or increased environmental harm;
- (b) Be incompatible with existing land use in the vicinity;
- (c) Have a substantial, demonstrable negative aesthetic effect;
- (d) Disrupt or divide the physical arrangement of an established community;
- (e) Create a public health hazard or attract people to an area and expose them to hazards found there;
- (f) Conflict with established recreational, educational, religious or scientific uses in the area;
- (g) Affect agricultural resources or operations by creating incompatible land uses; or
- (h) Convert prime agricultural land to non-agricultural use or impair the agricultural productivity of prime agricultural land. For purposes of estimating actual acreage, “prime agricultural land” is defined in the Draft EIR as soil identified as Class I or Class II in the US Department of Agriculture Soil Conservation Service (“USDA SCS”) *Land Capabilities Classification* system, or as *Prime Farmland* by the State Department of Conservation.

(DEIR, pp. IV.A-15 - IV.A-16.)

Impact:

LU-1: The Project will have significant and unavoidable impacts on the El Dorado Hills open space and rural character. (DEIR, p. IV.A-16.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that substantially lessen, but do not avoid, the significant environmental effect associated with open space and rural character impacts. No mitigation is available to render the effect less than significant. The effect therefore remains significant and unavoidable.

Explanation:

The specific plan designates approximately 1,401 acres (68.8 percent of the site) for urban uses (residential, commercial, research and development, school sites, streets, etc.) and 77 acres (3.8 percent) for park use. Approximately 559 acres (27.4 percent) of the site will remain as undisturbed open space.

The project vicinity is transitioning from an area with a predominantly rural character to an area that is more suburban. While uses north and west of the site are now predominantly suburban in character (e.g., El Dorado Hills Business Park, Town Center), uses south and east of the site still consist primarily of open space and rural residential development, although the Marble Valley site immediately east of the project site has been approved for single-family residential development. The project will extend the existing El Dorado Hills urbanization pattern further southeast.

(DEIR, p. IV.A-16.)

Mitigation LU-1:

Application of the visual impact mitigation measures identified in the Visual Impact Section of these Findings. (DEIR, p. IV.A-17.)

Significance after Mitigation

Significant and unavoidable for open space and rural character impacts. (DEIR, p. IV.A-17.)

Impact:

LU-2: The Project will have potentially significant compatibility impacts related to the El Dorado Hills Wastewater Treatment Plant. (DEIR, p. IV.A-17.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant environmental effect identified in the Final EIR.

Explanation:

The proposed Specific Plan calls for construction of: (1) a 52-acre community park north of the existing El Dorado Hills Wastewater treatment plant, (2) Core Residential uses permitting six dwelling units per acre south of the plant, and (3) Estate Residential uses permitting two dwelling units per acre east of the plant, with the latter two uses separated from the plant by a major collector road. There is a potential for odor intrusion from the treatment plant to be a nuisance to the future occupants of these adjacent recreational and residential areas, although this potential could be reduced with the anticipated installation of odor control measures to be funded through the proposed Assessment District 12. The potential odor nuisance represents a potentially significant impact.

Funding of odor control measures at the EID plant (e.g., elimination of sludge drying basins; structural containment of headworks) through proposed Assessment District 12 will assist in reducing odor problems at the project site.

(DEIR, p. IV.A-17.)

Mitigation LU-2:

- Implement Mitigation Measure AQ-4 as later described in the Air Quality section of these Findings.

This measure, combined with anticipated odor control measures at the treatment plant funded through proposed Assessment District 12, will reduce Impact LU-2 to a less than significant level. (DEIR, p. IV.A-18.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.A-18.)

Impact:

LU-3: The Project will have potentially significant land use compatibility impacts on adjacent mobile homes. (DEIR, p. IV.A-18.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant environmental effect identified in the Final EIR.

Explanation:

The specific plan proposes a school site, a Core Residential area (six dwelling units per acre), a 52-acre community park, and an approximately 80-foot strip of permanent open space adjacent to the existing mobile home park east of the project site. The proposed open space and Core Residential uses will be compatible with the mobile homes. Depending upon the design of the school and community park, however, there will be a potential for land use conflict with the mobile home park related to noise intrusion from the school, and noise and nighttime lighting associated with the community park playing fields (i.e., soccer and baseball fields). This possible incompatibility represents a potentially significant impact. (DEIR, p. IV.A-18.)

Mitigation LU-3:

The applicant shall work with the El Dorado Hills Community Services District to develop a community park plan that either:

- (1) locates playing fields at least 300 feet away from the closest mobile home, or
- (2) limits use of closer playing fields to daytime hours only, in order to avoid nighttime noise and lighting impacts.

The future developer of the school site shall work with the Buckeye Union School District to develop a school plan that either:

- (1) avoids potential noise impacts on the mobile homes by locating any playing fields that may be proposed as part of the site plan at least 300 feet away from the closest mobile home, or

- (2) limits use of closer playing fields to daytime hours only, in order to avoid nighttime noise and lighting impacts.

(DEIR, p. IV.A-19.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.A-19.)

Cumulative Impacts

Impact:

LU-4: Alteration of the existing patterns of county development associated with cumulative development will cause significant cumulative impacts. (DEIR, p. IV.A-21.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley Views Specific Plan that substantially lessen, but do not avoid, the project's cumulatively considerable incremental contribution to the significant cumulative environmental effect associated with alteration of existing patterns of county development impacts throughout the County due to planned development. No mitigation is available to render the project's contribution less than cumulatively considerable, or the larger effect less than significant. The effect therefore remains significant and unavoidable.

Explanation:

Cumulative local and countywide urban growth, of which this project is a part, is anticipated and is addressed in the El Dorado County General Plan, adopted in 1996. The cumulative impacts of that growth on land use and open space have been analyzed in the El Dorado County General Plan EIR. The analysis for Regional Analysis Area 1 (which contains the El Dorado Hills area) in the Land Use, Population, and Growth Inducing Impacts section of the Draft EIR (section V.1), states that the primary cumulative changes in countywide development patterns will occur as large tracts of undeveloped land are converted to urban land uses. As feasible mitigation measures were not available, this cumulative alteration of the existing patterns of county development has been identified as a significant and unavoidable land use impact. As described herein under Impact LU-1,

the Project will specifically contribute to a significant cumulative loss of open space and rural character in the El Dorado Hills area. (DEIR, p. IV.A-21.)

Mitigation:

No feasible mitigation measures are available. (DEIR, p. IV.A-21.)

Significance after Mitigation

Significant and unavoidable. (DEIR, p. IV.A-21.)

B. VISUAL FACTORS

Standards of Significance

Based on CEQA Guidelines, the project may be considered to have a significant visual impact if it will:

- (a) Conflict with applicable General Plan policies intended to reduce the visual impacts or improve the aesthetics of new development;
- (b) Have a substantial, demonstrable negative aesthetic effect.
- (c) Substantially and negatively affect a scenic vista or scenic highway.
- (d) Create light or glare that will result in a substantial negative effect.

Based on the El Dorado County General Plan and on criteria (a), (b), and (c) above, the project may also be considered to have a potentially significant visual impact if it will substantially and negatively:

- (e) change distinct or characteristic natural landscape features onsite (goal 2.3 and objective 2.3.1);
- (f) change the visual integrity of onsite hillsides and ridgelines (objective 2.3.2);
- (g) fail to maintain the rural character of the community (goal 2.5);

- (h) fail to provide physical and visual separation between existing and new communities (objective 2.5.1, policy 2.5.1.1, and policy 2.5.1.2);
- (i) provide signage that will not maintain and enhance the visual appearance of the County (goal 2.7); and
- (j) create high intensity lighting and glare (goal 2.8).

(DEIR, pp. IV.B-8 - IV.B-9.)

Impact:

V-1: The Project will cause significant impacts associated with the change in natural landscape and rural visual character. (DEIR, p. IV.B-19.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that substantially lessen, but do not avoid, the potentially significant environmental effect associated with change in natural landscape and rural visual character. No mitigation is available to render the effect less than significant. The effect therefore remains significant and unavoidable.

Explanation:

The project will convert the existing open, rural, oak-studded site to a developed community with large lot and ranchette residential, suburban residential, institutional (schools), and commercial structures, water tanks, roadways, and introduced landscaping. Development permitted under the Specific Plan will substantially and negatively detract from existing surrounding views of the site and from the distinct natural and rural character of the area. In general terms, development of the project site under the Valley View Specific Plan will change the existing visual character of the project site from an undeveloped, rural, natural landscape to a developed suburban residential and commercial landscape. These effects will represent a significant visual impact. (DEIR, p. IV.B-19; FEIR, p. IV.B-19.)

Mitigation V-1:

Incorporation of the additional design standards and guidelines listed below will reduce the overall impact of the project on the natural landscape and rural character, although not to a less than significant level. Any substantial change in the site's existing visual character from open grazing

land to suburban land uses, with the conventional development layouts provided for under the Specific Plan, could be expected to substantially change the distinct natural rangeland features of the site, reduce the visual integrity of its hillsides and ridgelines, and thus have a substantial negative aesthetic effect.

The applicant shall be responsible for implementing measures (a) through (c) identified below:

- (a) Landscape and Vegetation Management Plan. Prepare a detailed Landscape and Vegetation Management Plan for review and approval by the County Planning Department. Retain a qualified landscape architect or plant ecologist to prepare the plan. Structure the plan for implementation by the applicant/future developers and project homeowners associations. Incorporate the required oak tree retention, consolidation, and replacement measures (Biological Resources Mitigation Measures BR-3, BR-4, BR-5, BR-6, and BR-7) into this plan. The plan shall also be the primary tool for implementing measures (1), (2) and (3) listed below pertaining to tree protection, tree pruning, tree maintenance and replacement, and introduced landscaping. Incorporate the Landscape and Vegetation Management Plan into the project covenants, codes, and restrictions (“CC&Rs”) in order to enforce the plan.
 - (1) Protect Trees from Removal/Replace Removed Trees. Incorporate the tree protection measures described under Mitigation Measure BR-3. The visual effect of any native tree losses will remain until replacement trees reach trunk diameter comparable to the average size of the removed trees, which will require a 20 to 50 year growth period.
 - (2) Limit Tree Pruning. Existing trees that are successfully retained, but are within proximity to introduced residential development, could be subject to pruning by homeowners to maximize views from hillside and ridgetop homesites. Similarly, the effectiveness of introduced vegetative screening could be defeated by homeowners trying to maximize views from their homes by pruning trees needed for screening. Specify pruning restrictions in the Landscape and Vegetation Management Plan and project CC&Rs so that the beneficial screening effects of the trees are not significantly compromised.
 - (3) Implement a Vegetation Maintenance and Replacement Program. Establish a program of ongoing maintenance and replacement for existing and introduced landscaping. This program should be included in the Landscaping and Vegetative Management Plan. Implementation and enforcement of the program shall be the responsibility of the project homeowners association, which will collect dues to fund common maintenance costs, and will enforce the project CC&Rs.

- (b) **Vegetative Screening.** Revise the Specific Plan landscaping requirements and prepare a Landscaping and Vegetation Management Plan, as described under (a) above, to specify the following:
- (1) **Plant Trees in Natural Patterns to Screen Buildings.** Plant new trees as visual screening in locations where they will reduce the visibility and prominence of project homes, schools, and commercial buildings from offsite vantage points. Cluster such screen landscaping in natural-appearing arrays. Emphasis use of native and other drought-tolerant species to the extent possible. Many native species are relatively slow-growing. In order to provide for visual screening in the short-term, interplant native species with fast-growing evergreen trees that have low water requirements.
 - (2) **Cluster Screen Planting in Natural-Appearing Arrays.** Cluster landscaping used for screening purposes in natural-appearing arrays in the immediate vicinity (ten to 30 feet) of the buildings to be screened. Locating vegetative screening close to residential structures will also provide greater opportunities for selective placement and trimming to frame and maintain certain views.
- (c) **Architectural Standards and Landscaping Controls.** The visual impacts due to conversion of broad rangeland (approximately 1,174 acres of open rangeland) to large lot and ranchette residential development could only be mitigated to a less than significant level through development avoidance and permanent preservation of these areas as open space. These measures will be inconsistent with the basic objectives of the project, which are to develop the site as permitted by the El Dorado County General Plan. Nevertheless, to substantially reduce the extent of visual impact, the applicant shall incorporate additional architectural standards and landscaping controls in the Community Design element of the Specific Plan, and ultimately, the project CC&Rs, and shall establish an associated design review procedure, to implement those standards and controls.
- (1) **Architectural Design Standards.** The following standards, or variations on these standards which are acceptable to the County, shall be incorporated to reduce the visual impacts of project architectural designs to insignificant levels:
 - (a) Building location and introduced landscaping at the outer, most visible edge of the main ridgeline shall be avoided, to the extent possible.

- (b) Hillside and ridgetop building designs shall incorporate a combination of small volumes and varying surface planes to create visual interest and to avoid conspicuous, large-bulk structures and box-like masses.
 - (c) Building heights and scales shall be compatible with the existing terrain and other surrounding project homesites.
 - (d) Architectural designs for sideslope and ridgetop crest residential structures shall be visually adaptive and generally sensitive to the hillside topography.
 - (e) The design of residential and accessory structures shall be subordinate to existing hillside and ridgeline forms. Hillside and ridgecrest homes shall be constructed in multiple levels to achieve a better fit with the existing sideslopes, reduce the need for grading, and promote overall visual compatibility with the natural hillsides.
 - (f) Use of hillside “stilt” designs shall be avoided. Building elevations on the downhill sides shall continue to the ground.
 - (g) The design of residential exteriors and appurtenances, including fencing, shall be harmonious with the natural character of the landscape.
 - (h) Building materials and colors shall be subdued to minimize contrast with the natural Valley View landscape. Page 84 of the specific plan already states (under guideline 2, Architectural Guidelines for Single Family Residential) that natural materials “are encouraged” and that “colors shall be...primarily natural tones.” This guideline should also apply to all building construction onsite, not just single family units.
 - (i) Reflective windows and building materials shall be prohibited.
 - (j) Where roof surfaces will be visible from onsite or offsite vantage points, natural-appearing roofing materials (tile, fire-retardant shake, etc.) shall be used to minimize visual impacts.
- (2) Landscaping Controls. The following landscaping standards shall be incorporated to reduce the visual impacts of introduced landscaping:

- (a) The landscaping plan shall include the establishment of strategic vegetative screening in common areas to reduce the visibility of project homes on north- and west-facing ridges and sideslopes visible from viewpoints to the north, west, and south, and for project homes visible from the Marble Mountain community to the east.
 - (b) The project landscaping plan shall emphasize use of similar common landscaping elements throughout the site in order to unify the project and minimize its impact on offsite viewpoints.
 - (c) The landscape plan shall emphasize use of native, drought-tolerant, wind-resistant species.
 - (d) Given the ongoing, long-term importance of vegetative screening in mitigating project visual impacts, a program of ongoing maintenance and replacement of existing and introduced vegetative screening shall be established--see measure (a)(2) above.
- (d) Water Tank Provisions. One or a combination of the following measures should be implemented to reduce the visual impacts of the proposed water tanks.
- (1) Visual Screening. Trees should be planted to screen the water tanks from view and the tanks should be painted with a low-gloss paint in a color that blends with the natural environment.
 - (2) Depressed or Underground Tank Design. Unless the tanks can be adequately screened from view by existing vegetation, the water tanks should be placed partially or fully underground. The County and EID, should determine whether full or partial placement of the tanks underground would be needed in conjunction with or instead of the vegetative screening measures identified above in order to satisfactorily reduce visual impacts.

(DEIR, pp. IV.B-24 - IV.B-27; FEIR, IV.B-27.)

Significance after Mitigation

Significant and unavoidable. (DEIR, p. IV.B-24.)

Impact:

V-2: Project impact on views from Highway 50 eastbound will be significant and adverse. (DEIR, p. IV.B-27.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that substantially lessen, but do not avoid, the significant environmental effect associated with impacts on views from Highway 50 eastbound. No mitigation is available to render the effect less than significant. The effect therefore remains significant and unavoidable.

Explanation:

Substantial portions of the Specific Plan development areas will be briefly visible from the eastbound Highway 50, including foreground portions of White Rock Village and more distant portions of West Valley Village (nearly all of this area) and East Ridge Village (the west-facing upper hillsides and ridgeline development areas). The simulation on Figure B-6 of the Draft EIR is somewhat representative of this view. These project-related changes will negatively affect existing views of the site and will represent a significant adverse impact. (DEIR, p. IV.B-27.)

Mitigation V-2:

The applicant shall implement the mitigation measures identified below, as well as the measures identified under Mitigation Measure V-1 above.

- (a) Enhance Specific Plan Design Controls. Implement the measures described under Mitigation Measure V-1 to reduce the overall impact of the project on the natural landscape and rural character, including the following:
- a Landscape and Vegetation Management Plan,
 - vegetative screening, and
 - architectural standards and landscaping controls.
- (b) Relocate Visible Hillside ER-LL Units. Relocate the Estate Residential (ER-LL) lots on the immediate knoll at the northwestern section of East Ridge Village, just southeast of the Multiple Family Residential (MF)-designated area in White Rock Village, that will contain

units visible on the ridgeline from this vantage point (two are assumed in the Draft EIR, Figure B-6 simulation) to a less visible location elsewhere onsite. Relocation of these lots will preserve existing views of the open hillside and ridgeline and will substantially reduce the visual impact of the project on this vantage point.

(DEIR, pp. IV.B-27 - IV.B-28.)

Significance after Mitigation

Significant and unavoidable. (DEIR, p. IV.B-27.)

Impact:

V-3: Impacts on views from El Dorado Hills community vantage points north of Highway 50 will be significant and unavoidable. (DEIR, p. IV.B-28)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that substantially lessen, but do not avoid, the significant environmental effect associated with impacts on views from El Dorado Hills community vantage points north of Highway 50. No mitigation is available to render the effect less than significant. The effect therefore remains significant and unavoidable.

Explanation:

As illustrated on Figure B-6 of the Draft EIR (view from El Dorado Hills Shopping Center), views of the project site from the existing El Dorado Hills community north of Highway 50 will change substantially with project buildout. A limited number of residential lots atop the intermediate knoll at the northern edge of East Ridge Village (two such lots are assumed in the simulation) will be highly visible from this vantage point. Much of the development proposed for lower elevation West Valley Village and White Rock Village development areas will also be visible. These changes in the existing open space character of these visual units will negatively affect existing views of the site and will represent a significant adverse visual impact. (DEIR, p. IV.B-28.)

Mitigation V-3:

Implement Mitigation Measures V-2 above. (DEIR, p. IV.B-28.)

Significance after Mitigation

Significant and unavoidable. (DEIR, p. IV.B-28.)

Impact:

V-4: The Project will have a potentially significant impact on views from Latrobe Road. (DEIR, p. IV.B-29.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that substantially lessen, but do not avoid, the significant environmental effect associated with impacts on views from Latrobe Road. No mitigation is available to render the effect less than significant. The effect therefore remains significant and unavoidable.

Explanation:

The view of the project site from Latrobe Road near Golden Foothill Parkway will also change dramatically with buildout of the project. Existing open views of the broad, oak-scattered Valley View rangeland will be replaced with foreground views of West Valley Village development (see Figure III-8, Draft EIR). The commercial buildings, residential buildings, walls, and roadside landscaping visible along the east edge of Latrobe Road will act as a barrier to views of the onsite hillsides and ridgeline. The uniform pattern of introduced, densely-planted peripheral trees at the Village Center entrance will bear little resemblance to existing native vegetation characteristics of the area. These changes will substantially and negatively affect existing views of the site and will therefore represent a potentially significant adverse visual impact. (DEIR, p. IV.B-29.)

Mitigation V-4:

Implement Mitigation Measures V-1 and V-2 above, as well as the following mitigation measures:

- (a) **Streetscape Design Parameters.** The applicant and County shall formulate and adopt streetscape design parameters or guidelines for the Valley View Specific Plan area frontage along Latrobe Road to ensure a streetscape treatment which is balanced and harmonious with the existing business park development frontage on the opposite side of the route. The measures should be addressed both in onsite and offsite landscaping and other street design features (street lights, signage, etc.) that will affect the visual character of the route. The streetscape design guidelines shall address the need for consistent setbacks, consistent

architectural controls, and street landscaping, pedestrian, signage, and lighting treatments which unify the project frontage and are harmonious with the other side of the route.

- (b) Design Review. The County shall subject Valley View development along the Latrobe Road frontage to particularly stringent design review, guided by the streetscape design guidelines described under (a) above.

(DEIR, p. IV.B-29.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.B-29.)

Impact:

- V-5: Visual impacts of Wastewater Treatment Plant due to implementation of the Project will be potentially significant. (DEIR, p. IV.B-31.)**

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant environmental effect identified in the Final EIR.

Explanation:

The El Dorado Hills Wastewater Treatment Plant is located adjacent to the western boundary of the project site. The Specific Plan community park, and areas designated Estate Residential and Core Residential, could have potentially unattractive views of the treatment plant facilities. This possibility represents a potentially significant impact. (DEIR, p. IV.B-31.)

Mitigation V-5:

Implementation of Mitigation Measure LU-3 above, including landscaped buffers and proper noticing of potential future project occupants, will reduce this visual impact. In particular, provision of landscape screening in the recommended 300-foot buffer area will be expected to reduce views of the treatment plant from the community park and Core Residential area. For the substantially higher elevation of the Estate Residential area in relation to the plant, require onsite vegetative screening for lots on the northern edge of that neighborhood to effectively block views of the plant. (DEIR, p. IV.B-31.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.B-31.)

Impact:

V-6: The Project will cause potentially significant light and glare impacts. (DEIR, p. IV.B-31.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant environmental effect identified in the Final EIR.

Explanation:

The project will introduce exterior nighttime lighting to the site, as well as structures that may contain glare-producing materials. Such lighting could change nighttime views of the site from surrounding vantage points, and could illuminate the nighttime sky. These changes could adversely affect views from the existing El Dorado Hills community north of Highway 50, views from Highway 50 itself, and views from surrounding rural residential properties to the north, south, and east. The Specific Plan includes some guidelines to limit these impacts, but this potential still represents a potentially significant impact. (DEIR, p. IV.B-31.)

Mitigation V-6:

The applicant shall incorporate the measures listed below into the Specific Plan and the project CC&Rs.

- (a) Exterior lighting parameters for the project shall stipulate low mounting heights and, where the exterior fixture may be exposed to a surrounding public vantage point, use of appropriate light refractors or diffusers.
- (b) For driveway and street lighting, stipulate use of low-intensity fixtures (e.g., with the cone of light focused in a manner which avoids illuminating nearby vertical surfaces).
- (c) Limit project pathway illumination to low bollard fixtures.
- (d) Prohibit use of highly reflective or glare-producing materials onsite.

(DEIR, p. IV.B-32; FEIR, p. IV.B-32.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.B-32.)

Impact:

V-7: Visual impacts from signage in the Village Center will be potentially significant and adverse. (DEIR, p. IV.B-33.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant environmental effect identified in the Final EIR.

Explanation:

The Specific Plan does not contain guidelines for commercial area signage. Use of intensive neon, internally-lit, brightly-colored, and/or oversize signs could adversely affect the visual character of the area, and views from surrounding vantage points, including Highway 50. Such signage characteristics could contribute to overall potentially significant adverse visual impacts. (DEIR, p. IV.B-33; FEIR, p. IV.B-33.)

Mitigation V-7:

In order to avoid adverse signage-related visual impacts, the applicant shall be responsible for revising the Specific Plan to include the signage controls listed below in order to prohibit unattractive, conspicuous signs.

(a) Signs to identify the designated Village Center:

- Prohibit free-standing pole signs. Monument signs, or signs on walls and buildings should be used instead of free-standing pole signs.
- At each street entrance to the Village Center, only one detached sign on each side of the street shall be permitted. The information displayed on the signs shall be limited to the name and symbol or logo of the center. No advertising should be permitted on these signs.

- Such signs shall be low-profile signs less than 6 feet in height with maximum message area of approximately 100 square feet.
- Such signs shall be located in the landscape setback at least 10 feet from the street right-of-way line.
- Wood and other natural earth materials such as concrete, aggregate, stone, brick or slumpstone are acceptable building materials for these signs. Plastic signs shall not be permitted. Signs shall be integrated with landscaping (i.e., mounted on landscaped berms, etc.).

(b) Detached business identification signs in the Village Center:

- One detached sign shall be permitted on each development site for the purpose of identifying the occupant of the site. The information displayed on these signs shall be limited to the name and symbol of the business or businesses occupying the site or the name and symbol of the business or businesses occupying the site and the street and street number. No advertising shall be permitted on these signs.
- Signs shall be less than 4 feet in height with a maximum message area of 32 square feet.
- Wood and other natural earth materials such as concrete, aggregate, stone, brick, or slumpstone are acceptable building materials for these signs. The choice of materials should match major building materials. Signs shall be externally illuminated.
- District identification signs shall not be combined with business identification signs.

(c) Mounted business identification signs in the Village Center:

- One mounted sign shall be permitted on each structure for the purpose of identifying the occupant of the building. The information displayed on this sign shall be limited to the name and symbol of the building's occupant or occupants and the address.
- Mounted signs attached to vertical surfaces of a building or building-associated wall shall be allowed, with the provision that such signs appear as an integral part of the overall architectural and site design concept. Sign materials shall complement those of the structure to which they are attached. The attached sign area shall not exceed

three percent (3%) of the total area of the walls on any face of the building to which they are attached.

- Fascia and roof signs are not permitted.

(DEIR, pp. IV.B-33 - IV.B-34.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.B-33.)

Cumulative Impacts

Impact:

V-8: Visual impacts associated with the Project will cause a cumulatively considerable contribution to significant cumulative impacts. (DEIR, p. IV.B-34)

Finding:

Adherence to General Plan policies that are required of the Valley View Specific Plan substantially lessen, but do not avoid, the project's significant cumulatively considerable incremental contribution to the significant environmental effect associated with visual impacts throughout the County due to planned development. No mitigation is available to render the project's contribution less than cumulatively considerable, or the larger effect less than significant. The effect therefore remains significant and unavoidable.

Explanation:

The cumulative visual impacts of local, subregional, and regional urban growth, of which the project is part, are addressed in the Visual Quality section of the County-certified 1995 El Dorado County General Plan Update EIR. The General Plan EIR states under Impact 13.1 and 13.2 that the countywide associated introduction of light and glare into the newly established or expanded built (urban communities) will result in a significant cumulative visual impact. The EIR then identifies the policies incorporated in the adopted General Plan Update which have been formulated to address these impacts. The General Plan EIR concludes that, although these measures will aid in the reduction of cumulative visual impacts, the impacts (13.1 and 13.2) will remain significant and unavoidable. (DEIR, pp. IV.B-34 - IV.-35.)

Mitigation:

No mitigation measures are proposed. (DEIR, p. IV.B-35.)

Significance after Mitigation

Significant and unavoidable. (DEIR, p. IV.B-35.)

C. POPULATION, HOUSING, AND EMPLOYMENT

Standards of Significance

Based on Appendix G of the CEQA Guidelines, the project will be considered to have a significant adverse impact on population, employment or housing conditions if it will:

- (1) Induce substantial growth or concentration of population; or
- (2) Displace a large number of people.

(DEIR, p. IV.C-14.)

Cumulative Impacts

Impact:

PHS-3: The project will create a cumulatively considerable incremental contribution to significant cumulative impacts related to county-wide jobs/housing balance.
(DEIR, p. IV.C-23.)

Finding:

No mitigation is available to render the project's contribution less than cumulatively considerable, or the larger effect less than significant. The effect therefore remains significant and unavoidable.

Explanation:

The analysis of Employment and Housing section of the General Plan EIR (section V.2) states that a significant cumulative impact (Impact 2.2.1) on the countywide jobs/housing balance (a jobs-to-

housing ratio less than 1.0) could occur under the General Plan, and that even with the associated monitoring and economic development measures identified in the General Plan and General Plan EIR, this impact will be significant and unavoidable. This impact was also identified as significant and unavoidable in the Findings of Fact of the Board of Supervisors of El Dorado County for the El Dorado County General Plan (January 23, 1996, revised January 26, 1996; page 81). The Valley View Specific Plan project will contribute to this cumulative unavoidable impact. (DEIR, p. IV.C-23.)

Mitigation:

No mitigation measures are proposed. (DEIR, p. IV.C-23.)

Significance

Significant and unavoidable. (DEIR, p. IV.C-23.)

Cumulative Impact (General Plan)

The population, employment, and housing impacts of cumulative local, subregional, and regional urban growth, of which this project is a part, were anticipated in the County General Plan (adopted in 1996) and have been analyzed in the 1995 El Dorado County General Plan EIR. The analysis for the Regional Analysis Area 1 (which contains the El Dorado Hills area) in the Land Use, Population, and Growth-Inducing Impacts section of the Draft EIR (section V.1) states that development consistent with the adopted General Plan will result in a related cumulative increase in the population of the County (Impact 1.3.1) and that this will result in related cumulative impacts (traffic, public services, air quality, noise, etc.) that are addressed throughout the General Plan EIR. Similarly, related mitigations are identified throughout the EIR where necessary under the specific items discussed.

In addition, the analysis of Employment and Housing section of the General Plan EIR (section V.2) states that a significant cumulative impact (Impact 2.2.1) on the countywide jobs/housing balance (a jobs-to-housing ratio less than 1.0) could occur under the General Plan, and that even with the associated monitoring and economic development measures identified in the General Plan and General Plan EIR, this impact would be significant and unavoidable. This impact was also identified as significant and unavoidable in the Findings of Fact of the Board of Supervisors of El Dorado County for the El Dorado County General Plan (January 23, 1996, revised January 26, 1996; page 81). The Valley View Specific Plan project would contribute to this cumulative unavoidable impact.

(DEIR, p. IV.C-23; FEIR, p. IV.C-23.)

D. TRANSPORTATION

Standards of Significance

Roadway and Intersection Significance Criteria

Appendix G, item a, of the CEQA Guidelines indicates that a project may be considered to have a significant impact if it will conflict with applicable General Plan policies intended to improve the County's transportation system and reduce the transportation impacts of development. The significance criteria in this section are adapted from Appendix G and the El Dorado County General Plan Circulation Element policies listed in section 2 herein. The project will be considered to cause a significant impact if:

- (1) Project roadway provisions are not consistent with the right-of-way, intersection spacing, design, and access point location standards for subdivisions and other development as specified in the County Design and Improvement Standards Manual (General Plan Policies 3.1.1.1 and 3.1.2.1);
- (2) Project generated traffic causes any intersection or roadway segment currently operating at LOS A, B, C, D, or E to deteriorate to LOS F (General Plan Policy 3.2.1.1, Goal 3.5, and Objective 3.5.1);
- (3) Project generated traffic causes any roadway segment projected by the General Plan to operate at LOS A, B, or C in the year 2015 to fall to LOS D or worse or any roadway segment projected by the General Plan to operate at LOS D in the year 2015 to fall below LOS D (General Plan Policy 3.5.1.1);
- (4) Project generated traffic causes an increase in delay (one percent or greater) at a County intersection or roadway segment already operating at LOS F; or
- (5) Project generated traffic directly or cumulatively causes state highway (Highway 50) LOS to deteriorate to LOS F (General Plan Policy 3.3.2) or causes an increase in traffic delay (one percent or greater) on a state highway (Highway 50) segment already operating at LOS F (General Plan Policies 3.2.1.1 and 3.3.2).

(DEIR, pp. IV.D-29 - IV.D-30.)

Transit System Significance Criteria

Policy 3.8.1.1 of the El Dorado County General Plan Circulation Element requires any development that creates increased demand for transit to be responsible for providing onsite transit facilities. Such facilities will include school and public bus turnouts, shelters, and ramps at bus stops. Based on this policy, the project will be considered a significant impact if it creates an increased demand for transit and does not provide onsite transit facilities. (DEIR, p. IV.D-30.)

Pedestrian and Bicycle System Significance Criteria

As stated in policy 3.9.1.6 of the El Dorado County General Plan Circulation Element, prior to or in conjunction with project review and approval and/or development of a multifamily project, the developer shall cooperate with the County in providing for the construction of pedestrian and bicycle paths (separated or integrated) to allow unimpeded circulation within the entire property being developed. As stated in policy 3.11.1.1, the project should aid in implementing the El Dorado County Bikeway Master Plan and Hiking and Equestrian Trails Master Plan. Based on these policies, the project will be considered to cause a significant impact on the pedestrian and bicycle system if the developer did not cooperate with the County in providing for the construction of pedestrian and bicycle paths. (DEIR, p. IV.D-30.)

Impact:

T-1: The Project will have significant Existing-Plus-Project impacts on Latrobe Road/Golden Foothill Parkway South Intersection. (DEIR, p. IV.D-41.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the significant environmental effect identified in the Final EIR.

Explanation:

This T-intersection currently operates at LOS A. The addition of a two-lane project access road as a fourth leg of the intersection, and the corresponding traffic addition on the east side of Latrobe Road, will cause conditions in the PM peak hour to deteriorate to LOS F. This existing-plus-project condition will represent a significant impact. (DEIR, p. IV.D-41.)

Mitigation T-1:

Widen Latrobe Road to provide two southbound and one northbound left-turn lanes. At the project entrance/exit, provide two lanes in each direction, including a separate right-turn lane. The intersection shall also be signalized. These improvements will alleviate the congestion at this intersection and allow the intersection to operate at acceptable levels of service with the project, mitigating the impact to a less than significant level. (DEIR, p. IV.D-45.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.D-45.)

Impact:

T-2: The Project will have significant Existing-Plus-Project impacts on Latrobe Road/White Rock Road Intersection. (DEIR, p. IV.D-45.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the significant environmental effect identified in the Final EIR.

Explanation:

This intersection currently operates at LOS B in the AM peak hour and LOS C in the PM peak hour. Conditions will deteriorate to LOS F during the PM peak hour with the project. This existing-plus-project condition will represent a significant impact. (DEIR, p. IV.D-45.)

Mitigation T-2:

Mitigate the project impact to this signalized intersection by making changes to the lane configuration. On Latrobe Road, provide two through lanes in each direction from White Rock Road to south of Golden Foothills Parkway in order to mitigate all project impacts. In addition, provide a second southbound left turn lane on the Latrobe Road approach to this intersection. Provide a left-turn lane for eastbound White Rock Road. These improvements will allow the intersection to operate at acceptable levels of service with the project, mitigating the impact to a less than significant level. (DEIR, p. IV.D-45.)

It should be noted that this mitigation will be consistent with the mitigation requirements identified later in this section for the “Cumulative-Plus-Project” scenario, as well as with the County's 20-year CIP. The caveat is that the second left turn lane in the southbound direction might not be needed

to mitigate the “Cumulative-Plus-Project” impacts. For the “Cumulative-Plus-Project” scenario, however, even when the project-required impact measures recommended for that scenario are implemented, the intersection will still operate at LOS F, albeit with a lower level of delay than projected for the “Cumulative-No-Project” scenario. The second southbound left-turn lane will aid in mitigating the remaining congestion; thus, the added lane will be a valid mitigation of the existing-plus-project condition, and should be included as part of a long-range solution to the projected problems at this location. (DEIR, p. IV.D-45.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.D-45.)

Impact:

T-3: The Existing-Plus-Project impacts on El Dorado Hills Boulevard/Highway 50 Westbound Ramps Intersection will be significant. (DEIR, p. IV.D-46.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the significant environmental effect identified in the Final EIR.

Explanation:

This intersection currently operates at LOS C during the AM peak hour and LOS B during the PM peak hour. Addition of project traffic will cause deterioration to LOS F during the AM peak hour. This existing-plus-project condition will represent a significant impact. (DEIR, p. IV.D-46)

Mitigation T-3:

The County has programmed a comprehensive improvement to the US 50/El Dorado Hills Boulevard interchange as part of its current El Dorado Hills/Salmon Falls Road Impact Fee (“RIF”) program. The improvement is currently fully funded: it is included in the County's current Five-Year Capital Improvement Program (“CIP”). Construction is expected to begin in 2001. A new ramp will be added to provide for westbound traffic, and additional capacity will be added to the existing ramp. The improvement will add a new widened off-ramp for eastbound traffic oriented toward destinations to the south; it will also widen the existing off-ramp and dedicate it to eastbound traffic oriented to the north. The combination of improvements will produce LOS C operations at this intersection in the AM peak hour and LOS B in the PM peak hour, which will satisfy County LOS

policy. This RIF-funded improvement will more than mitigate the project impacts. The project is subject to County RIF requirements. All future project development will be required to make RIF payments. (DEIR, p. IV.D-46; FEIR, p. IV.D-46.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.D-46.)

Impact:

T-4: The Existing-Plus-Project impact on Latrobe Road/Highway 50 Eastbound Ramps Intersection will be significant. (DEIR, p. IV.D-46.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that substantially lessen, but do not avoid, the significant environmental effect associated with LOS on Latrobe Road/Highway 50 Eastbound Ramps impacts. No mitigation is available to render the short-term effect less than significant. The short-term effect therefore remains significant and unavoidable.

Explanation:

This intersection currently operates at LOS E during the AM peak hour and LOS F during the PM peak hour. Addition of project traffic will exacerbate the existing LOS F conditions during the PM peak hour and will also cause deterioration to LOS F during the AM peak hour. This existing-plus-project condition will represent a significant impact. (DEIR, p. IV.D-46.)

Mitigation T-4:

As indicated above under Mitigation Measure T-3, the County has programmed and funded a comprehensive improvement to the US 50/El Dorado Hills Boulevard interchange through the County's RIF program. The improvement will add a new widened off-ramp for eastbound traffic oriented toward destinations to the south; it will also widen the existing off-ramp and dedicate it to eastbound traffic oriented to the north. The combination of improvements will produce LOS C operations at this intersection, which will satisfy County LOS policy. This funded improvement will more than mitigate the project impacts. The project is subject to County RIF requirements. All future project development increments will be required to make RIF payments. This measure will reduce this impact to a less than significant level. It is possible, however, that portions of the Valley

View project will be completed before construction of this improvement (scheduled to begin by 2001) is completed. The addition of this increment of project traffic before the roadway improvement is completed will represent a short-term significant unavoidable impact.

No mitigation is proposed for the potential short-term impact, since there are no interim measures that will be compatible with the overall interchange improvement project.

(DEIR, p. IV.D-47.)

Significance after Mitigation

Significant and unavoidable in the short-term if portions of the Valley View project are completed before roadway improvement is completed. (DEIR, p. IV.D-47.)

Impact:

T-5: The Existing-Plus-Project impacts on Latrobe Road/Suncast Lane intersection will be significant. (DEIR, p. IV.D-47.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the significant environmental effect identified in the Final EIR.

Explanation:

This intersection is currently stop-sign controlled and operates at LOS A. Addition of project traffic will reduce the number of available gaps in traffic along Latrobe Road, resulting in LOS F conditions during the PM peak hour when vehicles will have a difficult time turning left from Suncast Lane onto Latrobe Road or from Latrobe Road onto Suncast Lane. This existing-plus-project condition will represent a significant impact. (DEIR, p. IV.D-47.)

Mitigation T-5:

The only reasonable mitigation measure for this condition will be to install a traffic signal, but the standard Caltrans Peak Hour warrant for installation of a traffic signal is not met by the volumes projected at this intersection for the “Existing-Plus-Project” scenario. The signal will, however, be warranted under the “Cumulative-Plus-Project” scenario. Thus, the required mitigation at this location for the “Existing-Plus-Project” scenario shall be to monitor the location on a periodic basis,

in conjunction with the issuance of building permits. If standard County signal “warrants” are satisfied by some combination of future traffic, then installation of a signal shall be required to mitigate this impact, and the project shall be assessed for a proportional share of the cost of the signal. (DEIR, p. IV.D-48.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.D-48.)

Impact:

T-6: The Existing-Plus-Project impact on Latrobe Road South of White Rock Road is significant. (DEIR, p. IV.D-48.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the significant environmental effect identified in the Final EIR.

Explanation:

The segment analysis indicates that the Service Level on this portion of Latrobe Road will decrease from LOS D to F on a daily basis. This cumulative-plus-project condition will represent a significant impact. (DEIR, p. IV.D-48.)

Mitigation T-6:

Widen Latrobe Road to four lanes (plus turning lanes as noted in the previous mitigation measures) from White Rock Road to a point 300-500 feet south of White Rock Road. South of this point, the road could revert back to a two-lane cross-section. The RIF currently includes, and is periodically revised to fully fund, this County roadway improvement. The project is subject to County RIF requirements. All future project development will be required to make RIF payments. (DEIR, p. IV.D-48.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.D-48.)

Impact:

T-7: The Existing-Plus-Project Impact on US 50 West of El Dorado Hills Boulevard/Latrobe Road is significant. (DEIR, p. IV.D-49.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the significant environmental effect identified in the Final EIR.

Explanation:

US 50 west of El Dorado Hills Boulevard currently operates at LOS D. The “Existing-Plus-Project” scenario will produce an LOS F on this portion of the freeway. As noted above, this condition represents a hypothetical “Existing-Plus-Project” scenario, developed to isolate potential project-related mitigation needs. In actuality, as other land uses are developed over the extended time period that the Valley View project is actually developed, it is expected that more traffic will be oriented to local land uses rather than toward Sacramento. Thus, it is not likely that the conditions forecast here will actually lead to an LOS F condition solely due to the impacts of the Valley View project. (DEIR, p. IV.D-49.)

Mitigation T-7:

Mitigation of this impact is largely an issue of project phasing. An impact identified later in this section for the “Cumulative-Plus-Project” scenario (Impact T-16) requires that the developer conduct interim traffic studies for submittal to the El Dorado County DOT together with each application for tentative map approval of future phases of the project. This interim study requirement is consistent with General Plan policy and will assure that County standards are maintained at each future project phase as well as for the total project. The County's State System Capacity and Interchange Transportation Impact Fee (State TIM) has been established to provide fair share developer contributions to partially finance improvements to County segments of the state highway system. The state TIM currently includes, and is periodically revised, to partially fund the widening of Highway 50 to six lanes by 2010 and eight lanes by 2015. The project is subject to County TIM requirements. All future project development will be required to make TIM payments. (DEIR, p. IV.D-49.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.D-49.)

Impact:

T-8: The Cumulative-Plus-Project impacts on White Rock Road/North project access intersection will be significant. (DEIR, p. IV.D-62.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the significant environmental effect identified in the Final EIR.

Explanation:

An unacceptable year 2015 level of service (LOS F) is projected at the White Rock Road/North Project Access intersection. This cumulative-plus-project effect will represent a significant impact. (DEIR, p. IV.D-62.)

Mitigation T-8:

Signalize the intersection and provide a right-turn lane for the eastbound approach and a left-turn lane for the westbound approach. If an entrance to Town Center East is provided opposite this project entrance, also provide an eastbound left turn lane. The exit from the project shall have two lanes: one for left turns and one for the remaining movements. This improvement will alleviate congestion at the intersection and allow it to operate at LOS B. (DEIR, p. IV.D-62.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.D-62.)

Impact:

T-9: The Cumulative-Plus-Project impacts on Latrobe Road/Golden Foothills Parkway South/Project Access Intersection will be significant. (DEIR, p. IV.D-63.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the significant cumulative environmental effect identified in the Final EIR.

Explanation:

The addition of project traffic to projected year 2015 cumulative intersection volumes will result in unacceptable levels of service on the Latrobe Road/Golden Foothills Parkway South/Project Access intersection. Without the project, this intersection will operate at LOS A in the AM peak hour and LOS B during the PM peak hour. With the project and its associated traffic, this intersection will degrade to LOS F during both peak hours. This cumulative-plus-project effect will represent a significant impact. (DEIR, p. IV.D-63.)

Mitigation T-9:

As with the “Existing-Plus-Project” scenario, provide a new traffic signal at this intersection. The “Cumulative-Plus-Project” scenario requires that the project entrance have two inbound and two outbound lanes. One of the outbound lanes will need to be striped as an exclusive right-turn-only lane. The mitigation will also require the widening of Latrobe Road to provide for two southbound left-turn lanes and one northbound left turn lane. In addition, widen the northbound departure on Latrobe Road to provide an exclusive right-turn and two through lanes northbound; one of these lanes will be the natural continuation of the exclusive right-turn lane from the project. This two lane section will then continue north as far as White Rock Boulevard, as described in Mitigation Measure T-13 below. This improvement will alleviate the congestion at the intersection and allow it to operate at LOS C. (DEIR, p. IV.D-63.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.D-63.)

Impact:

T-10: The Cumulative-Plus-Project impacts on White Rock Road/Latrobe Road Intersection will be significant. (DEIR, p. IV.D-63.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the significant cumulative environmental effect identified in the Final EIR.

Explanation:

This intersection is projected to operate at LOS F under the “Cumulative-Plus-Project” scenario in both peak hours. The project will add traffic to an intersection already projected to operate at LOS F. This cumulative-project-plus effect will represent a significant impact. (DEIR, p. IV.D-63.)

Mitigation T-10:

This intersection is projected to operate at LOS F in the peak hours for the base (cumulative-without-project) scenario. To mitigate the project impacts: widen Latrobe Road to provide two northbound and southbound through lanes, one northbound and southbound left turn lane, and one northbound and southbound right turn lane; widen White Rock Road east of Latrobe Road to become a four-lane divided roadway as discussed under Mitigation Measure T-14. (DEIR, p. IV.D-64.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.D-64.)

Impact:

Impact T-11: The Cumulative-Plus-Project impact on Latrobe Road/Golden Foothills Parkway North Intersection will be significant. (DEIR, p. IV.D-64.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the significant cumulative environmental effect identified in the Final EIR.

Explanation:

The added project volumes will cause this signalized intersection to operate at LOS F in both peak hours, compared to LOS D in the AM peak hour and LOS B in the PM peak hour without the project. This cumulative-project-plus effect will represent a significant impact. (DEIR, p. IV.D-64.)

Mitigation T-11:

Provide two through lanes in each direction on Latrobe Road at this intersection. This mitigation measure will improve operations to LOS B in both peak hours. (DEIR, p. IV.D-67.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.D-64.)

Impact:

T-12: The Cumulative-Plus-Project Impact on Latrobe Road/Suncast Lane Intersection will be significant. (DEIR, p. IV.D-67.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the significant cumulative environmental effect identified in the Final EIR.

Explanation:

The addition of project traffic to projected year 2015 cumulative intersection volumes will result in unacceptable levels of service on the Latrobe Road/Suncast Lane intersection. Without the project, this stop-sign controlled intersection will operate at LOS A in the AM peak hour and LOS B during the PM peak hour. Addition of project traffic will reduce the number of available gaps in traffic along Latrobe Road, resulting in LOS F conditions during the PM peak hour when vehicles will have a difficult time turning left from Suncast Lane onto Latrobe Road or from Latrobe Road onto Suncast Lane. This cumulative-project-plus effect will represent a significant impact. (DEIR, p. IV.D-67.)

Mitigation T-12:

Signalize the intersection, widen Latrobe Road to provide two through lanes in each direction, a northbound left-turn lane and a southbound right-turn on Latrobe Road (see Figure D-20 in section IV.D.5 of the Draft EIR). This improvement will result in LOS A-B operation at this intersection under cumulative-plus-project conditions. (DEIR, p. IV.D-67.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.D-67.)

Impact:

T-13: The Cumulative-Plus-Project Impact on Latrobe Road Between White Rock Road and Carson Creek will be significant. (DEIR, p. IV.D-68.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the significant cumulative environmental effect identified in the Final EIR.

Explanation:

The segment analysis indicates that the LOS on this portion of Latrobe Road south of White Rock Road will decrease from LOS D to F on an average daily basis. This cumulative-project-plus effect will represent a significant impact. (DEIR, p. IV.D-68.)

Mitigation T-13:

Widen Latrobe Road to four lanes (plus turning lanes as noted in the previous mitigation measures) between White Rock Road and the intersection with the new project entrance/Golden Foothills Parkway South. South of the Golden Foothills Parkway intersection, the road could revert to a two-lane cross-section. This widening will provide a consistent four-lane roadway width through each of the signalized intersections in this segment. The RIF currently includes, and is periodically revised to fully fund, this County roadway improvement. The project is subject to County RIF requirements. All future project development will be required to make RIF payments. (DEIR, p. IV.D-68.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.D-68.)

Impact:

T-14: The Cumulative-Plus-Project impact on White Rock Road East of Latrobe Road will be significant. (DEIR, p. IV.D-68.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the significant cumulative environmental effect identified in the Final EIR.

Explanation:

White Rock Road east of Latrobe Road is currently a two-lane undivided rural roadway. This roadway is projected to operate at LOS F in the “Cumulative-Without-Project” scenario as well as the “Cumulative-With-Project” scenario. The “Cumulative-With-Project” scenario will add traffic and thus increase delay on this segment that is already projected to operate at LOS F. This cumulative-project-plus effect will represent a significant impact. (DEIR, p. IV.D-68.)

Mitigation T-14:

Mitigate this condition by widening the roadway to become a four-lane divided roadway with median. Such a widening will make the roadway consistent with the already approved plans for White Rock Road west of Latrobe Road. The RIF currently includes, and is periodically revised to fully fund, this County roadway improvement. The project is subject to County RIF requirements. All future project development will be required to make RIF payments. (DEIR, p. IV.D-68.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.-.)

Impact:

T-15: The Project will cause a cumulatively considerable contribution to significant cumulative impacts on Highway 50. (DEIR, p. IV.D-69.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley Views Specific Plan that substantially lessen, but do not avoid, the project's cumulatively considerable incremental contribution to the significant environmental effect associated with level of service on Highway 50 impacts due to planned development. No mitigation is available to render the project's contribution less than cumulatively considerable, or the larger effect less than significant. The effect therefore remains significant and unavoidable.

Explanation:

The US 50 freeway will operate at LOS F for both the "Cumulative" and the "Cumulative-Plus-Project" scenarios. Because the project will exacerbate a projected base case LOS F condition, this will represent a significant impact. (DEIR, p. IV.D-69.)

The "Cumulative" scenario is based on the assumption that US 50 will be widened to become a six-lane freeway prior to the year 2015. As the projections indicate, the capacity of the freeway at six lanes will be exceeded by the year 2015. This will be a base case condition not attributable to the project. The project will, however, exacerbate this base case condition. (DEIR, p. IV.D-69.)

Mitigation: T-15

The project shall contribute its fair share to the cost of widening US 50 to eight lanes as is proposed by the 20-year CIP. The state TIM currently includes, and is periodically revised, to partially fund the widening of Highway 50 to six lanes by 2010 and eight lanes by 2015. The project is subject to

County state TIM requirements and El Dorado Hills RIF requirements. All future project development will be required to make state TIM payments. Once this widening is implemented, the freeway will operate at an acceptable LOS E west of El Dorado Hills Boulevard and LOS C east of El Dorado Hills Boulevard for the “Cumulative-Plus-Project” scenario. Because future funding for the widening is not currently assured (i.e., not currently in place). (DEIR, p. IV.D-69; FEIR, p. IV.D-46.)

Significance after Mitigation

Significant and unavoidable. (DEIR, p. IV.D-69.)

Impact:

T-16: The Project will have a significant impact on County Roadway Improvement Phasing Needs. (DEIR, p. IV.D-69.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the significant environmental effect identified in the Final EIR.

Explanation:

If the offsite roadway system improvements identified in the Draft EIR as necessary to meet General Plan specified LOS standards are not completed as each development increment occurs, the project could result in an interim LOS deficiency. This will represent a significant impact. (DEIR, p. IV.D-69.)

The short-term (“Existing-Plus-Project”) impact scenario has been analyzed in the Draft EIR in keeping with General Plan Policies 3.2.1.1 and 3.5.1.1, that is, in order to predict what mitigation needs can be expected in the future if the project is built out with no improvement to the existing roadway system. Similarly, the long-term (year 2020 “Cumulative-Plus-Project”) impact scenario has been analyzed to determine what mitigation needs will be expected in the future if the project is built out and only those planned offsite roadway improvements which are currently “fully funded” are implemented. In reality, the Valley View Specific Plan offsite roadway mitigation measures are intended to be developed incrementally over a number of years as traffic generated by the project incrementally increases. (The “VVSP” is intended to build out over the next ten to twenty years as dictated by market forces.) If the roadway improvement needs identified in the Draft EIR are not completed in proper increments that correspond adequately to project and cumulative traffic

demands occurring in that time period, significant roadway operational deficiencies could result. (DEIR, p. IV.D-.69)

Mitigation T-16:

Ongoing traffic study and mitigation monitoring measures shall be implemented by project developers and the County. The County's General Plan includes policies calling for such ongoing traffic study and monitoring. As detailed in section IV.D.6 of the Draft EIR, these policies shall be implemented with the project through the following two mechanisms:

- T-16a: Interim Traffic Studies, and
- T-16b: The DOT Annual Monitoring Program.

(DEIR, p. IV.D-70.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.D-70.)

Impact:

T-17: The Project will cause significant pedestrian and bicycle impacts. (DEIR, p. IV.D-71.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that further avoid the less than significant environmental effect identified in the Final EIR.

Explanation:

The project does not include provisions for implementation of the Latrobe Trail (identified in the County's Bikeway Master Plan and Hiking and Equestrian Trails Master Plan) along the frontage of the project site. Given the identified need for widening of Latrobe Road due to the project and cumulative development in the area, and the increase in the demand for trails that will be expected to result from the project, the lack of project participation in the implementation of the Latrobe Trail is considered a significant impact. (DEIR, p. IV.D-71.)

Mitigation T-17:

Revise the Specific Plan to include a bicycle and pedestrian trail along the portion of Latrobe Road adjacent to the project site consistent with El Dorado County and El Dorado Hills Community Service District standards. (DEIR, p. IV.D-71.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.D-71.)

Impact:

T-18: The Project will cause significant impacts associated with emergency access/egress into and out of East Ridge Village. (DEIR, p. IV.D-74.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the significant environmental effect identified in the Final EIR.

Explanation:

The access configuration for the East Ridge Village, as currently proposed, may not provide adequate emergency access/egress. This potential deficiency represents a significant adverse impact. (DEIR, p. IV.D-74.)

The East Ridge Village access configuration is, in effect, a large cul-de-sac with only one way in and one way out. Emergency access to Marble Valley to the east is no longer a part of the specific plan circulation system; therefore, this access roadway will need to accommodate all traffic, even in emergencies. The roadway will need to accommodate emergency vehicles, even if it were partially blocked. (DEIR, p. IV.D-74.)

Mitigation T-18:

To maintain access to the greatest extent possible, provide cross-overs between the two separate travelways at periodic intervals. The frequency of cross-overs will depend on topography, but typically should be provided every 1,800 to 2,000 feet. (DEIR, p. IV.D-74.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.D-74.)

E. PUBLIC FACILITIES AND SERVICES

1. Water Service

Standards of Significance

The Project may be considered to have a significant impact on water service if it will:

- (1) Conflict with applicable plans or policies adopted by agencies with jurisdiction over the project, such that the conflict will lead to decreased environmental protection or increased environmental harm;
- (2) Result in a need for new water systems, or substantial alterations to water services or utilities; and/or
- (3) Contaminate a public water supply, substantially degrade or deplete a groundwater resource, or interfere substantially with groundwater recharge.

Official County policy is that significant impacts relating to the creation of water demand that exceeds existing supplies can be mitigated to a less than significant level through compliance with El Dorado County General Plan policies related to water supply. (DEIR, pp. IV.E-27 - IV.E-28.)

Impact:

PF-1: The lack of reliable long-term water supply is considered a potentially significant cumulative impact.

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant cumulative environmental effect identified in the Final EIR.

Explanation:

According to EID's 1998 projections, the entire EID system has more water than is needed to meet the current demand of 38,428 acre-feet, an approximate 5,672 acre-feet of surplus, of which approximately 1,460 acre-feet of Folsom Lake surplus is available for the El Dorado Hills area in which Valley View is included. This surplus of annual reliable water supply, however, cannot

sustain the projected needs of both anticipated growth and currently Projects within EID, including Valley View. The Valley View project itself is projected to have an annual water supply demand of 2,002 acre-feet, which exceeds the existing surplus water in the EID system. (DEIR, p. IV.E-33.)

The El Dorado County 1997 Public Water Availability Evaluation estimates that the total potential annual water demand for all projects and parcels in EID will be 55,982 acre-feet, which clearly exceeds the current annual reliable water supply of 44,100 acre-feet. The development capacity stipulated in the draft Valley View Specific Plan translates into approximately 2,901 EDUs (2,002 acre-feet). EID's current records indicate that parcels within the project site are currently assigned 906 EDUs additional capacity. Under District Policy, the project cannot receive more than 906 EDUs of water service unless additional EDU entitlements are granted. Therefore, a reliable future water supply for the buildout of the Valley View project has not been acquired or developed by EID. (DEIR, p. IV.E-33.)

Mitigation PF-1:

Require that:

- (a) no final subdivision map, final parcel map, or building permit shall be issued for the project until water meters or equivalent water guarantees for the proposed urban development levels are obtained from EID or other water purveyors, consistent with El Dorado County General Plan Objective 5.1.2 and Policies 5.1.2.1, 5.2.1.2, 5.2.1.3, and 5.2.1.4;
- (b) the project shall incorporate water conservation measures specified in Mitigation Measure PF-3 below; and
- (c) no grading permit shall be issued for the project, or any portion thereof, unless and until the applicant has reached final agreement with EID regarding a fully vested right to water service to the portion of the project site affected by the grading permit.

(DEIR, p. IV.E-34.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.E-34.)

Impact:

PF-2: Project dependency on Potable Water Supply for Irrigation/Landscaping Purposes will cause potentially significant impacts. (DEIR, p. IV.E-35.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant environmental effect identified in the Final EIR.

Explanation:

The project's dependency on EID's limited potable water supply for irrigation purposes is considered a potentially significant impact, given EID's goal of using reclaimed water to reduce potable water needs. (DEIR, p. IV.E-36.)

To reduce the need for potable (treated) water in accordance with the 1994 Water Reclamation Master Plan, EID plans to use reclaimed water from the El Dorado Hills Wastewater Treatment Plant for irrigation of golf courses, parks, and open space. EID desires that the project use reclaimed water for irrigating landscaping for schools, commercial uses, offices, mixed-use open space, and street meridians.

The estimated total annual water demand of the office, commercial, schools and multi-use open space land use components of the Project is approximately 255.8 acre-feet--i.e., approximately 14 percent of the total project demand (excluding unaccounted water demand). Using reclaimed water for the high irrigation demands of these project land use components will substantially reduce the project's total potable demand. The 1-MG Business Park storage tank (water surface elevation of 960 feet), located in the northern central project site area, is in the process of being converted to store reclaimed water from the EDHWWTP and could provide reclaimed water for irrigation to these high irrigation demand land users. To date, however, a reclaimed water supply and use plan has not been developed for the Valley View project.

(DEIR, pp. IV.E-35 - IV.E-36.)

Mitigation PF-2:

In order to ensure adequate use of reclaimed water as a means of reducing its dependence on EID potable water supply, measures (a) through (d) listed below, and shall be completed as a condition of any future project rezoning or subdivision approval (based on General Plan Policy 5.2.1.4).

- (a) Concurrent with the buildout of the Valley View project area, the applicant shall work with EID to develop and provide a reliable reclaimed water supply that can be substantially used by Valley View.

- (b) The applicant shall develop a reclaimed water supply and use plan that will provide for irrigation of landscaping for parks, multi-use open space, school grounds, commercial/office uses, and landscaped median strips. This plan should also consider use of reclaimed water for irrigation of residential landscaping and fire protection, and shall be in place at or prior to approval of the first neighborhood/subdivision of the Valley View Specific Plan.
- (c) The 1-MG Business Park storage tank, currently being converted to store reclaimed water from the EDHWWTP, should be utilized for project site reclaimed water demand.
- (d) All reclaimed water distribution facilities and water lines shall comply with EID requirements as specified below under "Mitigation for Water Distribution Facility Impacts."

(DEIR, p. IV.E-36.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.E-36.)

Impact:

PF-3: The Project does not propose a Drought Contingency and Water Conservation Planning. This omission is considered a potentially significant impact. (DEIR, p. IV.E-38.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant environmental effect identified in the Final EIR.

Explanation:

Water supply for the project will be susceptible to the effects of prolonged droughts. EID obtains a large portion of its water from the U.S. Bureau of Reclamation, which, in times of drought, imposes rationing and cutbacks. The project does not propose a drought contingency plan or a specified water conservation program. (DEIR, p. IV.E-38.)

Mitigation PF-3:

The applicant shall implement water conservation measures to reduce the amount of water used by the project and reduce the potential effects of extended drought conditions. The following measures should be implemented:

- (a) Fit all new homes with low-flow toilets and shower heads.
- (b) Include an individual water meter for each new home.
- (c) For all commercial landscape areas, comply with Water Conservation in Landscaping Act requirements.
- (d) Use drought tolerant and/or native vegetation for commercial landscape areas.
- (e) Use drip irrigation to the greatest extent possible.
- (f) Provide all new home owners with educational and informational literature on drought-tolerant landscaping techniques.
- (g) To the extent that it can be made available, make maximum use of reclaimed wastewater (See also Mitigation Measure PF-2).

(DEIR, pp. IV.E-39 - IV.E-40.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.E-39.)

2. Sewer Service

Standards of Significance

The project may be considered to have a significant impact on sewer service if it will:

- (1) Conflict with applicable plans or policies adopted by agencies with jurisdiction over the project, such that the conflict will lead to decreased environmental protection or increased environmental harm;
- (2) Result in a need for new systems, or substantial alterations to sewer services; or

- (3) Extend a sewer trunk line with capacity to serve new development.

Official County policy is that significant impacts relating to the creation of demand for wastewater capacity beyond what is currently available can be mitigated to a less than significant level through compliance with the County's "Concurrency Policy" (El Dorado County General Plan Objective 5.1.2.

(DEIR, p. IV.E-50.)

Impact:

PF-4: The Project's impacts on existing wastewater flows will be potentially significant. (DEIR, p. IV.E-52.)

Finding:

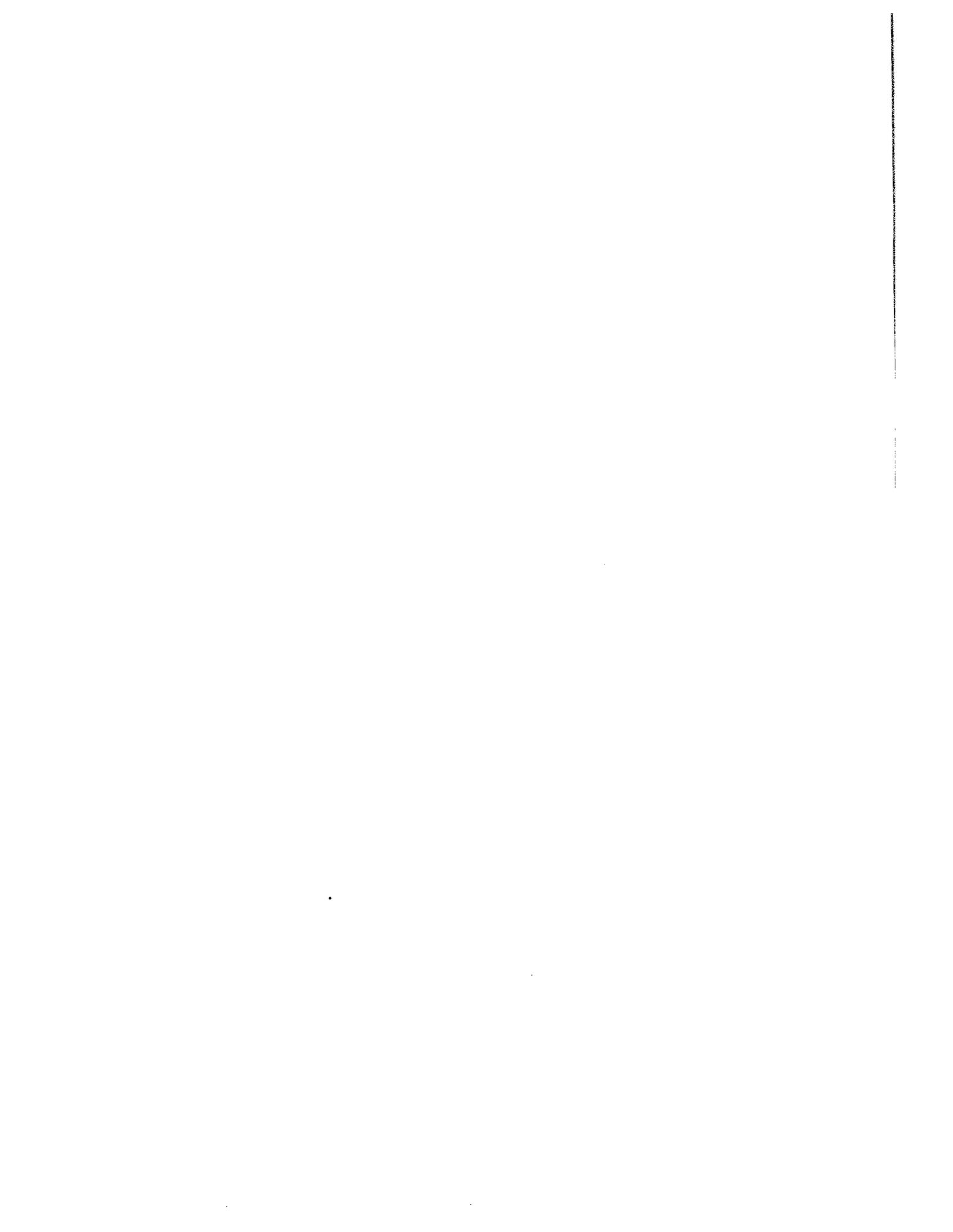
Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant environmental effect identified in the Final EIR.

Explanation:

At full buildout, the project will generate wastewater flows of approximately 0.7 mgd (average dry weather flow) and 2.8 mgd (total peak wet weather flow). There is an insufficient allocation of existing wastewater treatment capacity to accommodate these ultimate wastewater flows. (DEIR, p. IV.E-52.)

Project Wastewater Generation. For purposes of the EIR, it was assumed that development of the project will be phased by village. The Valley View project phasing must coincide with available reliable wastewater capacity and wastewater collection facilities. The estimated average dry weather flows by village are: (1) White Rock: 79,680 gallons per day ("gpd"); (2) West Valley: 451,400 gpd; and (3) East Ridge: 173,280 gpd. The site's current EDU allotment (906 EDUs) will be adequate to serve the wastewater flows of either White Rock or East Ridge Village, but not for full buildout of the project. (DEIR, p. IV.E-52.)

Availability of Wastewater Treatment Capacity. The project wastewater flows are proposed to be routed directly into EID's wastewater collection network for treatment at the EDHWWTP. Currently, the EDHWWTP receives an average dry weather flow of 1.25 mgd and, with a current dry-weather capacity of 1.6 mgd, does not have adequate unused capacity to treat the additional wastewater flows generated by the project at buildout. The El Dorado Hills Master Facilities Plan has outlined a construction sequence for required modifications and upgrading to the existing



facilities in six phases. The currently recommended phased construction sequences identified in Table E-8 of the Draft EIR will ultimately support the future 35,316 EDUs currently anticipated in the El Dorado Hills area by the year 2024. (DEIR, p. IV.E-53.)

In the interim, the expansion of the EDHWWTP facilities to 3.0 mgd is currently underway. The expansion is expected to be completed in December 1998. The District will implement the remaining Facilities Plan recommended expansion phases once additional water rights are secured. The interim increase in capacity of the EDHWWTP to 3.0 mgd will allow the plant to support approximately 12,500 total EDUs, approximately 2.5 times more EDUs than currently served. According to EID, full expanded plant capacity as outlined in the Master Facilities Plan will be ample to handle the wastewater flows of the Valley View project at buildout. (DEIR, p. IV.E-53.)

Historically, the effluent discharged into Carson Creek has exceeded the water quality objectives of the CVRWQCB as detailed in Order No. 95-151. The current focus of concern is mainly on the rate of failure of the sewage collection system rather than the performance of the EDHWWTP. The second-phase ERWQA scheduled for completion in 1999 will characterize the quality of effluent discharge to Carson Creek and identify plant/treatment operational mitigations necessary to reduce constituent concentrations in the discharge. (DEIR, p. IV.E-53.)

Although the planned EID expansions will be able to handle the additional effluent generated by buildout of the project, the number of EDUs currently assured for Valley View is limited by the project's current AD3 entitlement of 906 EDUs, or approximately 217,440 gpd (0.2 mgd), based on the El Dorado Hills Service Area Wastewater Design Criteria, which includes a factor of 240 gallons per EDU per day for a single-family residential unit. The project at ultimate buildout under the specific plan will require a total entitlement of 2,901 EDUs. (DEIR, p. IV.E-53.)

Mitigation PF-4:

Require that no final subdivision map, final parcel map, or building permit shall be issued for the project until EID has demonstrated (in a manner acceptable to the El Dorado Department of Transportation) that adequate wastewater service is available to serve the development in question.

EID and the applicant will likely be required to complete the following actions in order to carry out this mitigation measure.

- (a) EID Actions. EID will be required to complete the proposed phased wastewater capacity and collection system improvements outlined in the Master Facilities Plan in a sequence that provide anticipated development with an adequate wastewater collection, treatment and disposal system.

In order for the completion of the planned interim expansion of the EDHWWTP to occur, EID must complete the second-phase ERWQA and implement the treatment plant operational mitigations identified in the report and by the CVRWQCB. Effluent discharged from EDHWWTP into Carson Creek must adhere to the discharge constraints and water quality objectives outlined in the NPDES permit issued by the CVRWQCB.

To avoid repeated sewage spills into the Carson Creek drainage basin, EID must complete the promised implementation of maintenance and upgrade improvements to its collection system by the year 2002.

(b) Applicant Actions. The applicant will be required to participate in AD12 in order to obtain wastewater service entitlements for additional EDUs beyond the existing 906 EDUs currently allocated to the project site (a total entitlement of 2,901 EDUs will be required to serve specific plan buildout).

In cooperation with EID, the applicant will also likely be required to develop a plan for phasing of project development that is coordinated with planned phasing of wastewater facility improvements and capacity availability. This phasing plan will identify specific development area or neighborhood increments, and correlate these with specific wastewater facilities and treatment capacity improvements that must be in place before development can proceed. Phasing of the development should not exceed allocated EDUs or collection and treatment capacity, as stipulated by El Dorado General Plan Objective 5.3.1.

The applicant will also be required to submit a Facility Plan Report for EID approval, in accordance with EID's Design and Construction Standards (November 1993).

(DEIR, p. IV.E-54; FEIR, p. IV.E-54.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.E-54.)

3. Police Protection

Standards of Significance

The project may be considered to have a significant impact on police protection if it will:

- (1) Result in a need for new or altered police services. The project will be considered to "result in a need for new or altered police services" if it will (a) cause Sheriff's Department response

times for priority calls to exceed eight minutes for 80 percent of the population, or (b) prevent the Department from meeting the Sheriff's department standard of 1.8 sworn officers per 1,000 residents.

- (2) Result in possible interference with an emergency response plan or emergency evacuation plan.

(DEIR, p. IV.E-58.)

Impact:

PF-5: Potentially significant emergency police access impacts may result with the Project. (DEIR, p. IV.E-59.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant environmental effect identified in the Final EIR.

Explanation:

Unless adequate emergency access is provided, police protection could be compromised within the project, resulting in a potentially significant impact. (DEIR, p. IV.E-59.)

Mitigation PF-5:

The applicant shall implement the following measures:

- (a) provide for emergency access adequate to meet adopted County response time standards;
- (b) incorporate County standards for emergency access in project plans, and submit the appropriate maps for approval by the County Sheriff's Department; and
- (c) secure any emergency access gates in a fashion that will allow emergency entry with a minimum of time and effort.

Incorporate these measures in each project increment (individual development plan approval) to Sheriff's Department.

(DEIR, p. IV.E-59.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.E-59.)

4. **Fire Protection and Emergency Medical Services**

Standards of Significance

The project may be considered to have a significant impact on fire protection or emergency medical services if it will:

- (1) Conflict with applicable environmental plans adopted by the agencies with jurisdiction over the project, or policies of the community, such that the conflict will lead to decreased protection against fires or emergency conditions; or increased harm due to fire or emergency conditions.
- (2) Result in a need for new or altered fire protection or emergency medical services. The project will be considered to “result in a need for new or altered services” if it will cause the Fire District (a) to exceed an eight minute response time of five minutes to 80 percent of the population, the standard established by the El Dorado County General Plan.
- (3) Result in possible interference with an emergency response plan or emergency evacuation plan.

(DEIR, p. IV.E-63.)

Impact:

PF-6: The Project will have potentially significant fire protection and emergency medical services demand and phasing impacts. (DEIR, p. IV.E-63.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant environmental effect identified in the Final EIR.

Explanation:

The EDHFD will require additional staffing and equipment, and probably a new fire station, to provide fire protection and emergency medical response to the project adequate to meet adopted County and EDHFD goals and standards. Unless provided as needed, the project will cause a potentially significant impact on fire protection and emergency medical services. (DEIR, p. IV.E-63.)

EDHFD's Five-Year Plan includes a proposal to develop a new fire station in the El Dorado Hills Business Park (across from the project site). The Project will increase the need for the Business Park Station. The new station will be staffed with nine new firefighters and two new fire engines. The Valley View Fiscal Impact Study prepared by EPS for the County indicates that revenues generated by the project will be adequate to pay for increased project-related fire protection needs. Increased fire protection and emergency medical services will need to be phased adequately to meet increased demands as they occur over the project buildout period. (DEIR, p. IV.E-63.)

Mitigation PF-6:

The applicant-prepared Public Facilities Financing Plan (PFFP) shall specify phasing of fire protection services and facilities, for review and approval by the EDHFD. Also, the applicant shall be required to comply with applicable development fees and with the site and building design features requirements identified below under (b) to reduce fire hazards.

- (a) Public Services and Facilities Plan. The PFFP should specify how fire protection and emergency medical services will be phased to meet project needs as determined by the EDHFD. A mechanism should be established to ensure that staffing, equipment, and facility needs will be fulfilled to maintain adopted service standards throughout the various phases of the project. The PFFP should also consider a funding mechanism for the ongoing maintenance of the onsite open space.

- (b) Site and Building Design ~~Features~~ Requirements. The project shall comply with current adopted site and building design performance standards and prepare a Fuel Modification Plan in order to reduce identified fire protection and EMS response time impacts to less than significant levels. To meet current adopted standards, the applicant shall implement the following:
 - Roofing Materials. Use non-combustible (Class “A”) roofing materials (clay tiles, concrete tiles, fiberglass shingles, and certain metal tiles), as required by state law.

 - Signs and Addresses. To facilitate locating a fire and to avoid delays in response, all newly constructed or approved roads, street, and buildings shall be designated by names or numbers, posted on signs clearly visible and legible from the roadway.

- Fuel Modification Plan. Prepare a Fuel Modification Plan that specifies fire buffers and fire breaks. Incorporate such buffers and breaks into tentative subdivision maps as determined necessary by the EDHFD. Submit these plans to the El Dorado County Planning Department for review to also ensure that any adverse biological impacts that may result from the incorporation of such fire protection measures are avoided. The Fuel Modification Plan should also be submitted to the entity that would be responsible for ongoing maintenance of onsite open space.
- Gates. If gates are included, gate entrances shall be at least two feet wider than the width of the traffic lane(s) serving the gate. All gates providing access from a road to a driveway shall be at least 30 feet from the roadway and shall open to allow a vehicle to stop without obstructing traffic on that road. Where a one-way road with a single traffic lane provides access to a gated entrance, a 40-foot turning radius shall be provided.
- Installation of Roadways and Hydrants Prior to Building Construction. Install EDHFD- and EID-approved roadways and fire hydrants prior to construction of buildings.

(DEIR, p. IV.E-64; FEIR, p. IV.E-64.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.E-64.)

Impact:

PF-7: The project will cause potentially significant emergency fire protection and medical access impacts. (DEIR, p. IV.E-65.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant environmental effect identified in the Final EIR.

Explanation:

No specific circulation plans are available at this stage of the planning process to determine the emergency access adequacy, and no specific guidelines are included in the project application. Currently, the County Board of Supervisors has approved an emergency access to the project site

from the Marble Valley site, adjacent to the project on the east. Unless two permanent access roads are provided onsite during all phases of construction and thereafter, fire protection and emergency medical service response could be compromised within the project, resulting in a potentially significant impact. (DEIR, p. IV.E-65.)

Mitigation PF-7:

Require the applicant to develop and submit a Fire Safety Plan for review and approval by the El Dorado County Department of Transportation, the El Dorado Hills Fire District, and the California Department of Forestry. The Fire Safety Plan shall provide for adequate emergency access by providing a minimum of two permanent access roads during and after all phases of development, or an alternative access provision acceptable to the reviewing agencies. The plan shall incorporate standards contained in the State Fire Safe Regulations and the current El Dorado County Department of Transportation Design Standards Manual in all circulation plans.

The DOT Design Standards Manual specifies provision of:

At least two connections with an existing, improved public street, or with a future street extension approved by the Planning Commission or the Board, shall be provided, except when a proposed subdivision only contains one cul-de-sac street that is less than 500 feet in length in which case the one connection is sufficient. When the secondary access is to be provided, with a future street extensions, then a temporary exit road or acceptable alternative may be required, and approved by the Planning Director, with a favorable recommendation from the responsible fire agencies.

(DEIR, p. IV.E-65; FEIR, p. IV.E-65.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.E-65.)

5. Parks and Recreation

Standards of Significance

The project may be considered to have a significant impact on parks and recreation services if it will:

- (1) Conflict with applicable environmental plans pertaining to parks and recreation as adopted by the agencies with jurisdiction over the project, or policies of the community, where conflict with plans will have a negative impact on the physical environment.
- (2) Increase the demand for neighborhood or regional parks or other recreational facilities. The project will be considered to create a significant additional local park demand if it will fail to meet established park standards (i.e., 5.0 acres of park land per 1,000 residents).
- (3) Affect existing recreational opportunities.

(DEIR, p. IV.E-70.)

Impact:

PF-8: The Project's lack of participation in the Latrobe Road Trail will result in significant impacts. (DEIR, p. IV.E-71.)

Findings:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the significant environmental effect identified in the Final EIR.

Explanation:

The draft Valley View Specific Plan states on page 56 that "Bicycle and pedestrian paths will be developed within the collector street system of ...[West Valley] and White Rock Villages leading to the entrances at White Rock Road and the Village Center. These routes will also link neighborhoods to the two schools which are planned within each village. Bicycle paths will be installed both in the right-of-way as Class 2 facilities and, where feasible, within adjacent open space and greenbelt areas." The project does not include provisions for implementation of the Latrobe Trail along the frontage of the project site. Given the need for widening of Latrobe Road due to the project and cumulative development in the area, and the increase in the demand for trails that will be expected to result from the project, the lack of project participation in the implementation of the Latrobe Trail is considered a significant impact. (DEIR, p. IV.E-71.)

Mitigation PF-8:

Revise the Specific Plan to include a bicycle and pedestrian trail along the portion of Latrobe Road adjacent to the project site consistent with El Dorado County and El Dorado Hills CSD standards. (DEIR, p. IV.E-71.)

The El Dorado Hills Community Services District recommends that the bicycle and pedestrian trail along Latrobe Road be a Class I Bicycle Path. (FEIR, p. IV.E-71.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.E-71.)

6. Schools

Standards of Significance

The project may be considered to have a significant impact on schools if it will:

- (1) Conflict with applicable environmental plans pertaining to schools as adopted by the agencies with jurisdiction over the project, or policies of the community.
- (2) Result in a need for new or altered school services.
- (3) Propose a school site that fails to meet applicable State of California site selection standards (listed in section b.2 above) or BUSD standards for school facilities.

(DEIR, p. IV.E-77.)

Impact:

PF-9: Project impacts on BUSD elementary and middle school facilities will be significant. (DEIR, p. IV.E-78.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the significant environmental effect identified in the Final EIR.

Explanation:

School fees will most likely be collected in the amounts permitted by State law; however, it is not anticipated that these State-limited fees will be adequate to fund the complete site preparation and facility construction costs for the needed elementary and middle school facilities. The Valley View Specific Plan includes a Specific Plan Administration chapter that calls for a Project Facilities

Financing Plan (PFFP) that identifies potential financing mechanisms for school facilities. Unless the PFFP includes provisions for those elementary and middle school construction costs that exceed the impact fee revenue, elementary school facilities could not be constructed as needed onsite, middle school capacity could not be provided offsite, and capacities will therefore be inadequate. General Plan policy 5.8.1.1 requires an applicant to enter into a written agreement with the school districts affected to mitigate the project impacts to school facilities or demand thereof. (DEIR, p. IV.E-78.)

Unless adequate funding were available to finance school preparation and facility construction, the BUSD elementary and middle school capacity needed over the project buildout period (nine to 11 years) to ultimately accommodate the 1,295 elementary school students and 387 middle school students generated by the project could not be provided, resulting in a significant impact on BUSD schools. (DEIR, p. IV.E-78; FEIR, p. IV.E-78.)

Mitigation PF-9:

The applicant shall implement each of the following mitigation measures:

- (a) Consistent with General Plan Policy 5.8.1.1, enter into a written agreement with the BUSD to mitigate the project impacts on school facilities or the demand therefor;
- (b) Include measures in the PFFP that will ensure to El Dorado County's and the BUSD's satisfaction, that adequate funding will be available for school facilities when needed;
- (c) Determine and identify in the PFFP when elementary school facilities will be needed onsite and when additional middle school space will be needed offsite to serve proposed development. Require that locations of necessary schools be formalized concurrent with future tentative map approvals. Access, configuration, size, useable space and basic infrastructure needs (including timing and delivery of utilities) should also be determined at this time; and
- (d) Prior to issuance of building permits for units in the various phases of the project, secure written verification from the BUSD guaranteeing that adequate elementary and middle school space will be provided in schools on- or off-site.

(DEIR, p. IV.E-78.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.E-78.)

Impact:

PF-10: Project impacts on EDUHSD high school capacity is significant. (DEIR, p. IV.E-79.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the significant environmental effect identified in the Final EIR.

Explanation:

The project will contribute to the need for a new high school in El Dorado Hills. Unless the project's fair-share of funding for construction of a new high school were provided and unless it were demonstrated that adequate school capacity will be available by the time of occupancy of units to be constructed in the various phases of the project, capacity for project-generated high school students will be inadequate. It is not anticipated that the adopted school impact fee will be sufficient to cover the cost of providing adequate facilities to serve the 578 project-generated high school students. This impact will be significant. (DEIR, p. IV.E-79; FEIR, p. IV.E-79.)

Mitigation PF-10:

The applicant shall implement each of the following four mitigation measures:

- (a) Consistent with County General Plan Policy 5.8.1.1, enter into a written agreement with the EDUHSD to mitigate the impact of the project on school facilities;
- (b) Include measures in the project PFFP to ensure to El Dorado County's and the EDUHSD's satisfaction, that the project will provide its fair-share of funding for additional high school capacity when needed;
- (c) Determine and identify in the PFFP when high school capacity will be needed to serve the various phases of proposed development; and
- (d) Prior to issuance of building permits for units in the various phases of the project, secure written verification from the EDUHSD guaranteeing that adequate high school space will be provided for project-generated high school students.

(DEIR, p. IV.E-79.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.E-79.)

Impact:

PF-11: **The Project will result in significant impacts to elementary school sites.** (DEIR, p. IV.E-81.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the significant environmental effect identified in the Final EIR.

Explanation:

The two elementary school sites proposed under the Specific Plan do not appear to meet State school facility site selection standards and/or BUSD standards. Unless these school sites were modified/relocated to conform to State and District Standards, the project will result in a significant impact. (DEIR, p. IV.E-81.)

Choosing a school site also requires that facilities within one-quarter mile of the proposed site, which might reasonably be anticipated to emit hazardous emissions or handle hazardous materials, be identified. The El Dorado County Air Pollution Control District has determined that five such sites exist within one-quarter mile of the project boundaries. (DEIR, p. IV.E-81; FEIR, p. IV.E-81.)

Mitigation PF-11:

The applicant shall implement the following measures:

- (a) relocate the White Rock Village elementary school site to a location away from the onsite earthquake fault, and reconfigure the site as necessary to satisfy BUSD criteria regarding a square or rectangular in shape;
- (b) reconfigure the West Valley Village elementary school site as necessary to satisfy BUSD criteria regarding a square or rectangular in shape;
- (c) provide information for each site adequate for the lead agency to make determinations regarding site-related hazardous materials and hazardous wastes pursuant to PRC 21151.8; and

- (d) identify facilities within one-fourth of a mile of the proposed school sites that might reasonably be anticipated to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste and determine health risks as required under PRC 21151.8.

(DEIR, p. IV.E-82; FEIR, IV.E-82.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.E-82.)

F. BIOLOGICAL RESOURCES

Standards of Significance

Based on CEQA Guidelines, the project will be considered to have a significant impact on biological resources if it will:

1. Reduce the number or restrict the range of an endangered, rare or threatened species;
2. Interfere substantially with the movement of any resident or migratory fish or wildlife species;
3. Substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, or threaten to eliminate a plant or animal community; or
4. Conflict with applicable plans or policies adopted by the agencies with jurisdiction over the project such that an adverse environmental impact will be created.

(DEIR, pp. IV.F-20 - IV.F-21.)

Impact:

BR-1: The Project will have potentially significant impacts associated with increased presence of invasive non-native plant species. (DEIR, p. IV.F-.22)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant environmental effect identified in the Final EIR.

Explanation:

The presence of human development and related land disturbances associated with the project will lead to the increased presence of weedy, opportunistic, and invasive non-native plant species. These introduced species will tend to rapidly colonize disturbed areas, further reducing the number and diversity of naturally occurring local plant species. According to page 92 of the Valley View Specific Plan, non-native trees and shrubs will replace native vegetation along the project roads to create "... a tidy manicured appearance year round with minimal maintenance and low water consumption." The majority of plant species recommended in the landscaping section of the Valley View Specific Plan are either non-native or do not occur in the natural habitats found in the Valley View area. This impact will be potentially significant. (DEIR, p. IV.F-22.)

Mitigation BR-1:

The applicant shall revise the Specific Plan to:

- (a) state that native plant species will be encouraged for landscaping to the extent possible, and will be required where landscaping borders oak woodlands and oak savannah communities, and in riparian and wetland buffer zones;
- (b) prevent the introduction of invasive non-native vegetation, implement revegetation and erosion control measures in a timely manner following construction;
- (c) incorporate measures to control invasive non-native species into the Specific Plan's landscape, restoration and habitat management plans; and
- (d) use caution when selecting any non-native plants for landscaping purposes on the site to ensure that no potentially invasive plant species are selected. The current Specific Plan Landscape Plan objectives of "... minimal maintenance and low water consumption ..." are worthwhile and could be achieved using native plants.

(DEIR, p. IV.F-26.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.F-26.)

Impact:

BR-2: The Project will cause loss of non-native annual grassland habitat, resulting in a potentially significant impact. (DEIR, p. IV.F-26.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant environmental effect identified in the Final EIR.

Explanation:

The loss of approximately 907 acres of non-native grassland onsite will decrease foraging habitat for a variety of birds, mammals, and reptiles. Birds, especially raptors, depend on the open grassland and adjacent oak savannah to forage. They will be expected to use adjacent habitat, provided that it exists, and some raptors are able to coexist with nearby development. All raptor and songbird species will, however, be affected while construction is occurring. Although some species will be expected to return in reduced numbers, the majority of the species will not return due to loss of suitable habitat. Grassland habitat is also used by mammals, amphibians, and reptiles. The smaller less mobile species will be destroyed, whereas the larger, mobile species will attempt to recolonize the remaining nearby habitat. In any case, the species that survive construction will be forced to forage elsewhere. The loss of grassland, the foraging habitat for some raptors and songbirds, will not constitute a significant impact due to the foraging habitat available in adjacent areas. The loss for grassland mammals, reptiles, and amphibians will, however, be significant if corridor access to other adjacent areas is not available. The loss of non-native grassland habitat represents a potentially significant impact of the project. (DEIR, p. IV.F-26.)

Mitigation:

The applicant shall implement the following measures to avoid or minimize impacts of non-native annual grassland losses on both common and sensitive plant and wildlife species:

- (a) preserve grassland habitat in contiguous areas where possible to minimize fragmentation and maximize retention of habitat functions and values; and
- (b) use temporary fencing and/or protective signage to prevent construction impacts and unauthorized access to grasslands and associated wildlife corridors not planned for development.

(DEIR, p. IV.F-27.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.F-27.)

Impact:

BR-3: The Project will cause loss of oak woodland/oak savannah habitats, resulting in a significant impact. (DEIR, p. IV.F-28.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the significant environmental effect identified in the Final EIR.

Explanation:

The project-related loss of substantial oak woodland and oak savannah habitat (317 and 164 acres respectively) will be a significant loss of oak trees, and a significant habitat loss to many bird and mammal species. Several songbirds use the oaks for foraging, nesting and cover, while raptors use these trees as crucial roosting and nesting habitat. Portions of these existing oak communities will be fragmented by development-related removal of oak trees from currently uninterrupted stands. Any tree loss, whether individually standing or as part of a woodland, will impact these bird species. The loss of nests will impact reproductive success, while the loss of roosts and cover will displace individuals and decrease survivorship. These effects represent a significant impact of the project. (DEIR, p. IV.F-28.)

Mitigation:

The applicant shall implement the following:

- (a) conduct pre-construction surveys for raptor and songbird nests, and bat roosts;
- (b) limit development within the canopy of existing oak trees in the oak woodland, oak savannah, and non-native grassland whenever possible to retain the maximum feasible number of oak trees;
- (c) concentrate development and open space in contiguous areas to minimize fragmentation and maximize habitat value;

- (d) where oak woodland and oak savannah impacts are unavoidable, replant oaks at a rate of 5-to-1 (as specified by CDFG) as detailed in the Tree Replacement Plan specified under Mitigation Measure BR-4 below; and
- (e) implement the Tree Replacement Plan prior to any construction activities that will adversely affect oaks.

(DEIR, p. IV.F-29.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.F-29.)

Impact:

BR-4: During construction, there will be a reduction of the habitat quality of oak woodland, resulting in a potentially significant impact. (DEIR, p. IV.F-31.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant environmental effect identified in the Final EIR.

Explanation:

Damage to oak trees and other mature trees preserved within the oak woodland and oak savannah communities may occur the Valley View Specific Plan area. Construction impacts could include

- (a) damage to the root systems by earth-moving equipment,
- (b) storage of construction materials and/or dumping within the dripline of the trees,
- (c) trimming of tree branches,
- (d) the siting of infrastructure improvements, homes, and commercial structures too close to the dripline of the trees, and
- (e) trimming of tree branches.

These activities represent a potentially significant impact of the project. (DEIR, p. IV.F-31.)

Mitigation:

The applicant shall implement the following:

- (a) protect the existing oak trees within the oak woodland, oak savannah, and non-native grassland during construction; and
- (b) implement the Tree Replacement Plan prior to any construction activities that will adversely affect oaks.

(DEIR, p. IV.F-31.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.F-31.)

Impact:

BR-5: The Project will result in the loss of riparian areas, a significant impact. (DEIR, p. IV.F-33.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the significant environmental effect identified in the Final EIR.

Explanation:

Approximately 1.6 acres of Carson Creek and Plunkett Creek riparian area will be developed with bridge structures. The resulting potentials for destruction or alteration of existing riparian areas could potentially impact the health and survival of birds, reptiles, amphibians, and invertebrates in the riparian areas, especially on Plunkett Creek. The creation of ad-hoc trails through riparian areas may also be detrimental. Many invertebrates, especially insects, use the trees and shrubs within riparian areas, attracting birds and bats. Reptiles and amphibians may use riparian areas for foraging, reproduction, cover, and estivation during the dry season. Such alteration of riparian vegetation onsite will represent a significant impact on biological resources. (DEIR, p. IV.F-33.)

Mitigation:

The applicant shall implement the following measures to mitigate impacts on riparian areas:

- (a) construct creek crossings in locations which minimize riparian vegetation disturbance,
- (b) provide buffers,
- (c) limit activities in buffer zones, and
- (d) protect riparian habitat.

At a minimum, mitigation should conform to El Dorado County General Plan Policy 7.3.3.2, which requires avoidance of any net loss of riparian vegetation associated with wetlands. In addition, implement Mitigation Measure BR-6 (see below).

(DEIR, p. IV.F-33.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.F-33.)

Impact:

BR-6: The proposed landscape plan will cause potentially significant impacts on riparian areas. (DEIR, p. IV.F-34.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant environmental effect identified in the Final EIR.

Explanation:

The proposed Valley View landscape plan includes the use of non-native species in drainage areas where enhanced naturalized plantings are desirable. Local wildlife is adapted to use native riparian vegetation, and may be unable to use exotic species. The use of non-native species in a riparian area is inconsistent with El Dorado County General Plan Objective 7.3.4, which calls for the protection and use of natural drainage patterns such that natural watercourses should be integrated into new development so that they enhance the aesthetic and natural character of the site without disturbance. Non-native plantings will result in the disturbance and alteration of the natural riparian plant and wildlife community, and will represent a potentially significant impact to riparian woodland and associated plants and animals. (DEIR, p. IV.F-34.)

Mitigation:

The applicant shall implement the following: plant locally occurring native species (willows, alders, oaks) in riparian areas and adjacent buffer zones rather than non-native trees and shrubs. At a minimum, mitigation should conform to El Dorado County General Plan Policy 7.3.3.2, which requires avoidance of any net loss of riparian vegetation associated with wetlands. (DEIR, p. IV.F-34.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.F-34.)

Impact:

BR-7: The reduction of habitat quality of riparian areas during construction will be a potentially significant impact. (DEIR, p. IV.F-35.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant environmental effect identified in the Final EIR.

Explanation:

The two riparian communities that exist onsite (Great Valley Mixed Riparian and Cottonwood Willow Riparian) may be affected during project construction. Impacts on riparian woodland during construction may include damage to root systems by earth-moving equipment, storage of construction materials, dumping within the dripline of the trees, siting of infrastructure improvements within the dripline of the trees, as well as trimming of tree branches, and degradation of water quality. These construction related activities represent a potentially significant impact. (DEIR, p. IV.F-35.)

Mitigation :

The applicant shall implement the following measures:

- (a) protect riparian habitats with temporary fencing during construction;
- (b) permanently fence riparian corridors and a buffer zone extending 50 feet out from the riparian canopy;

- (c) not disturb riparian zone vegetation during construction;
- (d) prevent erosion, sedimentation, and urban runoff into the riparian corridors; and
- (e) consult with CDFG regarding the possible need for a Streambed Alteration Agreement. At a minimum, mitigation should conform to El Dorado County General Plan Policy 7.3.3.2, which requires avoidance of any net loss of riparian vegetation associated with wetlands. In addition, implement Mitigation Measure BR-6.

(DEIR, p. IV.F-35.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.F-35.)

Impact:

BR-8: The Project will cause a loss of wetlands, a significant impact. (DEIR, p. IV.F-36.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the significant environmental effect identified in the Final EIR.

Explanation:

The jurisdictional wetlands determination conducted on the site by the USACE in 1997 identified 14.47 acres of jurisdictional wetlands within the project area. The applicant's biologists indicate that the project will impact approximately 1.93 acres of jurisdictional wetlands. The destruction or alteration of existing wetland areas will significantly impact the health and survival of birds, reptiles, amphibians, and invertebrates. Perennial and intermittent streams, seeps, and other seasonal wetlands (14.39 acres), and vernal pools (0.08 acre) are necessary for survival of these specialized species, and the loss of that habitat will eliminate these species on the project site. Reptiles and amphibians require a variety of wetland types for foraging, reproduction, cover, and estivation during the dry season. Several songbirds use these areas for cover, nesting and foraging. Destruction of these wetland areas will mean the direct elimination of these species on the project site and thus will contradict the "no net loss" policy of the USACE. This impact will be significant. (DEIR, p. IV.F-36.)

Mitigation :

The applicant shall implement the following measures:

- (a) redesign the project to avoid filling wetlands, or
- (b) prepare a Wetlands Mitigation Plan and replace wetland habitat in-kind and on-site at a minimum 1:1 replacement ratio in conformance with County Policy 7.3.3.2 of no net wetland loss and based on consultation with the Army Corps of Engineers and Regional Water Quality Control Board. The County should review and approve a mitigation plan approved by the USACE and Regional Water Quality Control Board. Vernal pools, however, because of their special soil requirements, are often better mitigated by utilizing a local, but offsite mitigation bank specifically developed to provide vernal pool habitat (Mitigation Measure BR-10 which follows). Preparation of the Wetland Mitigation Plan and implementation of this plan shall be carried out by a qualified wetland revegetation specialist in a timely manner. Address indirect post-construction impacts on wetlands by clearly written CC&Rs provided to homeowners.

(DEIR, p. IV.F-37.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.F-37.)

Impact:

BR-9: The reduction of habitat quality of wetlands during construction will be a potentially significant impact. (DEIR, p. IV.F-38.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant environmental effect identified in the Final EIR.

Explanation:

Damage to wetlands onsite may occur during the construction of the proposed development, even though many wetlands are out of the planned development areas. Impacts may include damage to the existing wetland vegetation by earth-moving equipment, storage of construction materials and

dumping within wetlands, and inadvertent placement of fill material in wetlands. This impact will be potentially significant. (DEIR, p. IV.F-38.)

Mitigation :

The applicant shall be responsible for mitigating impacts on wetlands during construction by implementing protective buffer zone construction fencing of sensitive habitat. Provide a 50-foot buffer zone as recommended in the El Dorado County General Plan EIR, measured from the edge of the jurisdictional wetland. Keep all construction vehicles and supplies out of these fenced areas. (DEIR, p. IV.F-40.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.F-40.)

Impact:

BR-10: The Project will cause a significant loss of vernal pool habitat. (DEIR, p. IV.F-40.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the significant environmental effect identified in the Final EIR.

Explanation:

Project-related destruction of 0.08 acre of existing vernal pool areas in the western portion of the project site could significantly affect the health and survival of certain invertebrates endemic to this habitat. Both the vernal pool fairy shrimp and the vernal pool tadpole shrimp are federally protected species; and the presumption of their presence requires Section 7 (Endangered Species Act) consultation. Vernal pools are necessary for survival of these specialized species, and the loss of that habitat will eliminate these species on the project site. Several songbirds also use these areas for cover, nesting, and foraging. Destruction of 0.08 acre of vernal pools in the western section of the project area will represent a significant impact. (DEIR, p. IV.F-40.)

Mitigation :

The applicant shall implement the following:

- (a) obtain a Section 404 permit from the USACE for vernal pool wetland losses,
- (b) conduct Section 7 consultation for listed vernal pool crustacean species losses, and
- (c) purchase credit in a certified vernal pool mitigation bank at a ratio consistent with measures and conditions determined during the Section 7 consultation. At a minimum, the mitigation bank credit purchase should be consistent with the County's wetland no-net-loss policy (Policy 7.3.3.2), and avoid a reduction in the number, or restriction in the range of, endangered, rare or threatened species associated with these vernal pools.

(DEIR, p. IV.F-40.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.F-40.)

Impact:

BR-11: The Project will cause a potentially significant impact on vernal pool crustaceans. (DEIR, p. IV.F-42.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant environmental effect identified in the Final EIR.

Explanation:

Rain-filled depressions and vernal pools potentially inhabited by the vernal pool fairy shrimp (federal threatened species) and vernal pool tadpole shrimp (federal endangered species) will be lost due to the proposed development, representing a potentially significant impact. (DEIR, p. IV.F-42.)

Mitigation :

The applicant is assuming presence of vernal pool crustaceans on site and shall:

- (a) initiate Section 7 consultation with USFWS for listed vernal pool crustacean species losses, and

- (b) purchase credit in a certified vernal pool mitigation bank at a ratio consistent with measures and conditions determined during Section 7 consultation. At a minimum, the mitigation bank credit purchase should be consistent with the County's wetland no-net-loss policy (Policy 7.3.3.2), and avoid a reduction in the number, or restriction in the range of, endangered, rare or threatened species associated with these vernal pools.

(DEIR, p. IV.F-42.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.F-42.)

Impact:

BR-12: The Project will cause potentially significant impacts on bats. (DEIR, p. IV.F-43; FEIR, p. IV.F-43.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant environmental effect identified in the Final EIR.

Explanation:

Bats require specific temperature and humidity ranges in their roosts to survive winter hibernation and daily torpor. Many tree roosting species in California are CDFG Species of Special Concern or federal Species of Concern. The project will result in the loss of oak and pine snags and hollow trees to development, which provide potential roost habitat for bats. This represents a potentially significant impact. (DEIR, p. IV.F-43.)

Mitigation:

The applicant shall implement the following:

- (a) avoid potential roost trees (e.g. those supporting cavities) to the extent possible;
- (b) within or adjacent to open space areas, leave snags in place wherever feasible (without compromising human safety); and

- (c) to the extent possible, conduct planned tree removal outside of the bat maternity period, which extends from approximately May 1 through August 31, and before hibernation begins, approximately October. The County should review and approve mitigation measures developed in consultation with and approved by the CDFG.

(DEIR, p. IV.F-43.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.F-43.)

Impact:

BR-13: The Project may cause potentially significant impacts on raptors. (DEIR, p. IV.F-43 ;FEIR, p. IV.F-43.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant environmental effect identified in the Final EIR.

Explanation:

Large trees and areas of oak savannah and oak woodland that may provide nesting habitat for several species of raptors (many of which are CDFG Species of Special Concern) will be lost to the proposed development. Active raptor nests are protected by state and federal laws. The project could involve construction activities near active raptor nests, or the removal of trees in which active raptor nests are located (which could violate state and federal laws). This impact is potentially significant. (DEIR, p. IV.F-43.)

Mitigation:

The applicant shall hire a qualified biologist to implement the following:

- (a) conduct a pre-construction survey effort to determine active nest locations between March and June; and
- (b) describe the locations of any active raptor nests and, in consultation with CDFG, establish appropriate buffers. The applicant shall also be responsible for ensuring that disturbance to active raptor nests due to construction activity is avoided during the breeding season.

(DEIR, p. IV.F-44.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.F-44.)

Impact:

BR-14: The Project may cause potentially significant impacts on the valley elderberry longhorn beetle. (DEIR, p. IV.F-45 ;FEIR, p. IV.F-45.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant environmental effect identified in the Final EIR.

Explanation:

Elderberry shrubs and trees potentially inhabited by the federal threatened valley elderberry longhorn beetle (VELB) will be lost due to the proposed development, representing a potentially significant impact. USFWS policy regarding the VELB is to consider all habitat (i.e. elderberry shrubs) within the geographic range of the beetle as potentially-occupied habitat. (DEIR, p. IV.F-45.)

Mitigation :

The USFWS considers all elderberry shrubs directly affected by construction as “directly impacted” and all shrubs that are within 100 feet of disturbance activities as “indirectly impacted.” All affected shrubs require compensation, as is outlined in the USFWS guidelines, Mitigation Guidelines for the Valley Elderberry Longhorn Beetle (dated September 19, 1996). The applicant shall consult with the USFWS during the Section 7 process to determine mitigation requirements. Some or all of the VELB mitigation may (also) need to proceed under Section 10 of the Endangered Species Act. (DEIR, p. IV.F-45.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.F-45.)

Impact:

BR-15: The Project may cause potentially significant impacts on adjacent open space/habitat areas due to the increased human presence. (DEIR, p. IV.F-45; FEIR, p. IV.F-45.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant environmental effect identified in the Final EIR.

Explanation:

The increase in human presence onsite could result in a potentially significant impact on the adjacent open space/habitat areas. The increased human access and use of the open spaces could disrupt these remaining habitat areas. Additions such as roads and trails, even if unpaved or used by only a few individuals, can fragment existing habitat. Human refuse, such as garden clippings, car fluids, chemicals, machinery, and incidental trash, could contribute to the degradation of habitat quality. Domestic pets, especially cats, could become feral and do significant damage to native populations of birds, small mammals, and reptiles. Many open spaces bordering on residential areas could suffer significant wildlife casualties, especially to ground-nesting birds, due to feral cats. These anticipated post-construction human disturbances could represent a potentially significant impact of the project. (DEIR, p. IV.F-45.)

Mitigation:

Human access and usage of the project site needs to be limited both during and after construction. The applicant shall implement the following:

- (a) design an integrative plan to limit use and educate the new community about open space preservation;
- (b) restrict access in the open space areas, especially in regard to the creation of trails and roads which fragment existing habitat, even if they are unpaved;
- (c) discourage mountain biking and off-road vehicles and limit access for hikers;
- (d) prohibit human refuse within the open space; and
- (e) post signs at appropriate access locations at the development/natural habitat boundary to inform residents of the impacts to wildlife communities resulting from feral animals, to

encourage them to notify County Animal Control of sightings, and to inform them of county leash laws.

(DEIR, p. IV.F-46.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.F-46.)

Impact:

BR-16: **The project will cause a cumulatively considerable incremental contribution to significant cumulative biological impacts due to regional development.** (DEIR, p. IV.F-46; FEIR, p. IV.F-46.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley Views Specific Plan that substantially lessen, but do not avoid, the project's cumulatively considerable incremental contribution to the significant environmental effect associated with loss of habitat impacts throughout the County due to planned development. No mitigation is available to render the project's contribution less than cumulatively considerable, or the larger effect less than significant. The effect therefore remains significant and unavoidable.

Explanation:

There are currently three development projects in the Valley View vicinity totaling approximately 5,552 acres that have been approved and are either under construction or have been completed and occupied. An additional 14 projects in the vicinity totaling 7,067 acres have been approved, but remain unbuilt. Two projects totaling 3,340 acres have been proposed but have not been approved. If all 19 projects totaling nearly 16,000 acres are completed, the likely result will not only be the direct loss of existing wildlife habitat, but also additional degradation of remaining habitats through fragmentation of wildlife corridors, increased intrusion by humans and pets, introduction of exotic plants and animals, and increased noise, water, and air pollution. Considered together, these projects could result in a significant cumulative impact. (DEIR, p. IV.F-46.)

Mitigation :

To the extent that projects in the Valley View vicinity provide mitigation measures similar to those proposed for the Valley View project in the Draft EIR, such as maintaining wildlife corridors,

avoiding sensitive areas, such as wetlands, woodlands, and special status species habitats, and limiting impacts primarily to low habitat value non-native grassland, the cumulative biological impacts will be reduced. (DEIR, p. IV.F-46.)

Significance after Mitigation

Significant and unavoidable. (DEIR, p. IV.F-46.)

G. GEOLOGY AND SOILS

Standards of Significance

According to the CEQA Guidelines, exposure of people or structures to major geological hazards should be considered a significant adverse impact. The project may be considered to have a potentially significant impact if:

- (1) aspects of the project, such as grading, will alter existing geologic conditions on the site or in the surrounding area in a manner that may create unstable geologic conditions that will expose people and improved property to significant geotechnical hazards and that will last beyond the short-term construction period; or
- (2) the project will expose people and improved property to significant hazards or will present significant engineering or construction limitations due to factors such as underlying geologic soils conditions or regional seismic conditions.

(DEIR, pp. IV.G-13 - IV.G-14.)

Impact:

SG-1: The Project may cause landslide/soil creep hazards, a potentially significant impact. (DEIR, p. IV.G-14.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant environmental effect identified in the Final EIR.

Explanation:

The field reconnaissance revealed a moderate potential impact from soil creep and/or landslides within the west-facing slope in the central portion of the White Rock and West Valley Villages. The slope to the east of the abandoned landfill in the south part of West Valley Village also has minor landsliding and creep. Landslides may be present within the wooded areas of East Ridge Village, along the western flank of the ridge that traverses this portion of the site. Areas of oversteepened slopes undergoing soil creep and/or landsliding must be addressed during project grading operations, as cut slopes could alter current slope stability. Existing landslides and soil creep in the central portion of the White Rock Village, the central and southern portions of the West Valley Village, and the wooded areas of the East Ridge Village have the potential to pose hazards to future project occupants. This possibility represents a potentially significant impact. (DEIR, p. IV.G-14.)

Mitigation SG-1:

Require the project applicant to conduct a detailed onsite geologic and geotechnical investigation prior to tentative subdivision map approval. This investigation should identify landslide activity and map in detail the extent of landsliding. Repair of identified landslides should be guided by each landslide's specific conditions and by the constraints imposed by its proposed future use, and be acceptable to the El Dorado County Building Department and Department of Transportation (for project roads). (DEIR, p. IV.G-14.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.G-14.)

Impact:

SG-2: The Project may cause differential compaction/seismic settlement hazards. This impact is potentially significant. (DEIR, p. IV.G-15.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant environmental effect identified in the Final EIR.

Explanation:

The field reconnaissance revealed a very low potential for seismic settlement on slopes and ridges where the soil mantle is thin. A moderately low potential exists in drainage areas near the center of

the site and along the Bear Mountains fault where the soil horizon is thicker. The Bear Mountains fault trends northwesterly through the west central portion of the site. The project proposes to designate this fault trace as an open space area. Differential compaction and seismic settlement in drainage areas and along the Bear Mountains fault have the potential to pose hazards to future project occupants. This possibility represents a potentially significant impact. (DEIR, p. IV.G-15.)

Mitigation SG-2:

Implement the following mitigation measures:

- Require the project applicant to perform detailed geotechnical subsurface exploration in areas of the site that have unsuitable soil conditions for structural support;
- Require that soil samples be taken and analyzed to determine their engineering characteristics; and
- Require geotechnical earthwork or foundation design that will compensate for low density material, acceptable to the El Dorado County Building Department and Department of Transportation (for project roads) and in conformance with the County of El Dorado Design and Improvement Standards Manual and Uniform Building Code.

(DEIR, p. IV.G-15.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.G-15.)

Impact:

SG-3: The Project may cause potentially significant impacts associated with an increase onsite sedimentation and erosion. (DEIR, p. IV.G-15.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant environmental effect identified in the Final EIR.

Explanation:

Because of the large areas of significant relief difference across the site, topographic alteration due to grading activities could cause a moderate increase in sedimentation and erosion. The precise location and extent of sedimentation and erosion will be determined by future grading plans for the site. Grading for project development may increase onsite sedimentation and erosion, which could create hazards for future project occupants. (DEIR, p. IV.G-15.)

Mitigation SG-3 :

Implement the following mitigation measures:

- Minimize topographic modifications of the site to reduce sedimentation and erosion potential. Require drainage facilities to be lined as necessary to prevent erosion of the site soils;
- Prior to tentative map approval, require the project applicant to perform a detailed geotechnical investigation to confirm site characteristics and to identify site soils that may be subject to erosion when excavated and exposed to weathering;
- Require erosion control measures implemented during and after construction to conform with National Pollution Discharge Elimination System (NPDES) storm drain standards and El Dorado County standards (including El Dorado County Department of Transportation erosion control specifications); and
- Where possible, design collection systems to divert natural drainage away from parking facilities, roadway surfaces and buildings, and to collect water concentrated by impervious surfaces and convey it away from the site in accordance with the above-mentioned standards.

(DEIR, p. IV.G-16.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.G-16.)

Impact:

SG-4: The Project may cause potentially significant hazards from cut-and-fill slopes.
(DEIR, p. IV.G-16.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant environmental effect identified in the Final EIR.

Explanation:

Anticipated construction activities will involve cut and fill of existing onsite slopes, including landslide areas on steeper slopes. Cut-and-fill can cause soil erosion and instability. These effects may be accelerated due to shearing associated with the Bear Mountains fault. Construction activities that cause ground disturbance could produce a moderate to high potential for unstable cut-and-fill slopes. This possibility represents a potentially significant impact. (DEIR, p. IV.G-16.)

Mitigation SG-4:

Require that cut slopes parallel or subparallel to the geologic structure be eliminated where possible or reinforced with retaining structures. Any cut or fill slopes and their appurtenant drainage facilities should be designed in accordance with Uniform Building Code Appendix Chapter 33, Sections 3312 and 3313 and in general should be no steeper than 2:1 (horizontal to vertical) unless authorized by the El Dorado County Building Department based on corroborating evaluation by the project geotechnical engineer. Slope angles should be designed to conform to the competence of the material into which they are excavated. (DEIR, p. IV.G-16.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.G-16.)

Impact:

SG-5: **The Project may cause potentially significant hazards due to trench wall instability.** (DEIR, p. IV.G-17.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant environmental effect identified in the Final EIR.

Explanation:

Utility trenches will be excavated during project construction. Subsurface conditions encountered may be somewhat variable, ranging from competent to weak. The weaker soils can be expected nearer the creek channels, swale areas, and within the few feet of the ground surface. Trench walls

in these areas may be unstable. In addition, shearing and high groundwater associated with the Bear Mountains fault could cause trench wall instability. In areas of the site that contain weaker soils, utility trench walls may be unstable. This possibility represents a potentially significant impact. (DEIR, p. IV. G-17.)

Mitigation SG-5:

Require that trenches greater than five feet in depth be shored, sloped back at a 1:1 (horizontal to vertical) slope angle or reviewed for stability by the County's geotechnical engineer in accordance with the Occupational Safety and Health Administration (OSHA) regulations (described in 29 CFR 1926.650 to 1926.653) if personnel are to enter the excavations. Require trench excavations to conform with local ordinances. Monitor shearing and high groundwater associated with the Bear Mountains fault during trench construction and require additional shoring and/or dewatering as necessary. (DEIR, p. IV.G-17.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.G-17.)

Impact:

SG-6: The Project may cause potentially significant ground rupture hazards. (DEIR, p. IV.G-17.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant environmental effect identified in the Final EIR.

Explanation:

Development in the White Rock and West Valley Villages may be subject to ground rupture due to earthquake activity. While the potential for ground rupture at the project site is low, occupants of the White Rock and West Valley Villages could be exposed to this hazard. This possibility represents a potentially significant impact. (DEIR, p. IV.G-17.)

Mitigation SG-6:

Implement the following mitigation measures:

- Require the project applicant to map the fault geology of the site in detail prior to tentative subdivision map approval;
- Require that the width of the Bear Mountains fault and any fault splays be identified prior to siting schools, hospitals, fire stations and other essential service buildings; and
- Require that the surface mapping be verified by seismic and trenching methods, that the trench logs be interpreted for evidence of recency of fault activity, and that, if necessary, age dating be performed.

(DEIR, p. IV.G-17; FEIR, p. IV.G-17.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.G-17.)

Impact

SG-7: **The Project may cause potentially significant ground shaking hazards.** (DEIR, p. IV.G-17.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant environmental effect identified in the Final EIR.

Explanation:

A low to moderate potential for severe ground shaking exists at the site. White Rock, West Valley and East Ridge Villages will be subject to this hazard. The severity of shaking will depend on the location of the earthquake epicenter and the magnitude of the earthquake. The project site has the potential to experience severe seismic ground shaking, which could damage project structures and infrastructure. This possibility represents a potentially significant impact. (DEIR, p. IV.G-18.)

Mitigation SG-7:

Require compliance with Uniform Building Code seismic design criteria (Appendix Chapter 16, Sections 1626-1635) and determine the exact location of the Bear Mountains fault prior to tentative subdivision map approval, and the siting of essential service buildings. In addition, inform all

potential home buyers of the potential seismic risk associated with the Foothills Fault System. (DEIR, p. IV.G-18.; FEIR, p. IV.G-18)

Significance after Mitigation

Less than significant. (DEIR, p. IV.G-18.)

Impact:

SG-8: The Project may cause potentially significant Seiche hazards. (DEIR, p. IV.G-19.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant environmental effect identified in the Final EIR.

Explanation:

Waves generated by seismic energy may affect structures near the El Dorado Hills Waste Water Treatment Plant pond or near the pond located near the eastern property boundary. The ponds are not large in size, and the hazard will probably be limited to minor flooding. In the case of the treatment plant pond, however, flooding could cause the spread of infectious biological agents. A seiche developing within the 1,000,000-gallon water tank could cause the tank to fail, resulting in flooding in the area below the tank. Project occupants may be exposed to hazards due to seiches that may develop in (1) the El Dorado Hills Waste Water Treatment Plant pond located approximately 200 feet west of the project site, (2) the farm pond located near the eastern property boundary, (3) the 1,000,000-gallon water storage tank located in the north central portion of the site, or (4) any planned water tanks, lakes, ponds, or pools within the proposed development. This possibility represents a potentially significant impact. (DEIR, p. IV.G-19.; FEIR, p. IV.G-19.)

Mitigation SG-8:

Require project buildings to be adequately set back from nearby ponds or any water tanks, lakes or ponds planned for construction. Design a flood control system below the 1,000,000-gallon water tank and restrict residential development in this area, or evaluate the structural design of the tank for failure potential and require improvements to substantially reduce this potential. (DEIR, p. IV.G-19; FEIR, p. IV.G-19.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.G-19.)

Impact:

SG-9: The Project may cause potentially significant dam or water storage facility failure impacts. (DEIR, p. IV.G-19.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant environmental effect identified in the Final EIR.

Explanation:

The likelihood of a flood event occurring because of failure of structures is considered low. Failure of the farm pond dam to the east of the project site, however, will result in flooding along the Plunkett Creek drainage in East Ridge Village. Currently this farm pond is not large and flooding will probably be minimal. Failure of the water storage tank in the north central portion of the site could cause flooding in the area immediately downslope of the tank.

Flooding could occur along drainages in the proposed White Rock and West Valley Villages, and along Plunkett Creek in the proposed East Ridge Village, during periods of heavy rainfall. Seismic activity could cause failure of (a) the farm pond dam east of the project site, causing flooding in the East Ridge Village; and/or (b) the water storage tank in the north central portion of the site, causing flooding immediately downslope of the tank. (DEIR, p. IV.G-19.)

Mitigation:

Implement the above mitigation measure SG-8. (DEIR, p. IV.G-20.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.G-19.)

Impact:

SG-10: The Project may cause potentially significant impacts associated with exposure to asbestos. (DEIR, p. IV.G-20.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant environmental effect identified in the Final EIR.

Explanation:

Naturally occurring asbestiform minerals have been identified in regional serpentine bodies and along fault traces near the site. Asbestos fibers can be released into the air by earthwork activities. Exposure to asbestos fibers is associated with a number of diseases. Geologic mapping has not identified asbestiform mineral deposits on or adjacent to the site. Earthwork activities such as grading, drilling, or footings excavation, however, may uncover previously unidentified deposits of asbestiform minerals. Dust control measures and monitoring may be required where asbestiform minerals are identified. (DEIR, p. IV.G-20; FEIR, p. IV.G-20)

Mitigation:

Identify serpentine deposits during geotechnical investigations associated with earthwork design and during earthwork construction monitoring. Where serpentine rock or asbestiform mineral deposits are identified, implement El Dorado County standards for dust control and mitigation for serpentine soils. Require that any identified asbestos contamination be disclosed to future property owners, as required by law. (DEIR, p. IV.G-20; FEIR, p. IV.G-20.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.G-20.)

Cumulative Impacts (General Plan)

Cumulative local and countywide growth, of which this project is a part, is anticipated and provided for in the 1996 El Dorado County General Plan. The cumulative soils, geology, and mineral resources impacts of that growth are addressed in section V.7, Soils, Geology, and Mineral Resources, of the General Plan EIR. The EIR states that, with implementation of the measures listed in the EIR, which have been incorporated as General Plan policy, there will be no significant unmitigated cumulative soils or geologic impact. The Findings of Fact of the Board of Supervisors of El Dorado County for the El Dorado County General Plan (January 23, 1996, revised January 26, 1996; pages 196 and 210) identified effects associated with seismic hazards and loss of areas available for mineral resource extraction as significant and unavoidable. (DEIR, p. IV.G-21.)

H. HYDROLOGY AND WATER QUALITY

Standards of Significance

Based on CEQA Guidelines, the project may be considered to have a significant impact on drainage, flooding, and water quality conditions if it will:

- (1) Cause a substantial change in the amount of water in project area drainages;
- (2) Cause a substantial change in the rate and amount of surface runoff leaving the project site;
- (3) Cause substantial flooding, erosion or siltation;
- (4) Expose people or structures to substantial new or increased flooding;
- (5) Result in the substantial degradation of surface or groundwater quality;
- (6) Substantially interfere with groundwater recharge; or
- (7) Conflict with adopted plans or goals of agencies with jurisdiction over the project such that adverse hydrology and water quality impacts will be created.

For purposes of this analysis the following additional significance criteria are used to define hydrology and water quality impacts.

Less than Significant: Hydrology and water quality impacts are considered less than significant if the proposed project results in no substantially adverse increased runoff and water quality impacts.

Potentially Significant: Hydrology and water quality impacts are considered potentially significant if the proposed project has the potential to substantially impact flooding and water quality goals of the region.

Significant: Hydrology and water quality impacts are considered significant if the proposed project will clearly have substantial flooding and water quality effects that will be difficult to mitigate and/or will require significant re-design of the project.

(DEIR, pp. IV.H-16 - IV.H-17.)

Impact:

H-1: The Project may cause potentially significant impacts associated with increased flows in tributary four of Carson Creek. (DEIR, p. IV.H-18.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant environmental effect identified in the Final EIR.

Explanation:

The DOT-approved Carson Creek Drainage Study proposes three detention ponds, CU/VV4, CX2/VV1B and CY/VV2-1, to control anticipated runoff directly from the Valley View project site. The regional pond CU/VV4 will reduce future peak runoff flows in Carson Creek downstream of Latrobe Road by 100 cfs; and inclusion of detention ponds CU/VV4 and CX2/VV1B as part of the project development will result in no net increase in future peak flows from the project site into the main channel of Carson Creek at Golden Foothill Parkway. Detention pond CY/VV2-1, proposed in the upper reach of Tributary 4, does not, however, reduce future peak flows in Tributary 4 to those of existing conditions. Future development will cause Tributary 4 to experience an approximate seven-percent increase in peak flow at Latrobe Road, which will add to the existing downstream flooding and capacity problems in this tributary. This impact is potentially significant. (DEIR, p. IV.H-18.)

Mitigation:

Implement the following mitigation measures, including preparation of a drainage plan, construction of onsite drainage facilities, and ongoing maintenance of detention basins and drainage facilities.

- The applicant shall prepare an El Dorado County DOT-approved drainage plan that is consistent with the DOT-approved Carson Creek Drainage Study. The applicant shall coordinate with the El Dorado County DOT and contribute a proportionate share of the cost for downstream channel capacity improvements associated with any increases in discharge from the Project. Onsite detention basins will be permanently maintained.
- The drainage plan shall be prepared by a certified Civil Engineer and in conformance with the El Dorado County Drainage Manual (adopted by DOT in March 1995 and available for review at the El Dorado County Planning Department).
- At a minimum, the drainage plan shall include:
 - Written text addressing existing conditions;

- Effects of project improvements;
 - All hydrologic and hydraulic calculations;
 - Watershed Map;
 - Potential increases in downstream flows;
 - Proposed onsite improvements;
 - Proposes schedule of drainage improvements to assure that the necessary facilities are in place to mitigate the effects of each development phase as it occurs; and
 - Necessary drainage easements to accommodate flows from the site and implementation/maintenance responsibilities.
- All onsite drainage facilities shall be constructed according to El Dorado County DOT standards and satisfaction. At a minimum this will require compliance with the following performance standards:
 - Those watercourses set forth in an adopted master plan of drainage for the County of El Dorado shall be designed and constructed not to exceed the quantities of water indicated in such master drainage plans when said plans are adopted. All other watercourses and drainage ways shall be designed by a civil engineer in accordance with DOT criteria.
 - Drainage facilities for areas greater than 100 acres shall be designed to safely convey the storm runoff of the 100-year flood. All available headwater depth of the culvert may be used for these facilities. Flooding effects from backwater shall be analyzed when available headwater depth is incorporated into the design.
 - Drainage facilities for less than 100 acres shall be designed to safely convey the storm runoff of the 10-year flood. Without the headwater depth exceeding the culvert barrel height. Exceptions will be considered on a case-by-case basis when upstream ponding is required for the attenuation of flood peaks.
 - Natural channels for the collection and conveyance of stormwater runoff shall be given priority over artificial channels in project design.
 - Design flows shall be computed by use of methods acceptable to the DOT defined in Section 2 of the County of El Dorado Drainage Manual.

For further details on hydraulic design standards in regard to project development and onsite drainage facilities, refer to the County of El Dorado Drainage Manual.

- Specific mitigation measures shall be identified in the final drainage plans to reduce post-development stormwater discharge in Tributary four at Latrobe Road and Plunkett Creek at its confluence with Deer Creek. These measures shall include detention basins of adequate size or alternative stormwater detention measures subject to the approval of the El Dorado County DOT to reduce post-development runoff flows to pre-development levels.
- Maintenance of the detention basins and drainage facilities shall require periodic annual inspections to ensure facility functionality and debris removal as necessary.

(DEIR, pp. IV.H-20 - IV. H-21; FEIR, p. IV.H-20.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.H-20.)

Impact:

H-2: The Project may cause potentially significant impacts associated with increased flows in Plunkett Creek. (DEIR, p. IV.H-18.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant environmental effect identified in the Final EIR.

Explanation:

The project-related increase in runoff to Plunkett Creek could exacerbate flooding at Plunkett and Deer Creeks. No prior hydrological analysis of Plunkett Creek was available for review. Therefore, Questa Engineering used the methods outlined in the County of El Dorado Drainage Manual to calculate the existing and future peak flows of Plunkett Creek at its confluence with Deer Creek. Table H-3 presents the estimated pre- and post-development 10-year and 100-year peak flows for Plunkett Creek at its confluence with Deer Creek.

As indicated by the above calculations, the Valley View project will result in estimated five- and three-percent increases in 10-year and 100-year peak runoff flows, respectively. There are no proposed detention facilities within the Plunkett Creek watershed to reduce increased flows associated with proposed development. The confluence of Plunkett Creek with Deer Creek occupies the 100-year floodplain, any increases in runoff could exacerbate this condition. This impact is potentially significant.

(DEIR, p. IV.H-18.)

Mitigation:

Implement the above mitigation measure H-1. (DEIR, pp. IV.H-20 - IV.H-21.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.H-20.)

Impact:

H-3: The Project may cause potentially significant impacts associated with localized flooding. (DEIR, p. IV.H-21.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant environmental effect identified in the Final EIR.

Explanation:

Periodic flooding of the proposed multi-use open space land use is not considered a significant impact; however, flooding of structures proposed in the core residential area or the school site could occur. According to the DOT-adopted Bottorff study, the northeastern project site boundary occupies an existing 100-year floodplain. The Specific Plan proposes core residential, a school site and multi-use open space land uses within this adjacent 100-year floodplain. The Bottorff study includes channel improvements within Carson Creek to contain anticipated 100-year flows within its banks; however, to date no specific plans have been implemented or conducted for improving the creek channels through this area to increase their flood flow capacity. This impact is potentially significant. (DEIR, pp. IV.H-21 - IV.H-22.)

Mitigation H-3:

Project development shall not occur in areas within the 100-year floodplain (as delineated in the Bottorff study) unless El Dorado County DOT-approved 100-year flood protection improvements (as defined in the County of El Dorado Drainage Manual) are implemented. As defined in the County of El Dorado Drainage Manual:

- Floodplain requirements must include the definition of the natural easement boundaries necessary for intermittent occupancy by runoff waters, and within which encroachment by development will be prohibited.
- Land development shall be evaluated for impacts to floodplains both onsite and offsite. Measures shall be implemented that will lessen the exposure of property and facilities to flood losses and inhibit incompatible development in flood-prone areas (e.g., building finish floors must be elevated one foot above the base flood elevation of the 100-year floodplain).
- Floodplain limits shall be delineated along all significant water courses within proposed development. Floodplain boundaries shall be shown on preliminary and final subdivision maps. The area inundated should be indicated as a flow easement. Floodplain designations should account for future development within the catchment.
- Limits shall be established from applicable FEMA studies, U.S. Army Corps of Engineers Floodplain Studies, U.S. Geological Survey Floodplain Maps, regional flood studies prepared by private consulting engineers or other appropriate studies (e.g., Bottorff Study).
- Proposed development within a floodplain shall have also met all requirements and obtained all necessary approvals from jurisdictional agencies independent of the County of El Dorado and the requirements set forth in the County of El Dorado Drainage Manual prior to plan approval. If no requirements exist, documentation shall be provided stating that an investigation was conducted and requirements do not exist.

(DEIR, p. IV.H-22.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.H-22.)

Impact:

H-4: The Project may cause potentially significant impacts associated with increased flood duration. (DEIR, p. IV.H-23.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant environmental effect identified in the Final EIR.

Explanation:

In addition to the 100-year floodplain detailed in the Bottorff study, the existing FEMA Flood Insurance Rate Maps identify the confluences of Plunkett Creek and the unnamed tributary as occupying regions prone to the flooding hazards of the 100-year flood. The proposed detention basins outlined in the Bottorff study and recommended for Plunkett Creek are intended to maintain or reduce the post-development peak flow rate entering Carson and Deer Creeks associated with anticipated development. They will not, however, mitigate the increased volume of flow leaving the development area. Moreover, the duration of peak flows will increase, adding to the existing downstream flooding conditions in Carson and Deer Creeks. The project will not affect the extent of flooding, but will increase flood duration. In other words, areas subject to flooding under existing conditions will be flooded for a longer period of time under “with project” conditions, representing a potentially significant adverse effect. Without future improvements to contain anticipated flows within Carson and Deer Creeks or the expansion of onsite detention facilities, increased flood duration will represent a potentially significant adverse impact to present and future uses of land along downstream flood-prone sections of Carson and Deer Creeks. (DEIR, p. IV.H-23.)

Mitigation H-4:

In addition to the mitigation measures cited for Impacts H-1 and H-2, the applicant shall mitigate the flood duration impacts on Carson Creek and Deer Creek by either (1) contributing a proportionate share of the cost of Carson and Deer Creek channel improvements, or (2) designing and constructing onsite detention facilities with surplus capacity.

1. The project applicant shall cooperate with El Dorado County DOT and contribute a proportionate share of the cost for the completion of necessary channel improvements to eliminate downstream flooding along Carson and Deer Creeks. The specific improvements to be provided shall be based upon hydrologic analysis of these watersheds and shall be subject to review and approval by DOT. In the event that the Valley View project is built out prior to the securing of all monies to construct the downstream improvements, the applicant shall be required to bear the additional costs (beyond their fair share) to complete the necessary flood control improvements, under the condition that such additional payments will be reimbursed when other “fair share” contributions are received.

or

2. The applicant shall design and construct the onsite detention facilities with surplus capacity to avoid increases in the magnitude of peak discharge and the total duration of flooding as determined by the time when the low-lying properties improvements are first inundated by overbank flooding to the time when the floodwaters recede from those properties

improvements at the end of the flood event. The specific amount of surplus capacity to be provided shall be based upon a hydrologic-hydraulic analysis for the 10-, 50- and 100-year floods of the detention facilities in relation to downstream flood conditions, and shall be subject to review and approval by DOT. All detention facilities must be designed in accordance with DOT standards.

(DEIR, pp. IV.H-23 - IV.H-24.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.H-23.)

Impact:

H-5: The Project may cause significant construction-related soil erosion and sedimentation impacts. (DEIR, p. IV.H-24.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that substantially lessen, but do not avoid, the significant environmental effect associated with impacts on erosion and sedimentation. No mitigation is available to render the effect less than significant. The effect therefore remains significant and unavoidable.

Explanation:

The applicant has not yet prepared a grading plan for the site at a sufficient level to allow projection of grading quantities. As previously discussed, the Valley View project will involve significant earthmoving, with extensive grading proposed on approximately 430 acres of the project site. The project will present a significant threat of soil erosion from soil disturbance because: (a) proposed grading will occur on soils located on moderate to steep hill slopes; (b) the predominant soils on the project site are Auburn soils, which are moderately to very highly susceptible to erosion; and (c) large amounts of grading will be required to construct the project. Alterations in drainage patterns could compound and increase erosion onsite and downstream of the project by subjecting unprotected areas to the erosional forces of runoff, particularly in the Carson Creek, Screech Owl Creek, Plunkett Creek and the unnamed tributary channels.

Soil erosion can cause numerous types of environmental impacts. Eroded soil contains nitrogen, phosphorus, and other nutrients. When these nutrients are carried into water bodies, the nutrients can trigger algal blooms that reduce water clarity, deplete oxygen, and create odors. Excessive

deposition of sediments in streams may blanket fauna. The increased turbidity from the erosion may also reduce photosynthesis that produces food supply and natural aquatic habitats. Sediment from project-induced onsite erosion could also be deposited in the downstream receiving channels of Carson and Deer Creeks, which could interfere with the natural flow of storm waters, cause flooding where it will not otherwise occur, aggravate downstream flooding conditions or accelerate channel erosion.

Soil erosion and subsequent sedimentation and water quality effects could occur during project construction. This impact will be significant.

(DEIR, p. IV.H-24.)

Mitigation H-5:

Require the applicant to:

- (a) obtain a general construction activity stormwater permit under NPDES regulations,
- (b) obtain a County General Grading Permit,
- (c) include a County-approved erosion and sediment control plan in the project drainage plans, and
- (d) prepare a Storm Water Pollution Prevention Plan as part of the NPDES permit. Clear all drainage culverts and downstream receiving channels from accumulated sediment after each project construction phase is completed. These measures will reduce project construction-related erosion and sedimentation impacts, but not necessarily to a less than significant level.

(DEIR, p. IV.H-25.)

In addition, the applicant shall also implement the following mitigation measures:

- Prior to issuance of a County Grading Permit, require the applicant to obtain from the CVRWQCB a general construction activity stormwater permit under the NPDES regulations and comply with the requirements of the permit to minimize pollution of stormwater discharge during construction activities.
- Require the applicant to obtain a County General Grading Permit with the El Dorado County Department of Transportation.

- Include in the project drainage plans a County-approved erosion and sediment control plan to minimize the impacts from erosion and sedimentation during construction of all elements of the project. This plan should conform to all standards adopted by the county. This plan should include Best Management Practices, or others deemed effective by the DOT, such as:
 - (a) site construction practices including restricting grading to the dry season, winterization, traffic control and dust control;
 - (b) using soil stabilization techniques to protect all finished graded slopes from erosion such as straw mulching, hillslope benching, erosion control matting, hydroseeding, revegetation, and preservation of existing vegetation;
 - (c) protecting downstream receiving drainage channels and storm drains from sedimentation and retaining sediment on the project site by using silt fencing, straw bale sediment barriers and drop inlet sediment barriers, diversion dikes and swales, sediment basins and sediment traps.

The standards and specifications of this plan shall be in compliance with the Erosion and Sediment Control Guidelines for Developing Areas of the Sierras (prepared by the High Sierra Resource Conservation and Development Council).

- After each phase of construction is completed, inspect all drainage culverts and the downstream receiving channels of Carson Creek, Screech Owl Creek, Plunkett Creek, and the unnamed tributary for accumulated sediment. Where sediment has accumulated, these drainage structures should be cleared of debris and sediment.
- Require the applicant to prepare a Storm Water Pollution Prevention Plan (SWPPP) as part of the NPDES permit. A standard requirement of the SWPPP is to designate an individual responsible for the inspection and monitoring of all construction activities posing potential water quality concerns, including the implementation of erosion control measures and erosion remediation. Given the past construction-related erosion problems in the county, this standard requirement is not expected to be wholly effective in protecting downstream receiving waters. This can be corrected by requiring that the implementation and monitoring of the erosion control measures within the SWPPP be subject to inspection by the licensed design professional who prepares the erosion control plan (and the SWPPP). In this manner, the licensed professional will:
 - (a) provide added assurance that the prescribed erosion control measures are implemented;

- (b) be available to recognize onsite problems and adjust/modify design measures accordingly, and
- (c) act as the liaison between the Regional and State Water Boards.

(DEIR, pp. IV.H-25 - IV.H-26.)

Significance after Mitigation

Significant, unavoidable impact. (DEIR, p. IV.H-25.)

Impact:

H-6: The Project may cause significant impacts associated with urban runoff pollutant discharge into creeks. (DEIR, p. IV.H-26.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that substantially lessen, but do not avoid, the significant environmental effect associated with impacts on urban runoff pollutant discharge into creeks. No mitigation is available to render the effect less than significant. The effect therefore remains significant and unavoidable.

Explanation:

The project will generate urban runoff that may degrade water quality in Carson and Deer Creeks. Adverse impacts on the water quality of Carson and Deer Creeks could also occur as a result of urban pollutant runoff from the proposed streets, single- and multi-family residences, commercial sites, school grounds, multi-use open space (parks) and parking lots on the project site. Stormwater runoff from these areas will include materials and chemicals that will be washed into the developed storm drain system from a variety of urban sources. Unlike water pollutants that come from single point sources, such as industrial or sewage treatment plants, non-point source pollutants are washed by rainwater and other means from streets, sidewalks, driveways, landscape areas, parking lots, construction sites, and agricultural areas. Because storm drains are generally separate from the wastewater collection system, these pollutants will flow directly into the local drainages and downstream receiving waters of Carson and Deer Creeks.

For the Project, the types of pollutants that are likely to be found in greater concentrations than currently occurring in the Carson Creek and Deer Creek drainages include suspended solids and floating debris, litter, nutrients associated with landscape fertilizers, heavy metals (especially copper,

lead, and zinc) from automobiles, hydrocarbons associated with fuels and crankcase oil, pesticides, commercial land use related pollutants and chemicals, and trace organics from household solvents.

(DEIR, pp. IV.H-26 - IV.H-27.)

Mitigation H-6:

Implement a comprehensive urban runoff control program to mitigate the non-point source water quality effects of the project. This measure will reduce project impacts, but not necessarily to a less than significant level. (DEIR, p. IV.H-27.)

The project applicant shall develop specific stormwater management plans for each major sub-area of the project. The stormwater management plans for each major sub-area shall be subject to review and approval by the El Dorado County Department of Transportation and the Central Valley Regional Water Quality Control Board. At a minimum, the plan shall:

- (a) identify specific types and sources of stormwater pollutants;
- (b) determine the location and nature of potential impact; and
- (c) specify appropriate control measures to eliminate any potentially significant impacts to receiving water quality from stormwater runoff.

(DEIR, p. IV.H-27; FEIR, p. IV.H-27.)

Control measures may include vegetated buffer strips, water quality detention basins, site development restrictions, public education, street sweeping, and other design or source control management practices, as appropriate, to mitigate adverse potential water quality effects. Educational information should be distributed explaining that dumping oil, automotive products, household products and other toxics into the storm drainage system is illegal and damaging to the environment. Storm drain inlets should be marked with signs proclaiming "No Dumping-Drains to Local Streams." As each individual subdivision is built within the project, a regular community street sweeping program shall be implemented. (DEIR, p. IV.H-27.)

The Bottorff study proposes three stormwater detention ponds associated with the Valley View Specific Plan to reduce the projected increase in project site runoff from entering Carson Creek and/or its tributaries. The design details of these ponds have not been provided. Detention facilities will also be required to reduce anticipated increased flows in Plunkett Creek. These proposed and anticipated detention facilities could also be used as water quality ponds. Water quality ponds have been shown to reduce concentration of heavy metals and oil and grease. By retaining storm water,

suspended solids are allowed to settle. Since many of the typical urban storm pollutants are attached to suspended solids, the proposed ponds would remove a portion of these pollutants. (DEIR, p. IV.H-27.)

Significance after Mitigation

Significant, unavoidable impact. (DEIR, p. IV.H-27.)

Cumulative Impacts (General Plan)

Cumulative local and countywide growth, of which this project is a part, is anticipated and provided for in the El Dorado County General Plan. The cumulative impacts of that growth on hydrology and water quality are addressed in section V.5, Water: Resources, Quality and Hazards, of the County-certified 1995 El Dorado County General Plan Update EIR. The General Plan EIR indicates that most of the anticipated cumulative impacts will be mitigated to less than significant levels through implementation of related General Plan policies, but that the following cumulative impact, to which the project will contribute, will remain significant and unavoidable:

Impact 5.2.3: Increase in Surface Pollutants: The impact due to cumulative increases in surface water pollutants, which being substantially reduced through implementation of the General Plan policies, will be presumed to be cumulatively significant with the anticipated year 2015 level of development.

This impact is also identified as significant and unavoidable in the Findings of Fact of the Board of Supervisors of El Dorado County for the El Dorado County General Plan (January 23, 1996, revised January 26, 1996; page 171). In addition, the Findings of Fact (page 174) identified Impact 5.2.4 (Increase in Groundwater Pollutants) as significant and unavoidable. (DEIR, p. IV.H-28.)

I. AIR QUALITY

Standards of Significance

As established in Appendix G of the CEQA Guidelines, the project will be considered to have a significant impact on air quality if it will:

- (1) Violate any air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations.

For the purposes of this study a significant impact on local air quality is defined as:

- (2) A predicted violation of the carbon monoxide ambient air quality standards due to project traffic on the local street network.
- (3) The potential to frequently expose members of the public to objectionable odors.

A significant impact on regional air quality is defined in this analysis as:

- (4) An increase in emissions of an ozone precursor or PM₁₀ exceeding the Sacramento Metropolitan Air Quality Management District's recommended thresholds of significance. The District considers increases in emissions of 85 pounds per day of either ozone precursor or 285 pounds per day of PM₁₀ to represent a significant adverse impact.

(DEIR, pp. IV.I-7 - IV.I-8.)

Impact:

AQ-1: The Project will cause potentially significant air quality impacts from construction. (DEIR, p. IV.I-8.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant environmental effect identified in the Final EIR.

Explanation:

Construction activities such as demolition, excavation and grading operations, construction vehicle traffic, and wind blowing over exposed earth, will generate exhaust emissions and fugitive particulate matter emissions that will affect local and regional air quality. These effects will be potentially significant. (DEIR, p. IV.I-8.)

Construction dust will affect local and regional air quality at various times during the build-out period of the project. The dry, windy climate of the area during the summer months combined with the fine, silty soils of the region create a high potential for dust generation. Sacramento Metropolitan Air Quality Management District guidance documents differentiate between Phase I (grading) and Phase II (actual construction) activities and air pollutant sources. Emissions during the grading phase of construction are primarily associated with the exhaust of large earth moving equipment and the dust which is generated through grading activities. Emissions in Phase II of construction are

primarily associated with construction employee commute vehicles, asphalt paving, mobile equipment, stationary equipment, and architectural coatings. (DEIR, pp. IV.I-8 - IV.I-9.)

The anticipated effects of project construction activities include increased dustfall and locally elevated levels of PM₁₀ near the construction activity. Depending on the weather, soil conditions, the amount of activity taking place, and nature of dust control efforts, these impacts could affect existing or future residential areas within or near the project. Consequently, project construction dust generation is considered to be a potentially significant adverse impact, particularly during later phases of construction when residents of previously completed phases of the project could be affected. (DEIR, p. IV.I-9.)

Construction activities in areas of asbestos-containing soils and rock have the potential to expose the public to increased concentrations of asbestos in the air. The County of El Dorado recently adopted an ordinance establishing special guidelines and requirements for grading and construction activities in areas designated as Serpentine Rock in the Soil Survey of El Dorado County. The ordinance establishes dust mitigation practices to be used when construction occurs in areas with serpentine soil, and additionally authorizes the El Dorado County Environmental Management Department and the El Dorado Air Pollution Control District to require an "Asbestos Hazard Dust Mitigation Plan" for review and approval prior to the commencement of any grading or construction activities. Potential impacts due to asbestos exposure from construction activities are discussed in Impact SG-10 in the Soils and Geology Section of these Findings. (DEIR, p. IV.I-9.)

Mitigation AQ-1:

- (A) Dustfall control measures. Require implementation of dust control measures by project construction contractors during all phases of construction. The comprehensive dust control efforts listed below will be expected to reduce construction period dust-related air quality impacts to a less than significant level. (DEIR, p. IV.I-8.)

Rule 223 of El Dorado County Air Pollution Control District's regulations requires control of fugitive dust. The requirements for construction activities include:

- Application of water or suitable chemicals or other specified covering on materials stockpiles, wrecking activity, excavation, grading, sweeping, clearing of land, solid waste disposal operations or construction or demolition of buildings or structures, and
- Covering or wetting at all times when in motion of open-bodied trucks, trailer or other vehicles transportation materials that create a nuisance by generating particulate matter in areas where the general public has access.

Additional construction mitigation practices are identified below.

To ensure that these construction period mitigations are implemented, contractors shall develop, prior to the start of construction, a construction dust control program. This program shall include the following commitments:

- Suspend dust-producing activities during periods of high winds when dust control measures are unable to avoid visible dust plumes;
- Enclose, cover or water twice daily all soil piles;
- During the dry season provide equipment and staffing for watering of all exposed or disturbed soil surfaces at least twice daily;
- Conduct daily clean-up of mud and dirt carried onto paved streets from the site;
- Limit the speed of all haul trucks to 15 miles per hour while on site;
- Cover or wet down materials transported by truck to control dust;
- Replant vegetation in disturbed areas as quickly as possible;
- Install wheel washers for all exiting trucks, or wash off the tires or tracks of all trucks and equipment leaving the site; and
- Limit the area subject to excavation, grading and other construction activity at any one time.

The above measures will need to be enforced during all construction, although watering for dust control will not be necessary when soil moisture is high during the winter months.

(DEIR, p. IV.I-9 - IV.I-10.)

- (B) Exhaust emissions. Contractor's equipment fleets will be considered during the bidding process for construction contracts. Preference will be given to contractors using heavy-duty construction equipment meeting 1997 Federal emission standards for this type of vehicle. Utilizing new equipment manufactured to current emissions standards will reduce emissions of NO_x from equipment exhausts by up to 20 percent. Implementation of this measure will reduce construction period exhaust emission air quality impacts to a less than significant level.

(DEIR, p. IV.I-10; FEIR, p. IV.I-10.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.I-10.)

Impact:

AQ-2: The Project will have significant regional air quality effects. (DEIR, p. IV.I-11.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that substantially lessen, but do not avoid, the significant environmental effect associated with impacts on regional air quality effects. No mitigation is available to render the effect less than significant. The effect therefore remains significant and unavoidable.

Explanation:

Traffic generated by the project will increase regional emissions for reactive organic gases and oxides of nitrogen (two precursors of ozone) and PM₁₀ by several times the threshold of significance. This effect will represent a significant unavoidable impact. (DEIR, p. IV.I-11.)

- (a) Vehicular trips. The Valley View Specific Plan includes the following plan components that will tend to reduce air quality impacts somewhat providing for reduced auto travel, including: a mixed-used village center providing neighborhood commercial uses; an internal mix of commercial, recreational, and residential uses; higher-density residential in proximity to the village center commercial core; and schools in proximity to the village center commercial core.

(DEIR, p. IV.I-11.)

The substantial levels of external vehicular vehicle trips to and from the project, however, will still result in substantial air pollutant emissions affecting the regional air basin. Regional emissions associated with project vehicle use have been calculated for this EIR analysis using the URBEMIS-5 computer program. PM₁₀ emissions from road dust were calculated separately and added to the URBEMIS-5 results to get the total PM₁₀ emission. The URBEMIS-5 program and the assumptions made in its use are described in Appendix H of the Draft EIR. (DEIR, p. IV.I-11.)

- (b) Non-Mobile Sources. Residential uses contain a number of intermittent air pollution sources. The largest of these sources is residential woodburning and residential combustion of natural gas for space and water heating. Daily emission factors for woodburning and residential natural gas combustion for residences in El Dorado County were calculated using a county-wide inventory of air pollution sources. (DEIR, p. IV.I-11.)
- (c) Total Emissions. Total emissions associated with project land uses are presented in Table I-3 for reactive organic gases (287.2 pounds per day) and oxides of nitrogen (two precursors of ozone) (386.3 pounds per day) and PM₁₀ (1171.5 pounds per day). Guidelines for the evaluation of project impacts issued by the Sacramento Metropolitan Air Quality Management District consider emission increases of ozone precursors to be significant if they exceed 85 pounds per day. Based on this criterion, the project will have a significant impact on regional ozone air quality. Guidelines for the evaluation of project impacts issued by the Sacramento Metropolitan Air Quality Management District consider emission increases of PM₁₀ to be significant if they exceed 275 pounds per day. Based on this criterion, the project will also have a significant impact on regional PM₁₀ air quality. (DEIR, p. IV.I-11.)

Mitigation AQ-2:

In addition to the measures already included in the project, require the applicant to incorporate feasible land use, energy, and transportation measures into the project. These measures include (i) the inclusion of a mixed use village center providing neighborhood commercial uses; (ii) an internal mix of commercial, recreational, and residential uses; (iii) higher-density residential uses in proximity to the village center commercial core; and (iv) schools in proximity to the village center commercial core. Effective implementation of these measures, however, will not be expected to reduce project-related air emissions below significance thresholds; and this impact will remain significant and unavoidable. (DEIR, p. IV.I-13.)

The following additional mitigation measures will reduce project impacts on the regional scale by further reducing automobile travel or reducing direct emissions from residences:

- Develop a bikeway and pedestrian trail system along major roadways to connect residences to the Village Center and existing commercial centers and a park-and-ride lot north of the site;
- Require the installation of secure bicycle parking facilities at project schools, commercial areas and parks;

- Require that residential garages have electrical service that will allow installation of electric car recharge outlets at a later date;
- Wire each housing unit to allow use of emerging electronic communication technology;
- Implement feasible travel demand management (TDM) measures for a project of this type. These measures will include a ride-matching program (i.e., an informational service for residents interested in carpooling) and a public education program to inform residents of ridesharing and transit opportunities;
- Do not allow wood-burning open-hearth fireplaces. Use of EPA-certified woodstoves/ fireplace inserts, pellet stoves or decorative natural gas- or LPG-fired fireplaces should be encouraged;
- Require outdoor outlets at residences to allow use of electrical lawn and landscape maintenance equipment; and
- Electrical or alternatively fueled equipment should be used by any Community Services District for maintenance of the area under its jurisdiction.
- If and when the El Dorado County APCD establishes an air pollution mitigation measure trust fund, the applicant would contribute a pro-rata share to the trust fund to help improve the air quality of the District.

(DEIR, p. IV.I-13; FEIR, p. IV.I-13.)

Significance after Mitigation

Significant and unavoidable. (DEIR, p. IV.I-13.)

Impact:

AQ-3: The Project will cause potentially significant air quality impacts from residential uses. (DEIR, p. IV.I-14.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant environmental effect identified in the Final EIR.

Explanation:

Woodsmoke from project residences will affect air quality locally. This impact is potentially significant. Woodsmoke from fireplaces and woodstoves are residential sources of pollutants receiving increasing scrutiny in the past few years. Woodsmoke problems have been identified in many cities and rural areas in the western United States. Although constituting a very small percentage of total PM₁₀ emissions on an annual basis, woodsmoke is a major contributor to reduced visibility and reduced air quality on winter evenings in both urban and rural areas. (DEIR, p. IV.I-14.)

The potential for woodsmoke problems is related to a number of factors. The density of development is of primary importance, as is the terrain of the area. In general, dispersion of smoke is better in elevated terrain than in valleys or canyons. The higher eastern portions of the site have a relatively low residential density and elevated terrain, so the potential for wood-smoke problems is limited. The lower-lying western portion of the site will have the highest density development, and so will have the highest potential for wood smoke problems. (DEIR, p. IV.I-14.)

Mitigation AQ-3:

In addition to the general restriction on open-hearth fireplaces included under Mitigation Measure AQ-2, the following restriction should be adopted as a development standard for the MF and CR land use districts:

- Only natural gas fueled fireplaces are permitted.

(DEIR, p. IV.I-14.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.I-14.)

Impact:

AQ-4: The Project will cause potentially significant odor and land use compatibility impacts. (DEIR, p. IV.I-15.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant environmental effect identified in the Final EIR.

Explanation:

The project will place new residences adjacent to an existing wastewater treatment plant. This land use relationship could expose project residents to objectionable odors, although this potential could be reduced with the anticipated installation of odor control measures funded through proposed Assessment District 12. The potential odor nuisance is considered a potentially significant impact. (DEIR, p. IV.I-15.)

The existing El Dorado Irrigation District (EID) wastewater facility abuts two residential areas within the Project. Wastewater treatment plants are industrial in nature, so placement of these two land use types in proximity without a buffer zone creates a land use conflict. The treatment plant can be expected to have a characteristic odor during normal operation and may create stronger odors during periods of upset or breakdown. As a result, the project will be expected to increase the potential for odor nuisance complaints generated by the El Dorado Irrigation District wastewater facility. Funding of odor control measures at the EID plant (e.g., elimination of sludge drying basins; structural containment of headworks) through proposed Assessment District 12 will assist in reducing odor problems at the project site. (DEIR, p. IV.I-15.)

Mitigation AQ-4:

In order to reduce land use compatibility impacts between the project and the treatment plant, require the applicant to provide a 300-foot-wide open space, buffer and proper noticing of potential future project occupants. These measures, combined with anticipated odor control measures at the EID plant funded through proposed Assessment District 12, will reduce the impact to a less than significant level. (DEIR, p. IV.I-15.)

- (a) Buffer. As recommended by the El Dorado Irrigation District (EID), provide a 300-foot open space buffer between the proposed residential uses east and south of the treatment plant. This measure is consistent with the intent of El Dorado County General Plan policy 2.2.5.14, which states that *"buffers shall be established around future water supplies and other public facilities to protect them from incompatible land uses."*
- (b) Disclosure. Provide disclosure statements regarding the existence of the wastewater treatment plant and the associated potential odor problems. Include disclosure statements with all sales and lease agreements for all project residential and commercial properties located within one mile of the treatment plant. It is important to note that while this requirement may help reduce future complaints about odor from the treatment plant, it will not reduce the potential nuisance caused by odor from the plant; therefore, the buffer described under (a) above is considered the primary mitigation measure for this impact.

(DEIR, p. IV.I-15.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.I-15.)

Cumulative Impacts (General Plan)

Cumulative local and countywide growth, of which this project is a part, is anticipated and provided for in the El Dorado County General Plan. The cumulative impacts of that growth on air quality are addressed in section V.10, Air Quality, of the General Plan EIR. The General Plan EIR indicates that the anticipated cumulative air quality impacts will be reduced through implementation of related General Plan policies, but that the following cumulative impacts will remain significant and unavoidable:

Impact 10.2.1: Increase in short-term emissions. Construction related exhaust emissions, mobile source, fugitive dust, and volatile organic emissions will remain significant after mitigation.

Impact 10.2.2: Increase in long-term emissions. Stationary point source and area emissions, mobile emissions, will remain potentially significant after mitigation.

Impact 10.2.3 and Impact 10.2.4: Increase in toxic air emissions and exposure of sensitive receptors to substantial pollutant concentrations.

Impact 10.2.5: Conflicts with APCD air quality attainment plan programs. Will remain significant until a jobs/housing balance of 1.0 is achieved.

(DEIR, p. IV.I-18.)

The Findings of Fact of the Board of Supervisors of El Dorado County for the El Dorado County General Plan (January 23, 1996, revised January 26, 1996; pages 284, 298, 302, 306, and 310) also identified Impacts 10.2.1, 10.2.2, 10.2.4, and 10.2.5 as significant and unavoidable, but determined that Impact 10.2.3 (increases in toxic air emissions) could be mitigated to a less than significant level (e.g., through compliance with State law and El Dorado County Air Pollution Control District rules regulating fugitive dust emissions). (DEIR, p. IV.I-18.)

J. NOISE

Standards of Significance

Based on CEQA Guidelines (Appendix G), the project will be considered to have a significant impact on the noise environment if it will:

1. Conflict with applicable environmental plans adopted by agencies with jurisdiction over the project or policies of the community, such that the conflict will lead to increased noise levels or decreased protection against unacceptable noise levels;
2. Increase substantially the ambient noise levels for adjoining areas; or
3. Expose people to severe noise levels.

(DEIR, p. IV.J-12.)

Specific Criteria

1. "Substantial" increase in noise levels. To determine whether project-generated noise will conflict with an adopted plan or goal of El Dorado County, projected noise levels for this project have been compared with the goals, policies, and noise and land use compatibility guidelines contained in the Noise Element of the El Dorado County General Plan. Based upon these goals and policies, an increase in noise will be considered "substantial" and significant if:

- noise resulting from the project will increase average noise levels (L_{dn}) by 1 dBA or more, and existing average noise levels will increase from below an L_{dn} of 60 dBA to above an L_{dn} of 60 dBA;
- noise resulting from the project will increase average noise levels (L_{dn}) by 1 dBA or more where existing noise levels already exceed an L_{dn} of 60 dBA; or
- noise resulting from the project will increase average noise levels (L_{dn}) by 5 dBA or more and the resulting noise levels remain below an L_{dn} of 60 dBA.

(DEIR, p. IV.J-13.)

2. Land use compatibility standards. Tables J-4 and J-5 of the Draft EIR present the noise and land use compatibility standards for El Dorado County. In addition to the types of noise increases listed above, exposure of proposed land uses to noise levels that exceed these County-designated limits will also constitute a significant impact. (DEIR, p. IV.J-13.)

3. Construction noise. The General Plan policies that set the noise levels set forth in Tables J-4 and J-5 of the Draft EIR as maximum ambient noise levels do not apply to temporary construction noise. Project construction noise is assessed somewhat differently from noise associated with project operation, since construction noise typically is only of short duration. The most appropriate criteria for assessing construction noise impacts are based on related potential for intermittent speech interference during daytime or sleep disturbance during nighttime. Daytime construction noise at any noise-sensitive receptor (e.g., schools, hospitals) will be considered a significant short term noise impact if the level will exceed an hourly average L_{eq} of 60 dB during daytime hours. Nighttime construction is not proposed and will not be allowed. (DEIR, p. IV.J-13.)

Impact:

- N-1: The Project will cause potentially significant land use/noise conflicts along Latrobe road frontage.** (DEIR, p. IV.J-14.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant environmental effect identified in the Final EIR.

Explanation:

The Valley View Specific Plan proposes some noise-sensitive residential development along Latrobe Road. Current and predicted future noise levels along this corridor will exceed the County's noise/land use compatibility standards for these particular land uses. This land use/noise incompatibility will represent a potentially significant impact. (DEIR, p. IV.J-14.)

Most of the designated development along Latrobe Road is clustered to the north and south of the main project entrance. Core Residential (CR) is proposed to the north of the Village Center (VC) area and Single-Family Residential (SFR) is proposed to the south of the Village Center area. A Mixed-Use Development (MU) is also proposed just north of the southern project entrance from Latrobe Road. For the purposes of this noise and land use compatibility assessment, the future noise level expected to result from project-plus-cumulative traffic generation along Latrobe Road area is used. Under this future scenario, residential development proposed within about 500 feet of the centerline of Latrobe Road will be exposed to an L_{dn} of greater than 60 dBA. The future noise level 100 feet from the center of the roadway is calculated to be 71-74 dBA. (DEIR, p. IV.J-14.)

Mitigation N-1:

The following mitigation measures shall be implemented:

- Noise attenuation such as earth berms or combination earth berm/wall shall be installed at the time of development of project residential structures within the affected Latrobe Road frontage area (i.e., within the projected 60 dBA L_{dn} contour) and shall be designed according to the recommendations of an acoustical engineer, subject to the approval of the County;
- Special noise abatement measures and specifications in the architectural design of single- and multi-family residential structures shall also be implemented within the affected frontage area;
- Single- and multi-family housing shall incorporate noise abatement measures as necessary to achieve an interior noise level of 45 dBA L_{dn} or less; and
- Multi-family housing, which is subject to the requirement of Title 24, Part 2, of the State Building Code, shall be reviewed and an Acoustical Report submitted to the County prior to issuance of a building permit.

Implementation of an appropriate combination of these measures will reduce this impact to a less than significant level. (DEIR, p. IV.J-16.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.J-16.)

Impact:

N-2: The Project will cause potentially significant land use/noise conflicts along interior roadway frontages. (DEIR, p. IV.J-16.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant environmental effect identified in the Final EIR.

Explanation:

Interior project roadways which carry an average daily traffic volume of 4,000 to 5,000 vehicles per day will typically generate a 60 L_{dn} noise contour at least 50 feet from the centerline of the roadway. Residential development proposed along major and minor collectors could therefore be exposed to

noise levels exceeding an L_{dn} of 60 dBA (the County's maximum acceptable exterior standard). This impact will be potentially significant. (DEIR, p. IV.J-16.)

Mitigation N-2:

Implement measures recommended under Mitigation Measure N-1 above. Roadside noise barriers, i.e., either a berm, soundwall, or combination berm/wall of approximately 6-foot height, will be effective along affected major collectors. The specific height, length, and location of such barriers will depend upon the final internal traffic distribution, individual tentative maps, site plans, and grading plans. Implementation of this measure will reduce this impact to a less than significant level. (DEIR, p. IV.J-16.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.J-16.)

Impact:

N-3: The Project will subject future residents to potentially significant noise impacts from the wastewater treatment plant. (DEIR, p. IV.J-17.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant environmental effect identified in the Final EIR.

Explanation:

Existing or future equipment at the wastewater treatment plant will generate noise levels in planned adjacent residential areas which will exceed County land use/noise compatibility standards. This impact will be potentially significant. (DEIR, p. IV.J-17.)

The specific plan designates residential development east of the El Dorado Irrigation District Waste Water Plant. The common property boundary was visited during the noise monitoring survey in 1995. The average noise level during the morning measurement was 40 dBA, resulting primarily from distant traffic on Latrobe Road. It was noted that the outdoor pump was not operating. Existing and future noise levels generated by this facility are therefore not known. Development at this land use interface is subject to the County's Noise Level Performance Standards shown in Table

J-5 of the Draft EIR. These standards will be imposed at the residential property line. The noise limits are 55 dBA L_{eq} during the daytime, 50 dBA L_{eq} during the evening, and 45 dBA L_{eq} at night. The waste water plant will be separated from proposed residential development by a major collector road. Most of the equipment at the waste water plant is separated by a large open space buffer on the Irrigation District property. (DEIR, p. IV.J-17.)

Mitigation N-3:

The following mitigation measures shall be implemented:

- Incorporate a 300-foot buffer on the project site adjacent to the wastewater treatment plant where residential land uses are proposed;
- Prior to development of this area, require an Acoustical Study to analyze collector road traffic noise impacts, and an assessment of noise from the wastewater treatment plant. The Acoustical Study shall recommend measures to ensure that the County's Noise Level Performance Standards are met. It is anticipated that the 300-foot buffer will be sufficient to mitigate noise impacts from the wastewater treatment plant on adjacent residential development, subject to confirmation by the Acoustical Study; and
- The possibility of additional specific equipment noise control improvements funded by the project shall also be evaluated and implemented, if necessary.

(DEIR, p. IV.J-17.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.J-17.)

Impact:

N-4: The Project will cause potentially significant existing-plus-project traffic noise impacts along White Rock Road. (DEIR, p. IV.J-18.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant environmental effect identified in the Final EIR.

Explanation:

The existing L_{dn} noise level on White Rock Road was measured and found to be greater than 55 dBA, but less than 60 dBA, at representative residential receptors. Project traffic will increase this L_{dn} noise level by about 5 dBA along White Rock Road west of Latrobe Road and by about 7 dBA along White Rock Road east of Latrobe Road. The L_{dn} with the addition of project traffic will therefore be greater than 60 dBA along both roadway segments. Both frontages include existing noise-sensitive uses (mobile home park and individual residences). Therefore, this impact is potentially significant. (DEIR, p. IV.J-18.)

Mitigation N-4:

The following mitigation measures shall be implemented:

- Incorporate traffic noise mitigation measures such as earthen berms, soundwalls or combination berm/walls and setback restrictions as part of the overall program of roadway widening improvements already planned along White Rock Road to accommodate anticipated cumulative traffic increases;
- Incorporate fair-share funding for these noise mitigation components into the overall White Rock Road improvement program (see Mitigation Measure T-14). This traffic noise mitigation measure shall be designed to comply with the maximum allowable noise exposure standards set forth in Table 6-1 of the El Dorado County General Plan (i.e., an L_{dn} of 60 dB in outdoor activity areas at residential receptors); and
- The specific location, height, length, and type of barrier will be evaluated as part of the design of the roadway improvement project. These mitigation measures will be imposed on both segments of White Rock Road, just east and west of Latrobe Road, at the sensitive receptor frontages that will be significantly affected.

(DEIR, p. IV.J-18.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.J-18.)

Impact:

N-5: The Project will cause potentially significant short-term construction noise impacts. (DEIR, p. IV.J-19.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant short-term environmental effect identified in the Final EIR.

Explanation:

Residents located south and east of the project site will occasionally be exposed to increased noise levels during heavy periods of new construction activity in adjacent portions of the project site. Construction activities during various phases will be expected to produce intermittent noise levels exceeding 60 dBA L_{eq} at these residences and will result in short-term potentially significant impacts for adjacent noise sensitive land uses. (DEIR, p. IV.J-19.)

Project construction will involve ground clearing, site grading, and development of infrastructure and paving, followed by site improvements and erection of various buildings in the different development areas. Table J-6 of the Draft EIR identifies the types of construction equipment typically used for this type of project and the range of maximum noise levels that such equipment generates at a distance of 50 feet. Corresponding estimates of average hourly noise levels generated during various typical sequences of construction are listed in Table J-7 of the Draft EIR. (DEIR, p. IV.J-19.)

Mitigation N-5:

For all construction within the specific plan area, implement the following measures pertaining to construction scheduling, public notification, and equipment maintenance and use:

- (a) Construction Scheduling. Limit noise-generating construction activities near sensitive land uses to the hours of 7:00 AM to 7:00 PM, Monday through Saturday. Prohibit construction on Sundays;
- (b) Construction Equipment. Properly muffle and maintain all construction equipment powered by internal combustion engines;
- (c) Idling Prohibitions. Prohibit unnecessary idling of internal combustion engines near sensitive receptors;
- (d) Equipment Location. Locate all stationary noise-generating construction equipment, such as air compressors and portable power generators, as far as practical from noise-sensitive land uses;
- (e) Quiet Equipment Selection. Select quiet construction equipment whenever possible; and

- (f) Noise Disturbance Coordinator. Designate a project Noise Disturbance Coordinator (such as a County staff person or a superintendent already working at the construction site) responsible for responding to local complaints regarding construction noise. Include the name and the phone number of the disturbance coordinator on the construction schedule notification mailed to nearby residents. Post a related sign at the main entry points to the portion(s) of the project under construction.

(DEIR, p. IV.J-22.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.J-22.)

Impact:

N-6: Cumulative-plus-project traffic noise impacts along White Rock Road will be significant. (DEIR, p. IV.J-23.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley Views Specific Plan that avoid the project's cumulatively considerable incremental contribution to the significant environmental effect associated with cumulative traffic noise impacts along White Rock Road due to planned development throughout the County.

Explanation:

Project traffic will contribute to projected cumulative increases in traffic noise at sensitive frontages along White Rock Road east and west of Latrobe Road. Both roadway segment frontages include existing noise-sensitive uses (mobile home park and individual residences). This noise will represent a significant cumulative impact upon sensitive receptors along White Rock Road. (DEIR, p. IV.J-23.)

Traffic volumes along White Rock Road are predicted to increase substantially as a result of the Project and other development in the area (see Figure D-17 in section IV.D.4 of the Draft EIR). White Rock Road is proposed to be improved to a four-lane divided road west of Latrobe Road and a six-lane divided road east of Latrobe Road (see section IV.D.3.a(2) of the Draft EIR). The cumulative traffic noise increase is predicted to be 10 to 15 dBA at existing sensitive receptors adjacent to this roadway. This impact will be cumulatively significant. (DEIR, p. IV.J-23.)

Mitigation N-6:

Implement the above Mitigation Measure N-4. Implementation of this measure will be expected to reduce this noise impact to a less than significant level. (DEIR, p. IV.J-23.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.J-23.)

Cumulative Impact (General Plan)

Cumulative local and countywide growth, of which this project is a part, is anticipated and provided for in the El Dorado County General Plan. The cumulative impacts of that growth on environmental noise are addressed in section V.11, Noise, of the General Plan Update EIR. The General Plan EIR indicates that most of the anticipated cumulative noise impacts will be mitigated to less than significant levels through implementation of related General Plan policies, but that the following two cumulative impacts, though reduced, will remain significant and unavoidable:

Impact 11.3.1: Increase in traffic noise. It is recognized that in many instances, increases in traffic noise levels will occur as a result of growth. In some cases, particularly at existing noise-sensitive uses, the General Plan policies and recommended additional mitigation measures will not reduce the impacts to a less than significant level and additional mitigation measures may not be feasible. Therefore, the impacts may be considered significant and unavoidable.

Impact 11.3.4: Increase in background noise levels. An increase in background noise levels will creep upwards as a direct result of population growth. The mitigation measures and policies of the General Plan will not maintain background noise at present levels; they will only control the increase in noise. In time, ambient noise levels will increase to sensitive land uses and be considered a significant change.

These impacts are also identified as significant and unavoidable in the Findings of Fact of the Board of Supervisors of El Dorado County for the El Dorado County General Plan (January 23, 1996, revised January 26, 1996; pages 316 and 323). In addition, the Findings of Fact (page 318) identified Impact 11.3.2 (Increase in Noise Levels Due to Fixed or Non-Transportation Noise Sources) as significant and unavoidable.

(DEIR, p. IV.J-23 - IV.J-24.)

K. PUBLIC HEALTH AND SAFETY

Standards of Significance

Based on the CEQA Guidelines, the project will be considered in to have a significant health and safety effect if it will:

1. expose people to existing sources of potential health hazards;
2. create a health hazard or potential health hazard, or involve the use, production, or disposal of materials that pose a hazard to people or animal or plant populations in the area affected;
or
3. create a risk of accidental explosion or release of hazardous substances (including, but not limited to, oil, pesticides, chemicals, or radiation).

(DEIR, p. IV.K-3.)

Impact:

PHS-1: The Project will cause potentially significant impacts associated with the El Dorado Hills landfill. (DEIR, p. IV.K-3.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant environmental effect identified in the Final EIR.

Explanation:

Potential soil, groundwater and air contamination at this abandoned, unlined facility on the project site, if not remediated prior to project construction, may create health hazards for construction workers and future occupants of the West Valley Village. This possibility represents a potentially significant impact. (DEIR, p. IV.K-3.)

Mitigation PHS-1:

The applicant shall implement the following:

- (a) contact appropriate jurisdictional authorities such as the California Integrated Waste Management Board (CIWMB), the Central Valley Regional Water Quality Control Board (RWQCB), and the Placer County Environmental Health Services Department, regarding landfill closure;
- (b) conduct a detailed environmental assessment of the landfill site to determine if any soil or groundwater contamination exists;
- (c) depending on the level of contamination identified, either provide for minimum segregation of the landfill by designating it open space or parkland or provide for maximum segregation of the landfill (i.e., install fencing) to limit human exposure; and
- (d) complete clean-up prior to approval and recordation of any final subdivision map that includes the affected areas.

(DEIR, p. IV.K-3.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.K-3.)

Impact:

PHS-2: The Project will cause potentially significant impacts to Placer-mined drainages.
(DEIR, p. IV.K-4.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant environmental effect identified in the Final EIR.

Explanation:

Potential mercury contamination in project site drainages, if not remediated prior to project construction, may create health hazards for construction workers and future project occupants. Plunkett Creek and other drainages on the site are likely to have been placer-mined, creating the potential for mercury contamination. This possibility represents a potentially significant impact. (DEIR, p. IV.K-4.)

Mitigation PHS-2:

The applicant shall implement the following:

- (a) collect representative wet sediment samples from stream areas that have been placer-mined and analyze the samples for mercury;
- (b) assess the vertical and lateral extent of elevated levels of mercury in sediments, if present, via surface and subsurface sample collection and laboratory analyses; and
- (c) assess the risk associated with elevated levels of mercury in sediments, and either restrict access to the area or remediate the contaminated materials to a level acceptable to the El Dorado County Department of Environmental Health.

(DEIR, p. IV.K-4.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.K-4.)

Impact:

PHS-3: The Project will cause potentially significant impacts to soil or groundwater contamination on the site. (DEIR, p. IV.K-4.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant environmental effect identified in the Final EIR.

Explanation:

Future commercial, office, and R&D in the West Valley Village may store, handle or transport hazardous substances that will have the potential to cause soil or groundwater contamination on the site. This possibility represents a potentially significant impact. (DEIR, p. IV.K-4; FEIR, p. IV.K-4.)

Mitigation PHS-3:

The County shall require future onsite commercial development to prepare business plans that describe management of hazardous substances and procedures for handling potential releases of these substances. (DEIR, p. IV.K-4.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.K-4.)

Impact:

PHS-4: The Project will cause potentially significant health hazards for construction workers and future occupants. (DEIR, p. IV.K-5.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant environmental effect identified in the Final EIR.

Explanation:

Potential soil, surface water, and groundwater contamination and odor problems at the El Dorado Hills Waste Water Treatment Plant may create health hazards for construction workers and future occupants of the southern portion of White Rock Village and the northern portion of West Valley Village. This possibility represents a potentially significant impact. (DEIR, p. IV.K-5.)

Mitigation PHS-4:

The County shall:

- (a) implement Mitigation Measure AQ-4; and
- (b) require the applicant to design the project to accommodate the existence of buried pipelines leading to and from the treatment plant.

Independently from the Project, it is expected that the Regional Water Quality Control Board will require the EID to:

- (a) establish a monitoring system downgradient from the El Dorado Hills Waste Water Treatment Plant to detect existing soil and groundwater contamination and to provide warning of future events; and
- (b) provide containment measures for releases of hazardous materials.

These measures will also assist in reducing potential health hazards to project construction workers and future occupants.

(DEIR, p. IV.K-5.)

Significance after Mitigation

Less than significant. (DEIR, p. IV.K-5.)

Cumulative Impacts (General Plan)

Cumulative local and countywide growth, of which this project is a part, is anticipated and provided for in the El Dorado County General Plan. The cumulative impacts of that growth are addressed in the General Plan Update EIR. The General Plan EIR does not identify any significant public health and safety impacts associated with this anticipated cumulative growth. (DEIR, p. IV.K-5.)

L. CULTURAL RESOURCES

Standards of Significance

The project will be considered to have a significant impact on cultural resources if it will:

- a. disrupt or adversely affect an important archaeological resource;
- b. disrupt or adversely affect a significant paleontological site; or
- c. cause a substantial adverse change in the significance of an historical resource.

(DEIR, p. IV.L-17.)

Impact:

CR-1: The Project will have potentially significant impacts on prehistoric sites (CA-ELD-80/H, CA-Eld-785/H, Ca-Eld-788, V1, V2, V4, V5, V10, V14, V15, V16, V19, V20, V22, V23, V24, V27, V38, V42, V43). (DEIR, p. IV.L-22.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that substantially lessen, but do not avoid, the potentially significant environmental effect associated with impacts on prehistoric sites. No mitigation is available to render the effect less than significant. The effect therefore remains potentially significant and unavoidable.

Explanation:

As indicated in Table L-2 of the Draft EIR, these prehistoric sites fall within areas that are both planned for development and reserved for open space. These sites may qualify as "historical resources" under Public Resources Code section 21084.1, and therefore may be considered potentially significant. Direct impacts to these sites could result from the destruction of prehistoric or historic archaeological sites during any ground disturbance activities. Indirect impacts may be caused by the increased public use of the general vicinity and could result in equally devastating impacts. Indirect impacts may also be caused by the general changes in land use that may effect the integrity of the setting of these sites. (DEIR, p. IV.L-22.)

All of the prehistoric sites recorded within the Valley View site are considered potentially significant heritage resources until further work, intended to evaluate their research, interpretative and cultural values, has been completed. With the exception of the prehistoric component of CA-Eld-80/H, additional evaluation work on the other sites may involve additional archaeological field test excavation, mapping, and photo documentation. Representatives from the local Native American community should be closely involved in evaluating their significance. The prehistoric component of CA-Eld-80/H (the southern locus of the site) falls outside the project area; hence, it should not be indirectly or directly impacted by project activities; and additional evaluation research is not necessary. (DEIR, p. IV.L-22.)

Mitigation CR-1:

Avoid disturbance of these significant prehistoric sites, if feasible. Where avoidance is not feasible, develop and implement an appropriate mitigation program as specified under Mitigation Measures CR-1 below:

- If project redesign to avoid direct and indirect impacts is infeasible, then the applicant shall implement and carry out other appropriate mitigation measures. Prior to the property's modification or destruction, the applicant shall design and implement field-related mitigation activities in consultation with appropriate federal, state and local agencies and Native Americans, in order to recover the significant information contained within these heritage properties prior to project ground disturbance activities. Specifically, the applicant shall implement the following:

- (a) Modify the project to protect and/or avoid identified significant prehistoric sites. In lieu of project modification, implement a data recovery program. That program may involve focused archival research, oral history interviews, documentation with still and audio-video photography, detailed mapping, collection of artifacts, recordation of features, metal detection surveys, test excavations, technological analyses, interpretative trails, signing and displays, or some combination of these tasks;
- (b) Implement long-term protection measures for sites that are not destroyed by development. This protection may involve fencing with regular security checks and/or capping with culturally sterile soils placed over a mesh barrier. Signage at each of these locales, to explain the nature of the heritage resource and reason for its preservation, may be appropriate;
- (c) To prevent accidental damage to Valley View's important archaeological sites during construction activities, place temporary fencing around the perimeter of each site;
- (d) To further insure that the cultural resources are not disturbed once construction is underway, retain a professional archaeologist familiar with the Valley View sites to attend preconstruction meetings and brief contractors on heritage resource locations and protection methods;
- (e) As a further protection measure, conditions of approval shall include a clause that prohibits the collecting, digging or removal of any stone, artifact or other prehistoric or historic object from the open space managed by the homeowner's association;
- (f) At the discretion of the homeowners association, permit representative(s) of local Native American groups to visit, study, stabilize, preserve or restore the archaeological sites located within open space areas at their own expense; and
- (g) The project sponsor has an opportunity to incorporate selective preservation and interpretation of a representative sample of the unique and varied heritage resources inventoried within the Valley View Specific Plan area. In this regard, antiquities are not viewed as a constraint, but rather as an opportunity. The open space areas contain a variety of heritage remains that can be creatively integrated into a system of hiking/biking/equestrian trails and community parks and can also serve as field trip destinations for local schools planned within the project area. Open space areas along the west flank of Plunkett Ridge, in the upper reaches of Screech Owl Creek and in Plunkett Creek Valley, are especially amenable to this use. The project sponsor can expand the existing land use plan for these open space corridors,

designating them as both natural and cultural preserves for the enhancement of natural resources and interpretation of heritage resources.

(DEIR, pp. IV.L-23 - IV.L-24.)

Significance after Mitigation

Potentially significant and unavoidable. (DEIR, p. IV.L-23.)

Impact:

CR-2: The Project will cause potentially significant impacts on placer mining sites (CA-Eld-80/H, V12, V21, V25, V39, V40, V41). (DEIR, p. IV.L-24.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that substantially lessen, but do not avoid, the potentially significant environmental effect associated with impacts on Placer mining sites. No mitigation is available to render the effect less than significant. The effect therefore remains potentially significant and unavoidable.

Explanation:

All of the early 19th century mining landscape sites recorded within the Valley View Specific Plan area (V12, V21, V25, V39, V40, V41) may qualify as "historical resources" under Public Resources Code section 21084.1, and therefore are considered potentially significant heritage resources until further work, intended to evaluate their research, interpretative, and cultural values, has been completed. Placer diggings within the Screech Old Creek main channel (V25-1) and in the Plunkett Creek valley (V12) are of special interest. Plunkett Creek Valley, in particular, represents a microcosm of early gold rush activities, where more complex tailings features, ditch systems, and associated habitation remains are present with good integrity. Mining landscape remains easily lend themselves to public interpretation without elaborate protection measures, unlike fragile pattern site types with surface and buried portable artifacts. Placer mining remnants in the Carson Creek main channel have been largely obliterated (CA-Eld-80/H) and no further work is required here. Other diggings recorded along tributaries to Carson Creek (V21, V39, V40, V41) are less complex placers with relatively few associated features or habitation areas and are less interesting in terms of interpretation and research potential. (DEIR, p. IV.L-24.)

Mitigation CR-2:

Protect and avoid disturbance of mining sites to the extent possible. Where avoidance is not feasible, conduct additional documentation and analysis of the various mining sites as specified in section IV.D.4 of the Draft EIR.

If avoidance of the sites is not feasible, the applicant shall implement the following mitigation measures:

- (a) Hire a qualified archaeologist to conduct additional mining technological analysis and detailed documentation with still and audio-video photography for sites V-25 and V-12;
- (b) Protect sites V-25 and V-12 to the extent possible and incorporate them into public interpretation areas as part of the project's open space; and
- (c) For impacts to sites V21, V39, V40, and V41, hire a qualified archaeologist to complete additional still and audio-video photography documentation and minimal mining technological analysis.

(DEIR, p. IV.L-25.)

Significance after Mitigation

Less than significant (if disturbance of sites is avoided); Significant and unavoidable (if disturbance of sites cannot be avoided). (DEIR, p. IV.L-25.)

Impact:

CR-3: The Project will cause potentially significant impacts on mining habitation sites (V6, V7, V9, V17, V29, V30, V31, V32, V33, V34, V35, V36, V37, V44). (DEIR, p. IV.L-25.)

Finding :

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that substantially lessen, but do not avoid, the potentially significant environmental effect associated with impacts on mining habitation sites. No mitigation is available to render the effect less than significant. The effect therefore remains potentially significant and unavoidable.

Explanation:

All of the early mining habitation sites recorded within the Valley View Specific Plan area (V6, V7, V9, V17, V29, V30, V31, V32, V33, V34, V35, V36, V37, V44) may qualify as "historical resources" under Public Resources Code section 21084.1, and therefore are considered potentially significant heritage resources until further work, intended to evaluate their research, interpretative, and cultural values has been completed. (DEIR, p. IV.L-25.)

Mitigation CR-3:

The applicant shall implement the following:

- (a) Hire a qualified archaeologist to conduct additional archival research and archaeological field test excavation of these sites; and
- (b) Hire a qualified archaeologist to document these sites and avoid or protect them to the extent possible.

(DEIR, p. IV.L-26.)

Significance after Mitigation

Significant and unavoidable (if disturbance of resources cannot be avoided). (DEIR, p. IV.L-26.)

Impact:

CR-4: The Project will cause potentially significant impacts on way station site (V18).
(DEIR, p. IV.L-26.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that substantially lessen, but do not avoid, the potentially significant environmental effect associated with impacts on way station site (V18). No mitigation is available to render the effect less than significant. The effect therefore remains potentially significant and unavoidable.

Explanation:

This site (V18) may qualify as a "historical resource" under Public Resources Code section 21084.1, and therefore is considered a potentially significant heritage resource until further work, intended to evaluate its research, interpretative, and cultural values, has been completed. (DEIR, p. IV.L-26.)

Mitigation CR-4:

The applicant shall implement the following:

- (a) Hire a qualified archaeologist to conduct additional archival research and archaeological field test excavation of this site;
- (b) Hire a qualified archaeologist to document the site and avoid or protect it to the extent possible; and
- (c) Implement the list of mitigation strategies listed under Mitigation Measure CR-4 in the Cultural Resource Section of these Findings.

(DEIR, p. IV.L-26.)

Significance after Mitigation

Significant and unavoidable (if disturbance of site cannot be avoided). (DEIR, p. IV.L-26.)

Impact:

CR-5: The Project will cause potentially significant impacts on ranching habitation sites (CA-Eld-786-H, CA-Eld-787-H, V3, V8, V13, V16, V28). (DEIR, p. IV.L-27.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that substantially lessen, but do not avoid, the potentially significant environmental effect associated with impacts on ranching habitation sites. No mitigation is available to render the effect less than significant. The effect therefore remains potentially significant and unavoidable.

Explanation:

Ranching sites recorded in the project area (CA-Eld-786-H, CA-Eld-787-H, V3, V8, V13, V16, V28) may qualify as "historical resources" under Public Resources Code section 21084.1, and therefore are considered potentially significant heritage resources until further work, intended to evaluate their research, interpretative, and cultural values, has been completed. (DEIR, p. IV.L-27.)

Mitigation CR-5:

The applicant shall implement the following:

- (a) Hire a qualified archaeologist to conduct additional archival research and archaeological field test excavation of these sites;
- (b) Hire a qualified archaeologist to document these sites and avoid or protect them to the extent possible; and
- (c) Implement mitigation strategies listed under Mitigation Measure CR-1 above.

(DEIR, p. IV.L-27.)

Significance after Mitigation

Significant and unavoidable (if disturbance of sites cannot be avoided). (DEIR, p. IV.L-27.)

Impact:

CR-6: The Project will cause potentially significant impacts on buried/undiscovered heritage resources. (DEIR, p. IV.L-27.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that substantially lessen, but do not avoid, the potentially significant environmental effect associated with impacts on buried/undiscovered heritage resources. No mitigation is available to render the effect less than significant. The effect therefore remains potentially significant and unavoidable.

Explanation:

It is possible that significant direct impacts could occur to buried or concealed heritage resources discovered during project construction activities that were not detectable on the surface. Any such resources may qualify as "historical resources" under Public Resources Code section 21084.1, and therefore will be considered potentially significant heritage resources until further work, intended to evaluate their research, interpretive, and cultural values, has been completed. (DEIR, p. IV.L-27.)

Mitigation CR-6:

The applicant shall implement the following:

- (a) In the event of discoveries of buried or concealed heritage resources, cease project activities in the area of the find and consult a qualified archaeologist for recommended procedures;
- (b) If human remains are inadvertently discovered, cease work immediately and notify the county coroner, in accordance with California law; and
- (c) Hire a professional archaeologist to assist in the development of appropriate mitigation of site impacts.

(DEIR, p. IV.L-28.)

If human remains are inadvertently discovered, California law requires that work must stop immediately and the County Coroner must be notified. (See Health and Safety Code, Section 7050.5; Public Resources code, Section 5097.95, 5097.98.) In the event of discovery or recognition of human remains in any location other than a dedicated cemetery, no further excavation or disturbance of a project site or any nearby area reasonably suspected to overlie adjacent human remains can occur until the County Coroner has been informed and determines that no investigation of the cause of death is required. (DEIR, p. IV.L-28.)

If the remains are Native American, AB 297 requires that the County Coroner notify the Native American Heritage Commission in Sacramento to see whether that agency can identify descendants of the deceased Native American(s). If, within 24 hours of being notified by the Commission, such descendants offer the lead agency recommendations for treating or disposing of the remains and any associated grave goods, such recommendations should be followed, unless the landowner disagrees with the recommendation, in which case the Native American Heritage Commission shall mediate the dispute. If the Native American Heritage Commission is unable to identify a descendant, or the descendant fails to offer a recommendation within 24 hours after being notified by the Commission, or the Commission cannot mediate a dispute between the descendants and the landowner to the latter's satisfaction, further work on the project may proceed, but the landowner must rebury the remains and any grave goods "with appropriate dignity" on the property in a location not subject to subsurface disturbance. (DEIR, p. IV.L-28.)

Significance after Mitigation

Significant and unavoidable (if disturbance of resources cannot be avoided). (DEIR, p. IV.L-28.)

Impact:

CR-7: The Project will cause potentially significant impacts on buried/undiscovered traditional cultural properties. (DEIR, p. IV.L-29.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that substantially lessen, but do not avoid, the potentially significant environmental effect associated with impacts on buried/undiscovered traditional cultural properties. No mitigation is available to render the effect less than significant. The effect therefore remains potentially significant and unavoidable.

Explanation:

It is possible that significant impacts to sites of ethnic/religious/cultural significance to descendants of the county's Native American population may occur, as these types of resources are difficult to identify during surface field reconnaissance due to an absence of any discernible physical remains. Any such resources may qualify as "historical resources" under Public Resources Code section 21084.1, and therefore will be considered potentially significant heritage resources until further work, intended to evaluate their research, interpretive, and cultural values, has been completed. (DEIR, p. IV.L-28.)

Mitigation CR-7:

Further consultation with the local Native American community is required in order to determine areas of potential traditional cultural importance. The applicant shall implement the following:

- (a) Maintain the initial contacts established with the Shingle Springs Band of Miwok and the El Dorado Indian Council during the archaeological inventory phase as part of ongoing operations;
- (b) In consultation with local Native Americans, research the available project-specific ethnographic data pertaining to local Nisenan and Miwok groups within the project vicinity;
- (c) In the event of discoveries of buried or concealed heritage resources, cease project activities in the area of the find and consult a qualified archaeologist for recommended procedures;
- (d) If human remains are inadvertently discovered, cease work immediately and notify the county coroner; and

- (e) Hire a professional archaeologist to assist in the development of appropriate mitigation of site impacts.

(DEIR, p. IV.L-29.)

Significance after Mitigation

Significant and unavoidable (if disturbance of resources cannot be avoided). (DEIR, p. IV.L-29.)

Impact:

CR-8: The Project will cause potentially significant impacts on linear features; four discrete mining ditch systems (V-LF1, V-LF22, V-LF43, and V-LF45), one mining road (V-LF42), four road transportation systems (V-LF7, V-LF18, V-LF24, V-LF41) one ranch water conveyance system (V-LF44), and 38 rock walls (AF-9-76-H, AF-9-77-H, V-LF2 through V-LF6, V-LF8 through V-LF17, V-LF19 through V-LF21, V-LF23, V-LF25 through V-LF40). (DEIR, p. IV.L-30.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that substantially lessen, but do not avoid, the potentially significant environmental effect associated with impacts on linear features. No mitigation is available to render the effect less than significant. The effect therefore remains potentially significant and unavoidable.

Explanation:

At this inventory and evaluation stage, it is not clear which features are significant contributing elements to the larger system. It is likely that all are not contributors and, for those non-contributing features, all of their important data can be recoverable through a more detailed field recordation of their dimensions, shape, construction techniques, etc., and with more thorough mapping, in addition to documentation via still and audio-video photography. Limited, focused archival research may also be appropriate. Although the initial EIR inventory/evaluation serves as a substantial effort towards such documentation, additional work is warranted. While only representative examples of these linear feature systems should ultimately be preserved, all 48 features should be protected until impact mitigation/data recovery is complete. These features are of interest and some possess considerable interpretive potential. As substantial segments fall within project open space, selective

preservation of a few key feature segments may be compatible with project plans. (DEIR, p. IV.L-30.)

Mitigation CR-8:

Protect and avoid disturbance of these linear features to the extent possible. If avoidance is not feasible, conduct additional field recordation and documentation to determine which features are significant contributing elements to the larger feature systems associated with transportation, mining and ranching. Preserve representative examples of each feature system. (DEIR, p. IV.L-31.)

Significance after Mitigation

Significant and unavoidable (if disturbance of resources cannot be avoided). (DEIR, p. IV.L-31.)

Cumulative Impacts (General Plan)

Cumulative local and countywide growth, of which this project is a part, is anticipated and provided for in the El Dorado County General Plan. The cumulative impacts of that growth on cultural resources are addressed in section V.12, Cultural Resources, of the General Plan Update EIR. The General Plan EIR indicates that the following cumulative cultural resources impacts will remain significant and unavoidable due to increased disturbance through development and other human activity:

Impact 12.2.1. Disturbance or destruction of prehistoric or historic sites, properties, or areas of ethnic significance; "important archaeological resources" as defined in Appendix K of the CEQA Guidelines; and properties eligible for inclusion in the National Register of Historic Places.

Impact 12.2.2. Indirect impacts on cultural resources through an increase in human activity.

The Findings of Fact of the Board of Supervisors of El Dorado County for the El Dorado County General Plan EIR (January 23, 1996, revised January 26, 1996; pages 332 and 333) also identified these impacts as significant and unavoidable.

(DEIR, p. IV.L-32.)

M. ENERGY

Standards of Significance

Based on the CEQA Guidelines, the project will be considered to have a potentially significant impact on energy resources if it will:

- (1) encourage activities that result in the use of large amounts of fuel, water, or energy; [or] use fuel, water, or energy in a wasteful manner, or
- (2) conflict with applicable environmental plans adopted by agencies with jurisdiction over the project, or policies of the community, such that the conflict will lead to increased energy consumption.

(DEIR, p. IV.M-2.)

Impact:

E-1: The Project will cause long-term project energy use impacts. (DEIR, p. IV.M-3.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the significant environmental effect identified in the Final EIR.

Explanation:

At buildout, the residential, commercial and public facility uses proposed by the project could use an estimated 2.32 million therms of energy each year. This impact is potentially significant.

Residential Uses. The project residential units will consume energy for lighting, heating, cooling, ventilation, and cooking. Based on a standard energy usage figure of 680 therms per unit for conventional dwelling units, it is estimated that the proposed 2,840 units will consume up to 1.93 million therms annually.

Commercial Uses. The commercial components of the project will consume energy for lighting, heating, cooling, ventilation, water heating, and restaurant operations. Based on an assumed average energy usage figure of 1.38 therms per square foot annually for conventional commercial space, it

is estimated that the 107,000 gross square feet of commercial uses proposed by the project could consume up to 0.15 million therms annually at buildout.

Public/Semi-Public Facilities Uses. The project-proposed Public/Semi-Public-designated areas will contain approximately 172,000 square feet of community facility buildings included in the project (two schools, fire station, community centers, post office, and religious institutions). These uses consume up to approximately 0.24 million therms annually at buildout, assuming energy usage will be comparable to that estimated for conventional commercial space (1.38 therms per square foot).

(DEIR, p. IV.M-3.)

Mitigation E-1:

Require the project to comply with Title 24 Energy Efficiency Standards.

The project construction design will be required to comply with Title 24 Energy Efficiency Standards set forth in the California Code of Regulations. Compliance with the following measures will allow the project to meet or exceed these standards:

- Where possible given local terrain, streets should be oriented such that the principal streets are running primarily east/west. This orientation provides for optimum solar gain as well as the best shelter of streets from the winter west-northwesterly winds. Solar access to south-facing winter heating and shading of low morning and afternoon summer heat gain are the primary reasons for this guideline;
- Building orientation and solar access should be considered in choosing housing types. Application of passive solar technology in residential design suggests differing unit types for differing exposures. For example, the front facade of a north-facing home should be different from the home opposite it with full southern exposure;
- Residential and commercial buildings should use natural daylight. Residential and commercial buildings should provide at least 75 percent of their daytime lighting needs with natural daylighting. Possible technologies include interior light courts, clerestory windows, lightshelves (reflecting daylight onto light-colored surfaces), mirror systems, skylights, windows on at least two sides of every room in a house, and narrow floor plates in commercial buildings;
- Thermal mass, such as a concrete or tile floor or masonry wall, should be part of every residential unit's design as needed to meet Title 24 standards;

- Windows should not receive direct sunlight during the hours of 10:00 AM to 4:00 PM between March 21 and September 21. Walls and windows facing east, south and west generate a large portion of a building's cooling load. Shading these will greatly increase efficiency. Shading solutions, including architectural elements, movable awnings, trellises, deciduous vegetation, and adjacent buildings, should be considered in building design;
- Building designs should provide opportunities for winter sunlight. Structures or coniferous vegetation ("evergreens") should not shade any south-facing glazing or roof-top solar devices from 9:00 AM to 3:00 PM on December 21. Winter sun should shine on the thermal mass within the unit. Solar water heaters and photovoltaic arrays are encouraged for business park rooftops;
- Single-family house designs should provide at least two outdoor living areas. Designs should include at least two outdoor living areas, one that is well shaded in the summer and one which remains sunny in winter. These can be left to be finished by the homebuyer, but they should be a defined part of the house plan and have doors opening onto them;
- Fifty percent of any building's window area should feature operable windows and shading devices. Employees in commercial buildings should be able to control their environment;
- All buildings should contain insulation that conforms to Title 24. Caulking, insulation and weatherstripping is an inexpensive method for reducing unwanted air flows. Insulation in attics, ceilings, and exterior wall cavities help minimize air flows and heat transference;
- All buildings should contain high-efficiency lighting. All lighting fixtures permanently installed in housing units and commercial buildings should include high-efficiency bulbs. Possibilities include compact fluorescent, tube fluorescent, electronic bulbs, low voltage, and other emerging products. Energy-efficient lighting equipment, such as electronic ballasts, reduced-voltage lamps, high light efficiency fixtures, fixture lenses and reflectors, help reduce the amount of lighting energy required for a particular application. An estimated 35 to 50 percent of all electrical energy used in commercial, retail and institutional facilities is consumed by lighting. On/off controls, variable output controls and occupancy sensor controls are effective mechanisms for managing lighting needs;
- Mechanical equipment should be energy-efficient. Heating, ventilation, and air conditioning systems generally account for between 45 to 60 percent of the energy used in a typical commercial building. A wide variety of energy-efficient equipment is available. Incorporating energy-efficient technologies into commercial buildings can increase the buildings' value and marketability. PG&E also has cash incentive programs for builders

using energy-efficient equipment. Energy-efficient water heaters, booster pumps and insulation of water pipes also help reduce overall energy costs; and

- Natural heating and cooling technology should provide a portion of the building's environmental management needs. Possible heating technologies include direct gain passive solar, active solar, trombe walls, and hybrid remote heat storage. Possible cooling technologies include passive and active solar, thermo-siphoning, underground cooling tubes, and ventilated cavities between two layers.

(DEIR, p. IV.M-4 - IV.M-5.)

Significance after Mitigation

Less than significant (DEIR, p. IV.M-4.)

Impact:

E-2: The Project will cause potentially significant transportation-related energy consumption impacts. (DEIR, p. IV.M-5.)

Finding:

Changes or alterations have been required in, or incorporated into, the Valley View Specific Plan that avoid the potentially significant environmental effect identified in the Final EIR.

Explanation:

Transportation-related energy consumption will consist primarily of fuel for project-generated vehicular trips. Based on an (a) estimated average one-way trip length of 10 miles, (b) the Council on Environmental Quality estimate of average fuel consumption of 23.6 miles per gallon for late model mid-sized American sedans, and (c) an estimate of approximately 31,600 trips per day and 9.5 million trips per year (31,600 x 300 days), approximately 4.2 million gallons of gasoline will be consumed by the project annually at buildout. This fuel use rate will be equivalent to approximately 5.27 million therms of energy per year. (DEIR, p. IV.M-5 - IV.M-6.)

The Project is part of a pattern of rapid urbanization of the Sierra foothills in general and El Dorado County specifically. This pattern of development is very auto-dependent and results in relatively long commute distances to employment centers. Project-related energy usage will be substantially reduced if a portion of the project residents, and commercial space clients used public transit, bicycled, or walked instead of using automobiles. (DEIR, p. IV.M-6.)

Within the Plan area and its immediate surroundings, opportunities exist for non-motorized transportation primarily by bicycle and foot. West Valley and White Rock Villages, particularly, are within easy walking and riding distance of the neighborhood services planned for the Village Center and also within a short distance of major commercial and office uses and the Multi Modal Transfer facility located in Town Center East. For certain individuals who will be fortunate enough to both live in Valley View and work at businesses located in the adjacent employment centers, commuting could be accomplished without dependence upon the automobile. (DEIR, p. IV.M-6.)

Bicycle and pedestrian paths will be developed within the collector street system of Valley View and White Rock Villages leading to the entrances at White Rock Road and at the Village Center. These routes will also link neighborhoods to the two schools which are planned within each village. Bicycle paths will be installed both in the right-of-way as Class 2 facilities and, where feasible, within adjacent open space and greenbelt areas. (DEIR, p. IV.M-6.)

Unless the project provides substantially for modes of transportation that offer viable alternatives to the automobile, the project will be expected to result in comparatively wasteful uses of transportation fuel, representing a potentially significant impact. (DEIR, p. IV.M-5.)

Mitigation E-2:

Reduce automobile trips by facilitating and encouraging use of local public transit opportunities and other alternative modes of transportation. Implement the following measures:

- Develop a bikeway and pedestrian trail system along major roadways to connect residences to the Village Center and existing commercial centers and park-and-ride lot north of the site;
- Require the installation of secure bicycle parking facilities at project schools, commercial areas and parks;
- Wire each housing unit to allow use of emerging electronic communication technology; and
- Implement feasible travel demand management (TDM) measures for a project of this type. These measures will include a ride-matching program (i.e., an information service for residents interested in carpooling) and a public education program to inform residents of ridesharing and transit opportunities.

(DEIR, p. IV.M-7.)

Significance after mitigation

Less than significant. (DEIR, p. IV.M-7.)

Cumulative Impacts (General Impacts)

Cumulative local and countywide growth, of which this project is a part, is anticipated and provided for in the El Dorado County General Plan. The cumulative impacts of that growth on energy use are addressed in section IV.C of the General Plan Update EIR, Energy Conservation. This section of the General Plan EIR indicates that anticipated cumulative energy impacts will be mitigated to less than significant levels through implementation of related General Plan policies, particularly those in the Public Services and Utilities, Circulation, and Conservation and Open Space elements of the plan. (DEIR, p. IV.M-7.)

**X.
PROJECT ALTERNATIVES**

Where a lead agency has determined that, even after the adoption of all feasible mitigation measures, a project as proposed would still cause one or more significant environmental effects that cannot be substantially lessened or avoided, the agency, prior to approving the project as mitigated, must first determine whether, with respect to such impacts, there remain any project alternatives that are both environmentally superior and feasible within the meaning of CEQA. An alternative may be “infeasible” if it fails to fully promote the lead agency’s underlying goals and objectives with respect to the project. Thus, “‘feasibility’ under CEQA encompasses ‘desirability’ to the extent that desirability is based on a reasonable balancing of the relevant economic, environmental, social, and technological factors” of a project. (*City of Del Mar, supra*, 133 Cal.App.3d at p. 417; see also *Sequoiah Hills, supra*, 23 Cal.App.4th at p. 715.)

The detailed discussion in Section IX demonstrates that all of significant project-specific environmental effects of the Valley View Specific Plan project have been either substantially lessened or avoided through the imposition of mitigation measures recommended in the EIR. Thus, the County has no legal obligation to determine whether any alternatives identified in the Draft EIR are both feasible and environmentally superior. (*Laurel Hills, supra*, 83 Cal.App.3d at pp. 519-527; *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 730-731 [270 Cal.Rptr. 650]; and *Laurel Heights Improvement Association v. Regents of the University of California* (1988) 47 Cal.3d 376, 400-403 [253 Cal.Rptr. 426].)

For the sake of full disclosure, however, the County has chosen, in these Findings, to identify those impacts that, though substantially lessened, remain significant and unavoidable, and to address the feasibility of project alternatives. Such impacts include the following: certain land use and open

space impacts (LU-1); certain visual factors (V-1, V-2, and V-3); certain transportation impacts (T-15); certain biological resource impacts (BR-16); certain hydrology and water quality impacts (H-5 and H-6); certain air quality impacts (AQ-2); and certain cultural resource impacts (CR-1, CR-2, CR-3, CR-4, CR-5, CR-6, CR-7, and CR-8). The Draft EIR summarizes these significant, unavoidable impacts as follows:

- Project impacts on El Dorado Hill open space and rural character;
- change in the natural landscape and rural visual character;
- impact on views from Highway 50 Eastbound;
- impacts on views from El Dorado Hills Community vantage points north of Highway 50;
- cumulative-plus-project impact on US 50;
- project vicinity cumulative impacts on biological resources;
- construction-related soil erosion;
- urban runoff pollutant discharge into creeks;
- regional air quality impacts;
- impacts on prehistoric sites;
- impacts on Placer mining sites;
- impacts on mining habitation sites;
- impacts on Way Station site;
- impacts on Ranching Habitation sites;
- impacts on buried/undiscovered heritage resources;
- impacts on buried/undiscovered traditional cultural resources; and
- impacts on linear features.

(DEIR, pp. VII-2 - VII-3..)

To fully account for these unavoidable significant effects, and the extent to which particular alternatives might or might not be environmentally superior with respect to them, these Findings will address the environmental merits of the alternatives with respect to all broad categories of impacts -- even though such a far-ranging discussion is not required by CEQA. The Findings will also assess whether each alternative is feasible in light of the County's objectives for the Project.

The County's review of project alternatives is guided primarily by the need to reduce potential impacts associated with the Project, while still achieving the basic objectives of the Project. Here, the Applicant's and County's objectives include the following:

As noted earlier, the County's objectives for this project are:

1. *To ensure comprehensive planning for development on the site consistent with the intent, purpose, and policy direction of the General Plan.*
2. *To create a new, balanced community in an area suitable for intensive development due to the availability of adequate infrastructure and services.*
3. *To provide cohesive design criteria that support the creation and maintenance of community character.*
4. *To place the primary emphasis on clustering intensive land uses and incorporation of modern planning techniques to minimize impact on various natural and man-made resources, minimize public health concerns, minimize aesthetic concerns, and provide for the creation of open space lands and other community land uses.*
5. *To maintain the visual integrity of hillsides and ridgelines.*
6. *To protect and maintain native trees, including oaks and landmark and heritage trees.*
7. *To ensure that safe and efficient transportation and circulation facilities, both locally and internally, are provided concurrent with new development.*
8. *To provide safe and efficient bicycle and pedestrian circulation that connect residential areas to one another, as well as residential areas to employment, retail, school, community facilities and recreation areas.*

9. *To designate appropriate sites for commercial uses to provide opportunities for County residents to shop and work within the county.*
10. *To provide a variety of housing opportunities by type, tenure, price and neighborhood character in order to meet County housing needs.*
11. *To conserve wetland, riparian areas, natural drainage, and other wildlife habitat of significant biological, scenic, and recreational values.*
12. *To provide adequate park and recreation facilities.*
13. *To grant development approvals consistent with the applicant's existing development agreement with the County.*

(DEIR, pp. III-9 - III-11.)

In addition, the applicant has identified the following basic project objectives:

1. *To provide for the planning of the site's development in a comprehensive manner, avoiding "piecemeal" approaches to infrastructure planning and development in conformance with the intent, purpose and policy direction provided by the El Dorado County General Plan;*
2. *To develop a project that will complement the overall development of the El Dorado Hills community by providing for a residential base south of Highway 50 that will enhance the viability of the El Dorado Hills Business Park and the various existing and planned commercial developments within the El Dorado Hills community;*
3. *To include lot sizes within the project that are generally larger than those available in existing areas of El Dorado Hills, without promoting a project that requires the construction of custom homes;*
4. *To include a variety of lot sizes within the project consistent with sound planning principles and with applicable policies of the El Dorado County General Plan;*
5. *To develop a project that considers the existing development patterns on adjacent properties in order to facilitate a development that does not adversely impact lifestyles presently enjoyed on surrounding properties; and*

6. *To develop the project in a manner that takes advantage of long distance views that exist on the site, without significant impacts on existing views of the property from the remainder of the community.*

The Draft EIR identified the following seven potentially feasible alternatives to the Project: No Project/Existing Conditions Left Unchanged; No Project/Future Development Based on Current Entitlements; Mitigation Alternative; Rural Residential Alternative; Reduced Density Alternative #1; Reduced Density Alternative #2, and; Alternative Sites. Each of these Alternatives will be discussed in detail below.

A. NO PROJECT-EXISTING CONDITIONS ALTERNATIVE

Section 15126, subdivision (d)(4), of the CEQA Guidelines require the evaluation of the “No Project” alternative. Such an alternative “shall discuss the existing conditions, as well as what will be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.” Under this CEQA-required “no project alternative,” the project site will remain in its existing condition, and the current open space and cattle grazing uses will not change for a prolonged period of time. (DEIR, p. VI-4.)

1. Land Use and Open Space

Under this alternative, the existing open space conditions onsite would remain unchanged and the adverse land use impacts identified for the proposed specific plan would not occur. In particular, the extension of urban development and the project contribution to the El Dorado Hills area open space loss, change in the rural character, onsite land use conflicts, and other adverse land use impacts as previously discussed, would not occur. (DEIR, p. VI-18.)

2. Visual Factors

Under the “No Project/Existing Conditions” alternative, there would be no change in the existing visual character of the site. The onsite open rangeland would not be converted to suburban use and views of the site from surrounding areas would not change. (DEIR, p. VI-18.)

3. Population, Housing, and Employment

Under this alternative, the site would remain uninhabited. Therefore, none of the population, housing, or employment effects associated with the Project, described previously in these Findings, would occur. (DEIR, p. VI-18.)

4. Transportation

Under the “No Project/Existing Conditions” alternative, there would be no project-related change in the circulation pattern or traffic levels on local or regional roadways; and none of the transportation impacts associated with the Project described previously in these Findings would occur.

5. Public Facilities and Services

Under this alternative there would be no project-related increased demand for water, sewage treatment and disposal, police protection, fire protection, emergency medical service, parks and recreation, schools, solid waste collection and disposal, road maintenance, or other public services and facilities. Onsite parks and school sites would not be provided under this alternative. (DEIR, p. VI-18.)

6. Biological Resources

The “No Project/Existing Conditions” alternative would not change conditions onsite and therefore would not affect current vegetation, wildlife habitat, or wildlife use of the site. This alternative would not result in a reduction in habitat for any special status wildlife species. None of the impacts described previously in these Findings would occur. (DEIR, pp. VI-18 - VI-19.)

7. Geology and Soils

Under this alternative, the existing topography of the site would not change; no grading or filling would occur. No buildings, roadways, or infrastructure would be constructed onsite that would be subject to the potential adverse soil and geotechnical problems identified in these Findings. (DEIR, p. VI-19.)

8. Hydrology and Water Quality

Under this alternative, existing drainage, flooding, and water quality conditions on and downstream from the Valley View site would not change. Drainage improvements proposed by the project would not be constructed, and impacts described previously in these Findings would not occur. No new development would be added to the site that would increase the impervious surface area and associated runoff volumes and rates. Water quality in Carson Creek, Plunkett Creek, and Screech Owl Creek would not deteriorate. (DEIR, p. VI-19)

9. Air Quality

Under the “No Project/Existing Setting” alternative, there would be no measurable change in air quality due to onsite activities. None of the impacts described previously would occur under the no project alternative. No construction would occur. No additional vehicular traffic and associated traffic congestion would be generated under this alternative, and consequently, there would be no long-term regional air quality impacts.

10. Noise

None of the impacts previously described would occur under this “No Project/Existing Conditions” alternative. There would be no new site occupants exposed to noise levels associated with traffic on adjacent roadways or the adjacent wastewater treatment plant. In addition, this alternative would not contribute to increased traffic-generated noise along Latrobe Road and White Rock Road. (DEIR, p. VI-19.)

11. Public Health and Safety

Under this alternative, none of the impacts previously described would occur. There would be no increase in population or employment onsite, and therefore little risk of human contact with contaminants from the abandoned El Dorado Hills Landfill, potential mercury contamination in site drainages, or potential soil, surfacewater, groundwater, or air contamination from the wastewater treatment plant. (DEIR, p. VI-19.)

12. Cultural Resources

None of the impacts on cultural resources previously described would occur under this alternative. No changes in the conditions of onsite prehistoric and historic cultural resources would occur. There would be no construction activity that could result in unearthing of and damage to prehistoric or historical resources. (DEIR, p. VI-19.)

13. Energy

Under the “No Project/Existing Conditions” alternative there would be no increase in the demand for natural gas, electricity, or fuel associated with the site. (DEIR, p. VI-19.)

14. Relationship of Alternative to Project Objectives

Implementation of the No Project-Existing Conditions Alternative would achieve very few of the objectives established for the Project. Scenarios involving County acquisition of the property have comparatively low feasibility, given the inventory of open space land in the region with comparable or higher open space amenity and natural resource value, and the relative price of the Valley View

property given its current General Plan Community Region location and designation for mixed urban development. In addition, implementation of this no development alternative would require a mutual interest and willingness by both the landowner and the Board of Supervisors to amend the 1985 development agreement, which allows development of the site under 1983 El Dorado Hills Area Plan policies. (DEIR, p. VI-18.) The applicant has indicated no willingness to abandon its rights under that agreement. For these reasons, the Board of Supervisors concludes that the No Project Existing Conditions Alternative is not feasible. (See City of Del Mar, *supra*, 133 Cal.App.3d at p. 417; Sequoiah Hills, *supra*, 23 Cal.App.4th at p. 715.)

B. NO PROJECT - CURRENT ENTITLEMENTS

A primary feature of the “No Project/Current Entitlements” alternative is that 2,700 multiple family units would be provided (compared to 431 under the Project), increasing County opportunities to meet its future fair share of regional affordable housing needs. This alternative also provides greater acreage devoted to research and development than the Project, which would provide increased employment opportunities in El Dorado Hills. As described below, however, due to the increase in development intensity and the lack of open space, this alternative would result in substantially greater impacts on land use and open space, visual factors, transportation, public services, biological resources, geology and soils, hydrology and water quality, air quality, noise, public health and safety, cultural resources, and energy. (DEIR, p. VI-20.)

1. Land Use and Open Space

Under this alternative, the open space conditions onsite would change significantly as the open grazing land would be converted to a dense suburban land use pattern. The adverse land use impacts identified for the Project would be expected to occur under this alternative, but to a more substantial degree. The extension of urban development, change in the local land use pattern, loss of open space, change in the rural character of the area, onsite land use conflicts, and other adverse land use impacts identified in the Land Use and Open Space Section of these Findings for the Project would also occur under this alternative, but to a substantially greater degree. (DEIR, p. VI-21.)

2. Visual Factors

The visual impacts under this alternative would be expected to be greater than under the Project. The open rangeland landscape of the site would be converted to suburban use, and views of the site from surrounding areas would change significantly. In particular, this substantially more intensive

development alternative could be expected to result in more ridgeline development and associated adverse impacts on views from Highway 50 and the El Dorado Hills community north of Highway 50. (DEIR, p. VI-21.)

3. Population, Housing, and Employment

Under this alternative a total of approximately 6,342 homes could be developed onsite, resulting in a population of approximately 18,160 residents. An estimated 2,700 multiple family residential units would be provided, which would increase future opportunities for the County to meet its fair share of regional affordable housing needs. Substantially more employment (approximately 4,400 employees) would be created due to the approximately 170 acres of R&D use that would be permitted, compared to 10.9 acres of commercial and R&D use under the Project (approximately 268 employees; see Table C-8 of the Draft EIR). (DEIR, p. VI-21.)

4. Transportation

Daily and peak period traffic levels on local or regional roadways would increase significantly under this “No Project/Current Entitlements” alternative. The critical peak period (PM) traffic increment from the site would increase from approximately 2,869 trips for the Project to 7,219 for the alternative, resulting in increased operational (LOS) impacts on the local and interregional roadway system. Eventual buildout would result in the addition of approximately 68,500 average daily trips, or approximately three times the number of daily trips anticipated under the Project, far greater than those associated with the Project and as described in the Transportation Section of these Findings. (DEIR, p. VI-22.)

5. Public Facilities and Services

This alternative would also result in substantially increased demands for water, sewage treatment and disposal, police protection, fire protection, emergency medical service, parks and recreation, schools, and other public services and facilities. Table VI-8 of the Draft EIR indicates that annual water demand would increase from approximately 2,002 acre-feet for the Project to approximately 3,762 acre-feet. Table VI-9 of the Draft EIR indicates that daily wastewater generation would increase from approximately 0.68 million gallons per day (MGD) average dry weather flow for the project as proposed as already exceeding the EID capacity allocation to the project site) to approximately 1.7 MGD, roughly a 250 percent increase. Table VI-10 of the Draft EIR indicates the degree to which school enrollment increases from Alternative B would exceed those of the project as proposed (2.2-fold). Similarly, Table VI-11 of the Draft EIR indicates the degree to which solid waste generation from the project site would increase under this alternative (2.1-fold). (DEIR, p. VI-22.)

6. Biological Resources

The No Project/Current Entitlements alternative would also significantly increase project adverse impacts on current vegetation, wildlife habitat, and wildlife use of the site, and could result in a significant reduction in habitat for special status wildlife species. The impacts described in the Biological Resource Section of these Findings for the Project would be substantially greater under this alternative due to the higher development densities and the reduction or elimination of large permanent open space dedications. (DEIR, p. VI-22.)

7. Geology and Soils

Changes to the existing topography (the volume and extend of grading) could be expected to be much greater under this alternative than under the Project. Development densities would be greater, less open space preservation would be expected, and more hillside development would be expected to occur. In addition, the more extensive network of buildings, roadways, and infrastructure that would be constructed under this alternative would be subject to similar but expanded adverse soil and geotechnical problems compared to those identified in the Geology and Soils Section of these Findings, and a substantially greater population would be exposed to such risks. (DEIR, p. VI-22.)

8. Hydrology and Water Quality

Under this alternative, existing drainage, flooding, and water quality conditions on and downstream from the Valley View site would be similar to, but greater than, those of the Project. The degree of increase in 10- and 10-year peak period runoff rates into Upper Plunkett Creek and into the storm drainage system along Latrobe Road would be more than would be expected from the Project. (The Project increment would result in a significant impact on existing downstream flooding and capacity problems in this tributary, as described in the Hydrology and Water Quality Section of these Findings.) Similarly, water quality in Carson Creek, Plunkett Creek, and Screech Owl Creek could deteriorate more substantially under this alternative. (DEIR, p. VI-23.)

9. Air Quality

Alternative B would result in substantially greater, and substantially more significant, air quality impacts than the project as proposed. Projected emissions associated with vehicular traffic and stationary residential sources would exceed established standards by substantial multiples, resulting in significant unavoidable adverse impacts on regional air quality. Construction period particular (PM₁₀) emissions impacts would also be substantially greater than those of the project. (DEIR, p. VI-23.)

10. Noise

Under this alternative, noise impacts would be similar to, but greater than, those described for the Project. A greater extent of noise-sensitive development within the project site frontage along Latrobe Road would be exposed to future noise levels along this corridor, which are predicted to exceed the County's General Plan goals of 60 dBA L_{dn} with or without the project. In addition, land use/noise conflicts along interior roadway frontages, wastewater treatment plant noise impacts, project-related traffic noise increases along Latrobe Road, and project-related construction period noise impacts would all be substantially greater under Alternative B than anticipated for the Project (DEIR, p. VI-23.)

11. Public Health and Safety

Under this alternative, as under the Project, there would be an increased potential risk to project construction personnel and future occupants of: (1) contact with remnant contaminants associated with the abandoned, unlined, El Dorado Hills Landfill, (2) contact with mercury contaminants in site drainages due to past mining activity, and (3) contact with soil, surface water, groundwater, or air contaminants from the wastewater treatment plant. In addition, the potential exposure of site occupants to herbicide and pesticide use and to hazardous materials that may be handled or stored onsite under the Project would increase. The potential for construction worker or future occupant exposure to release of natural-occurring asbestos fiber from serpentine rock during development-related earthwork activities would also be greater under Alternative B. (DEIR, p. VI-23.)

12. Cultural Resources

Potentially more extensive impacts on cultural resources than those described in the Cultural Resource Section of these Findings for the Project would be expected to occur under Alternative B, since there would be more construction activity that could result in unearthing of and damage to prehistoric or historic resources. (DEIR, p. VI-23.)

13. Energy

Energy usage would also be correspondingly greater under this alternative than under the Project. There would be a greater increase in the demand for natural gas, electricity, and fuel compared to the Project. (DEIR, p. VI-24.)

14. Relationship of Alternative to Project Objectives

In terms of rate of return, assuming a market ready and willing to absorb large numbers of multi-family units, Alternative B would have the highest economic feasibility of the six alternatives by virtue of its highest development yields, but the prospect of County acceptance and approval is questionable. A primary feature of the "No Project/Current Entitlements" alternative is that 2,700

multiple family units would be provided (compared to 431 under the Project), increasing County opportunities to meet its future fair share of regional affordable housing needs. This alternative also provides greater acreage devoted to research and development than the Project, which would provide increased employment opportunities in El Dorado Hills. Due to the increase in development intensity and the lack of open space, however, this alternative would result in substantially greater impacts on land use and open space, visual factors, transportation, public services, biological resources, geology and soils, hydrology and water quality, air quality, noise, public health and safety, cultural resources, and energy. (DEIR, p. VI-21.)

Because the Alternative is *not* environmentally superior to the Project, the County has no need to assess whether it is feasible. Even so, however, the County concludes that the alternative is infeasible within the meaning of CEQA, as it would not meet project objectives as well as the Project as approved. For example, conversion of the open space and grazing land to dense suburban land uses and development of more ridgelines is contrary to the County's objective to "[m]aintain the visual integrity of hillsides and ridgelines." The No Project/Current Entitlement Alternative would also add approximately three times more daily vehicle trips to the area. This Alternative would compromise the County objective to "[e]nsure that safe and efficient bicycle and pedestrian circulation facilities, both locally and internally, are provided concurrent with new development."

Because the applicant, presumably for market-based reasons, has not seen fit to seek approval of an alternative emphasizing high-density residential uses, the Board sees no reason to impose such an alternative, particularly since it would cause increased environmental impacts. The current project reflects the landowner's considered judgment regarding how to develop its property in light of the realities of the marketplace. The Board believes it is appropriate to give some weight to this judgment. (See *Laurel Hills*, *supra*, 83 Cal.App.3d at p. 521 (a "public agency may approve a developer's choice of a project once its significant adverse effects have been reduced to an acceptable level -- that is, all avoidable damage has been eliminated and that which remains is otherwise acceptable".)) For all of these reasons, the Board rejects the alternative as infeasible. (See *City of Del Mar*, *supra*, 133 Cal.App.3d at p. 417; *Sequoyah Hills*, *supra*, 23 Cal.App.4th at p. 715.)

C. MITIGATED ALTERNATIVE

This alternative consists of a revised specific plan for the project site that would incorporate numerous mitigations recommended in the Draft EIR to reduce identified significant environmental impacts. As indicated in Tables VI-1 and VI-3 of the Draft EIR, this alternative would include a development program similar to the Project--i.e., 2,840 residential units, 10.9 acres of commercial and R&D acreage, 77 acres of parkland, 559 acres of open space, two school sites totaling 24 acres, and 87 acres for major roads, but with incorporation of numerous EIR-recommended mitigations.

Figure VI-1 of the Draft EIR illustrates the primary site design modifications that would occur under the Mitigated Alternative. These modifications would include the following:

1. Provision of a 300-foot buffer south and east of the wastewater treatment site (*Mitigation Measure LU-2*).
2. Location of the community park and elementary school playing fields 300 feet away from the mobile home park (*Mitigation Measure LU-3*).
3. Increased limitations on vegetation removal, and increased use of vegetative screening in natural patterns to reduce visual impacts (*Mitigation Measure V-1*).
4. Reduction or avoidance of building placement and introduced landscaping on the outer, most visible edges of the main ridgeline (*Mitigation Measure V-1*).
5. Incorporation of building height and scale limitations which are compatible with the existing terrain and other surrounding project homesites (*Mitigation Measure V-1*).
6. Incorporation of common vegetative screening for project homes on the north- and west-facing ridges and sideslopes visible from viewpoints to the north, west, and south, and east (*Mitigation Measure V-1*).
7. Relocation of *Estate Residential (ER-LL)* lots on the immediate knoll at the northwestern section of East Ridge Village to a less visible location elsewhere onsite (*Mitigation Measure V-2*).
8. Subjection of development along Latrobe Road to particularly stringent design review using guidelines to ensure a harmonious streetscape treatment (*Mitigation Measure V-4*).
9. Relocation of White Rock Village school site south to the proposed location of the Core Residential units, in order to provide a rectangular-shaped site and avoid the potentially-active west branch of the Bear Mountains fault (*Mitigation Measure PF-11*).
10. Reconfiguration of the shape of the West Valley Village school site so that it is square or rectangular (*Mitigation Measure PF-11*).
11. Avoidance of oak woodland areas with special status species use and cluster development to retain oak tree corridors (*Mitigation Measure BR-3*).

12. Provision of a 50-foot buffer zone along Carson and Plunkett Creeks and construct creek crossings over Plunkett Creek in areas with little or no riparian vegetation (*Mitigation Measure BR-5*).
13. Planting of locally-occurring native species (wouldows, alder, oaks) in riparian areas and adjacent buffer zones rather than non-native trees and shrubs (*Mitigation Measure BR-6*).
14. Avoidance of wetland filling. This could be at least partially-achieved through use of clustering development (see Draft EIR, Figure VI-1, for example, which recommends clustering in the SFR- and CR-designated areas that include wetlands that would be affected by the Project) (*Mitigation Measures BR-8 and BR-10*).
15. Establishment of adequate building setbacks from the onsite Bear Mountains fault (*Mitigation Measure SG-6*).
16. Establishment of adequate building setbacks from nearby offsite ponds and any lakes planned onsite. Design a flood control system below the onsite water tank or evaluate the tank and improve it to substantially reduce the potential for failure (*Mitigation Measure SG-8*).
17. Avoidance of disturbance of significant archaeological sites by clustering development and, where required, eliminating lots (*Mitigation Measures CR-1 through CR-5*). It is possible that the project could provide for greater densities at the western edge of the site, allowing lots to be eliminated elsewhere, particularly in archaeologically-sensitive areas while still providing the same number of residential units.

(DEIR, p. VI-24; FEIR, p. VI-27)

There is no need to address the environmental attributes and feasibility of this Alternative because the Board, in effect, has decided to approve the Alternative, insofar as the Board has adopted all of the mitigation measures proposed in the Draft and Final EIRs. The Alternative, in short, is feasible, and has been adopted.

D. RURAL RESIDENTIAL ALTERNATIVE

Under this alternative, the site would be developed in a manner similar to that of existing rural residential development to the north, south, and east. The 2,037-acre site would be developed with 206 five-and ten-acre residential lots. As illustrated in the Draft EIR, on Figure VI-2 and indicated

in Table VI-4, there would be 21 five-acre lots in White Rock Village, 122 five-acre lots in West Valley Village, and 63 ten-acre lots in East Ridge Village. Development would not be permitted on the three prominent ridgelines onsite or on the western flank of the main, central ridgeline. (DEIR, p. VI-30.)

1. Land Use and Open Space

Under this alternative, existing open space conditions onsite would change; the site would be subdivided into 206 rural residential lots. The alternative would extend the rural land use pattern that currently exists north, south and east of the site (Ryan Ranch area, etc.). This project alternative would change the existing land use pattern from open grazing land to rural residential use; the rural character of the site would in general be retained. The extension of urban development and the project contribution to a substantial change in the land use pattern, loss of open space, change in the rural character of the area, onsite land use conflicts, and other adverse land use impacts described in the Land Use and Open Space Section of these Findings for the Project would not be significant under this alternative. (DEIR, p. VI-31.)

2. Visual Factors

Under the Rural Residential alternative, there would be some change in the visual character of the site: portions of open grazing land would be replaced with large residential lots; and views of the site from surrounding areas would change accordingly, although not as substantially as would occur under the Project. The change to rural residential use and assumed greater abilities to restrict development on the ridgelines and the western flank of the central ridgeline would be expected to reduce the visual impacts of the project to a less than significant level. (DEIR, p. VI-31.)

3. Population, Housing, and Employment

An estimated 206 housing units and 577 residents would be added to the site under this alternative. Some temporary employment would occur during construction, but no permanent employment would be generated. All of the housing units under this alternative would be affordable to above moderate-income households; no affordable units would be provided. This attribute of the alternative would have a significant adverse affect on El Dorado County's ability to meet its regional fair share housing needs. (DEIR, p. VI-31.)

4. Transportation

Under the Rural Residential alternative, an additional 1,967 average daily trips would be added to the circulation system, representing approximately nine percent of the 21,250 average daily trips generated by the Project. Impacts on service levels and associated mitigation needs would therefore be substantially less than those identified for the Project, as shown in Table VI-7 of the Draft EIR. (DEIR, p. VI-31.)

5. Public Facilities and Services

Under this alternative, the increase in demand for water, sewage treatment and disposal, police protection, fire protection, emergency medical service, parks and recreation, schools, and other public services and facilities would be substantially less than for the Project. This alternative would require approximately 272 acre-feet of water per year (1.20 acre-feet per rural unit), which would be well under the available water supply allocated by EID to the site. Wastewater, school enrollment, and solid waste disposal impact reductions associated with this alternative (Alternative D) are listed in the Draft EIR in Tables VI-9, 10, and 11, respectively. Onsite parks and school sites would not be provided under this alternative. (DEIR, p. VI-33.)

6. Biological Resources

The impacts of this alternative on vegetation, wildlife habitat, and wildlife use on the site would be far less substantial than those described in the Biological Resource Section of these Findings for the Project due to the reduction in site disturbance under this alternative, and could be readily mitigated. (DEIR, p. VI-33.)

7. Geology and Soils

Under this alternative, changes in topography would be minimal; no grading or filling of large areas would occur. Grading would be limited to that required for roadways and individual building pads and driveways. Avoidance of the potential adverse soil and geotechnical problems identified in the Geology and Soils Section of these Findings for the project could be readily achieved under this alternative. (DEIR, p. VI-33.)

8. Hydrology and Water Quality

Under this alternative, runoff increases from the site and associated impacts on downstream drainage provisions and flooding would be negligible. Erosion and sedimentation resulting from the 206 lots could still contribute to deterioration of water quality in Carson Creek, Plunkett Creek, and Screech Owl Creek, but to a much lesser degree than with the Project. (DEIR, p. VI-33.)

9. Air Quality

Under the Rural Residential alternative, the change in air quality due to onsite activities would be minimal, as shown by Table VI-12 of the Draft EIR. During construction there would be elevated levels of PM-10. Long-term vehicular traffic and associated traffic congestion generated under this alternative and associated long-term regional air quality impacts would be far less than those associated with the Project. No state or federal air emissions standard would be exceeded. There would also be much fewer residents onsite that could be affected by odor from the wastewater treatment plant, and development would be located a greater distance from the plant. (DEIR, p. VI-33.)

10. Noise

Under this alternative, the dwelling units would be set well back and outside of the Latrobe Road 60 dBA noise contour, and therefore would not be exposed to unacceptable noise levels associated with traffic. The lots would also be set back more than 300 feet from the wastewater treatment plant, and therefore would not be exposed to noise from the plant. In addition, this alternative would not be expected to contribute significantly to increased traffic noise along Latrobe Road or White Rock Road. (DEIR, p. VI-33.)

11. Public Health and Safety

Under this alternative, as under the Project, there would be a risk to project-related construction personnel and occupants of: (1) contact with contaminants from the abandoned El Dorado Hills Landfill; (2) potential mercury contamination in site drainages; (3) potential soil, surface water, groundwater, or air contamination from the wastewater treatment plant; and (4) potential contact with natural-occurring asbestos due to grading of serpentine soils. The overall effects of these factors, however, would be reduced to well below significant levels due to the substantial reduction in the numbers of units and people. (DEIR, p. VI-34.)

12. Cultural Resources

Similarly, under the Rural Residential alternative, the potential for impacts on onsite prehistoric and historic cultural resources would also be reduced, since less of the site would be disturbed by development, and avoidance of resources would be easier to achieve. (DEIR, p. VI-34.)

13. Energy

Compared with the Project, the energy impacts of this alternative would be reduced by over 90 percent due to the reduction in the number of residential units and associated automobile trips. (DEIR, p. VI-34.)

14. Relationship of Alternative to Project Objectives

Alternative D would have low economic feasibility. Economic viability would probably require some combination of acquisition of the development rights on a large portion of the site at an acceptable price by a public or private open space conservation entity, and the marketing of the 206 rural lots at a high residential estate price. The prospects of County approval of such a substantial, 2,037-acre land use change in a designated Community Region may also be low. (DEIR, p. VI-31.)

The Rural Residential Alternative would provide no affordable units, which would have a significant adverse affect on El Dorado County's ability to meet its regional fair share housing needs. This lack of affordable housing units does not meet the County's objective to "[p]rovide a variety of housing opportunities by type, tenure, price and neighborhood character[.]" Furthermore, the alternative is inconsistent with the 1985 development agreement, which gives the applicant the vested right to approvals consistent with the El Dorado Hills/Salmon Falls Area Plan. The applicant therefore has the right to veto this alternative, and has done so. The alternative, then, would be inconsistent with the project objective "[t]o grant development approvals consistent with the applicant's existing development agreement with the County." For all of these reasons, the Board of Supervisors concludes that the Rural Residential Alternative is not feasible. (See City of Del Mar, supra, 133 Cal.App.3d at p. 417; Sequoyah Hills, supra, 23 Cal.App.4th at p. 715.)

E. REDUCED DENSITY ALTERNATIVE # 1

This alternative consists of a specific plan permitting development similar to that envisioned under the Project, but at a reduced scale that would not exceed the existing EID water allocation for the site. Under current EID allocations, the Valley View site is entitled to a guaranteed supply of water for 906 equivalent dwelling units (EDUs), which amounts to approximately 625 acre-feet of water annually. As described in the Water Supply Section of these Findings, the Project would require 2,002 acre-feet of water per year; and, although it is anticipated that this water could probably be supplied, there is currently no guarantee that more than 625 acre-feet could be supplied. (DEIR, p. VI-34.)

Under this alternative there would be 1,054 residential units, including 788 multiple-family units and 266 single-family units, many of which would be clustered to avoid sensitive site features (e.g., visually vulnerable ridgelines, cultural and biological resources, and the earthquake fault). This alternative also includes 10.9 acres of commercial and R&D use (the same as the Project), one 12-acre elementary school site, 35 acres of parkland (a 30-acre community park, and a five-acre neighborhood park), and 87 acres for major roads. The remaining 1,464 acres would be permanent open space/buffer area. (DEIR, p. VI-34.)

1. Land Use and Open Space.

Land use and open space impacts would be reduced under this alternative, since a greater percentage of the site would be preserved in permanent open space. Approximately 1,464 acres, or 72 percent of the 2,037-acre site, would be preserved in open space, compared to 559 acres, or 27 percent, under the Project. (DEIR, p. VI-35.)

2. Visual Factors.

The visual impacts of this alternative would also be substantially less than those of the Project. Development could be readily avoided on the central ridgeline and on the prominent knoll in White Rock Village. (DEIR, p. VI-35.)

3. Population, Housing, and Employment.

This 1,054-unit alternative would generate an estimated 2,557 residents at buildout, or about one-third of the number projected for the Project. The alternative would also provide 788 multiple-family units, compared to 431 under the Project, which would provide more affordable housing opportunity than would the Project, and would therefore increase the County's ability to meet its fair share of regional housing needs. Permanent employment opportunities would be the same as for the Project. (DEIR, p. VI-35.)

4. Transportation.

The transportation impacts of this alternative would also be less than those associated with the Project. This alternative would generate an estimated 9,564 trips per average weekday, or approximately 45 percent of the 21,250 daily trips that would be generated by the Project. The "existing-plus-project" operational (LOS) impacts of Alternative E would be mitigated to less than significant levels on all county roadway components, but would still be significant on Highway 50. The higher number of affordable multiple family units provided under this alternative would increase the likelihood that people employed in the El Dorado Hills Business Park and Town Center would be able to afford to live in Valley View. This feature would in turn reduce commute distances and increase the potential for alternative modes of commuting (i.e., walking and bicycling) to work. (DEIR, p. VI-35.)

5. Public Facilities and Services.

The primary difference between this alternative and the Project is that it would not require more water than is currently allocated by EID to the project site. This alternative would require 625 acre-

feet of water annually; that is, it would not exceed the current EID allocation of 625 acre-feet per year. This alternative would result in increases in demands for sewage treatment and disposal, police protection, fire protection, emergency medical service, parks and recreation, schools, and other public services and facilities; but demands on these services and facilities would be approximately 67 percent less than would be required by the Project. The specific wastewater generation, school enrollment, and solid waste disposal impacts of Alternative D, in comparison to the Project, are shown in the Draft EIR, Tables VI-9, VI-10, and VI-11, respectively. Due to a greater number of multiple-family residential units and fewer larger more expensive units that would create more tax revenue for the County and the fire district, the ability of this alternative to pay for its own additional police and fire protection and other public service needs would be more limited. (DEIR, pp. VI-35 - VI-37.)

6. Biological Resources.

Because development onsite would be more limited under this alternative than the Project, opportunities for avoidance of sensitive resources would be increased, and impacts on vegetation, wildlife habitat, and wildlife use on the site would be correspondingly reduced. (DEIR, p. VI-37.)

7. Geology and Soils.

Under this alternative, changes to the existing topography would be reduced compared to the Project, since less of the site would be graded and developed. Buildings, roadways, and infrastructure constructed under this alternative would be subject to adverse soil and geotechnical risks similar to those identified in the Geology and Soils Section of these Findings; however, there would be greater site design flexibility and ability to avoid such constraints, and there would be fewer residents onsite that could be exposed to geotechnical problems. (DEIR, p. VI-37.)

8. Hydrology and Water Quality.

As with the Project, existing drainage and water quality conditions on and downstream from the Valley View site would change as a result of development under this alternative. The drainage impacts for the Project would be reduced due to a reduced level of development and reduced area of impermeable surface created. Similarly, as anticipated under the Project, water quality in Carson Creek, Plunkett Creek, and Screech Owl Creek would deteriorate, but to a correspondingly reduced degree. (DEIR, p. VI-37.)

9. Air Quality.

Under the Reduced Density alternative, air emissions due to onsite activities would be much less substantial than the air quality impacts described for the Project. Significance thresholds for reactive organic gases, oxides of nitrogen, and particulate matter (PM₁₀), however, would still be exceeded. (DEIR, p. VI-37.)

10. Noise.

Under this alternative, noise impacts would be similar to, but less substantial than, those described for the Project. New onsite occupants could still be exposed to noise levels associated with traffic on adjacent roadways and with the treatment plant, but development could be more readily set back from these noise sources due to the substantial reduction in development intensity. This alternative would also contribute to increased traffic-generated noise along Latrobe Road and White Rock Road, but to a substantially lesser degree than would occur with the Project. (DEIR, p. VI-37.)

11. Public Health and Safety.

Under this alternative, as under the Project, there would be a risk to occupants of contact with: (1) potential contamination from the abandoned El Dorado Hills Landfill; (2) potential mercury contamination in site drainages; (3) potential soil, surface water, groundwater, or air contamination from the wastewater treatment plant; (4) natural-occurring asbestos due to possible grading disturbance of serpentine soils; and (5) herbicide and pesticide use, and other hazardous materials that may be handled or stored onsite. These risks, however, would be substantially less than for the Project, due to the reduced development intensity and greater ability to avoid risk-prone areas. (DEIR, p. VI-38.)

12. Cultural Resources.

Under this alternative, the potential for impacts on onsite prehistoric and historic cultural resources would be similarly reduced, since less of the site would be disturbed by development and avoidance of resources would be easier to achieve. (DEIR, p. VI-38.)

13. Energy

Compared with the Project, the energy impacts of this alternative would be reduced by approximately 63 percent, since fewer residential units would be developed and fewer automobile trips would be generated. (DEIR, p. VI-38.)

14. Relationship of Alternative to Project Objectives

The per-home land and development costs associated with Alternative E would translate into a potentially prohibitive selling or rental price requirement for the 266 single-family homes and 788 multi-family units in the competitive Sierra foothill housing market. The economic feasibility of Alternative E is highly questionable. (DEIR, p. VI-34.) Furthermore, the applicant maintains that, under the 1985 development agreement, the Board has no ability to reject any project configuration proposed by the applicant consistent with uses authorized under the El Dorado Hills/Salmon Falls Area Plan. Without expressing agreement or disagreement with that position, the Board finds that the legal conflict that might be caused by a decision to reject that view is a factor militating against an attempt to impose a Reduced Density Alternative on an unwilling applicant.

Furthermore, because the applicant, presumably for market-based reasons, has not seen fit to seek approval of this alternative or a project variant similar to it, the Board sees no reason to impose such an alternative, particularly since all project-specific significant impacts have been at least substantially lessened. The current project reflects the landowner's considered judgment regarding how to develop its property in light of the realities of the marketplace. The Board believes it is appropriate to give some weight to this judgment. (See *Laurel Hills*, supra, 83 Cal.App.3d at p. 521 (a "public agency may approve a developer's choice of a project once its significant adverse effects have been reduced to an acceptable level -- that is, all avoidable damage has been eliminated and that which remains is otherwise acceptable").) For all of these reasons, the Board rejects the alternative as infeasible. (See *City of Del Mar*, supra, 133 Cal.App.3d at p. 417; *Sequoyah Hills*, supra, 23 Cal.App.4th at p. 715.)

F. REDUCED DENSITY ALTERNATIVE # 2

This alternative consists of a specific plan permitting development similar to that envisioned under the Project, but, as indicated on Figure VI-4 of the Draft EIR, almost all of East Ridge Village would be preserved in open space in order to avoid impacts on the sensitive visual, biological, and cultural resources present in the proposed East Ridge Village area. Portions of White Rock Village and West Ridge Village development areas would also be converted to open space in order to avoid impacts on sensitive visual, biological, and cultural resources. (DEIR, p. VI-38.)

The majority of development under this alternative would occur in West Valley Village, and much of the residential development here would be clustered to avoid sensitive site features (e.g., cultural

and biological resources, the earthquake fault). This alternative includes 355 single family units, 566 multiple family units, 10.9 acres of commercial and R&D use (the same as the Project), one 12-acre elementary school site, 35 acres of parkland (a 30-acre community park, and a five-acre neighborhood park), and 60 acres for major roads. The remaining 1,675 acres would be preserved as permanent open space/buffer area. (DEIR, p. VI-38.)

1. Land Use and Open Space

The land use and open space impacts of the project would be reduced under this alternative due to a greater percentage of the site being preserved in permanent open space. Under this alternative, 1,675 acres, or approximately 82 percent of the 2,037-acre site, would be preserved in open space, compared to 559 acres, or 27 percent, under the Project. (DEIR, p. VI-39.)

2. Visual Factors

The visual impacts of this alternative would also be substantially less than those of the Project. There would be no development on the central ridgeline or the prominent knoll in White Rock Village. (DEIR, p. VI-39.)

3. Population, Housing, and Employment

This 921-unit alternative would generate an estimated 2,401 residents at buildout, or about one-third of the number projected for the Project. The alternative would provide 566 multiple-family units, compared to 431 under the Project, which would provide slightly more affordable housing opportunity than would the Project, and would therefore increase the County's ability to meet its fair share of regional housing needs. Permanent employment opportunities would be the same as those identified in the Draft EIR for the Project. (DEIR, p. VI-39.)

4. Transportation

The transportation impacts of this alternative would be significant, but less than those associated with the Project. This alternative would generate an estimated 9,130 trips per day, or approximately 43 percent of the 21,250 daily trips that would be generated by the Project. As with Alternative E, this alternative would result in no significant "existing-plus-project" impacts on county roadway segments, but would still contribute to significant impacts on Highway 50. Also as with Alternative E, the higher number of affordable multiple-family units provided under this alternative would increase the likelihood that people employed in the El Dorado Hills Business Park and Town Center would be able to afford to live in Valley View. This feature would in turn reduce commute

distances, increase opportunities for alternative modes of transportation (i.e., walking and bicycling) to work, thereby reducing traffic impacts. (DEIR, p. VI-39.)

5. Public Facilities and Services

This alternative would require 634 acre-feet of water annually, slightly greater than the current allocation of 625 acre-feet per year. This alternative would also result in increased demands for sewage treatment and disposal, police protection, fire protection, emergency medical service, parks and recreation, schools, solid waste, and other public services and facilities, but to a lesser degree than the Project. Those impacts would be similar to those of Alternative E, and substantially less than those described in the Public Facilities and Service Section of these Findings for the Project. Due to a greater number of multiple-family residential units and fewer larger, more expensive units (that create more tax revenue for the County and the fire district), the ability of this alternative to pay for its own additional police and fire protection and other public service needs would be more limited. (DEIR, pp. VI-39 - VI-41.)

6. Biological Resources

Because the extent of development onsite would be substantially less under this alternative than the Project, opportunities for avoidance of sensitive resources would be increased, and impacts on vegetation, wildlife habitat, and wildlife use on the site would be correspondingly reduced. (DEIR, p. VI-41.)

7. Geology and Soils

Under this alternative, changes to the existing topography would be reduced, compared to what would occur with the Project, since less of the site would be graded and developed. Buildings, roadways, and infrastructure constructed under this alternative would be subject to adverse soil and geotechnical risks similar to those identified in the Geology and Soils Section of these Findings; however, there would be greater layout flexibility and ability to avoid such constraints, and there would be fewer residents onsite that could be exposed to such geotechnical problems. (DEIR, p. VI-41.)

8. Hydrology and Water Quality

As with Alternative E, existing drainage and water quality conditions on and downstream from the Valley View site would change as a result of development. The drainage impacts described in the Hydrology and Water Section of these Findings would be reduced due to a reduced level of development and reduced area of impermeable surface created. Water quality in Carson Creek,

Plunkett Creek, and Screech Owl Creek would still deteriorate under this alternative, but to a lesser degree than under the Project. (DEIR, p. VI-41.)

9. Air Quality

Air emissions due to onsite activities would be similar to, but less substantial than, those that would occur with the Project. The significance thresholds for reactive organic gases, oxides of nitrogen, and particulate (PM₁₀), however, would still be exceeded. (DEIR, p. VI-41.)

10. Noise

Under this alternative, noise impacts would be similar to, but less substantial than, those described for the Project. New onsite occupants could still be exposed to noise levels associated with traffic on adjacent roadways and with the treatment plant, but development could be more readily set back from these noise sources due to the reduction in development intensity. This alternative would also contribute to increased traffic-generated noise along Latrobe Road and White Rock Road, but to a substantially lesser degree than the Project. (DEIR, p. VI-41.)

11. Public Health and Safety

Under this alternative, as under the Project, there would be a risk to occupants of contact with: (1) potential contaminants from the abandoned El Dorado Hills Landfill; (2) potential mercury contaminants in site drainages; (3) potential soil, surface water, groundwater, or air contaminants from the wastewater treatment plant; (4) natural-occurring asbestos due to possible grading disturbance of serpentine soils; and (5) herbicide and pesticide use, and other hazardous materials that may be handled or stored onsite. As with Alternative E, however, these risks would be substantially less than those associated with the Project, due to the reduced development intensity and greater ability of this alternative to avoid risk-prone areas. (DEIR, p. VI-42; FEIR, p. VI-42.)

12. Cultural Resources

Under this alternative, the potential for impacts on onsite prehistoric and historic cultural resources would be similarly reduced, since less of the site would be disturbed by development and avoidance of resources would be easier to achieve under this alternative. (DEIR, p. VI-43.)

13. Energy

Compared with the Project, the energy impacts of this alternative would be reduced by approximately 68 percent, since fewer residential units would be developed and fewer automobile trips would be generated. (DEIR, p. VI-43.)

14. Relationship of Alternative to Project Objectives

As with Alternative E, the per-home land and development costs associated with Alternative F would translate into a potentially prohibitive selling price requirement for the 355 single-family homes in the competitive Sierra foothill housing market, thereby reducing the viability of an affordable 566-unit multi-family component. The economic feasibility, then, of Alternative F is highly questionable. (DEIR, p. VI-39.) Furthermore, the applicant maintains that, under the 1985 development agreement, the Board has no ability to reject any project configuration proposed by the applicant consistent with uses authorized under the El Dorado Hills/Salmon Falls Area Plan. Without expressing agreement or disagreement with that position, the Board finds that the legal conflict that might be caused by a decision to reject that view is a factor militating against an attempt to impose a Reduced Density Alternative on an unwilling applicant.

Furthermore, because the applicant, presumably for market-based reasons, has not seen fit to seek approval of this alternative or a project variant similar to it, the Board sees no reason to impose such an alternative, particularly since all project-specific significant impacts have been at least substantially lessened. The current project reflects the landowner's considered judgment regarding how to develop its property in light of the realities of the marketplace. The Board believes it is appropriate to give some weight to this judgment. (See *Laurel Hills*, supra, 83 Cal.App.3d at p. 521 (a "public agency may approve a developer's choice of a project once its significant adverse effects have been reduced to an acceptable level -- that is, all avoidable damage has been eliminated and that which remains is otherwise acceptable").) For all of these reasons, the Board rejects the alternative as infeasible. (See *City of Del Mar*, supra, 133 Cal.App.3d at p. 417; *Sequoyah Hills*, supra, 23 Cal.App.4th at p. 715.)

XI.

STATEMENT OF OVERRIDING CONSIDERATIONS

As set forth in the preceding sections, the County's approval of the Project will result in impacts that, even with mitigation, remain significant and unavoidable. Despite these impacts, however, the Board of Supervisors has chosen to approve the Project (as mitigated). The Board has therefore adopted the following Statement of Overriding Considerations.

Any one of the reasons for approval cited below is sufficient to justify approval of the Project. Thus, even if a Court were to conclude that not every reason is supported by substantial evidence, the County would stand by its determination that each individual reason is sufficient. The substantial evidence supporting the various benefits can be found in the preceding findings, which are incorporated by reference into this Section (XI), and in the documents found in the Record of Proceedings, as defined in Section V.

The Board of Supervisors finds that the project will have the following economic, social, or other benefits:

Provision of Permanent Jobs and Temporary Construction Jobs. The Valley View Specific Plan

will add approximately 2,840 residential units to the El Dorado Hills community by the year 2009, which will provide housing for an estimated 7,764 people. The Project will also add approximately 107,000 square feet of commercial and industrial floor area that will provide space for an estimated 268 jobs by the year 2009. The Project could stimulate additional development elsewhere in the El Dorado Hills area, as currently allowed by the El Dorado County General Plan. (DEIR, p. VII-1.) Implementation of the Project will also require a large number of construction jobs for all the construction and associated infrastructure (i.e., roads, water and sewer lines). These additional jobs generated by the Project will also cause an increase in the purchasing of goods and services in the area. The Valley View Specific Plan will provide for future employment opportunities that will financially benefit the entire community.

Economic Benefits from Taxes Generated by the Project. With the addition of 2,840 residential housing units, and office and retail uses in the Project Area, there will be an eventual increase in property taxes and local sales tax from the purchase of goods and services within the community. This revenue could be used to fund a variety of other services and capitol improvements required by the County. This revenue increase represents a significant public benefit of the Project.

Consistency with the County's General Plan Policies. The Valley View Specific, in its land use design, will support the policy commitments set forth in General Plan goals and policies (Goals 2.1, and 2.2; and Policies 2.1.1.2 and 2.1.1.3), which require protection of existing communities, establishment of community regions, encouragement of mixed-use development, and provision of a range of land uses. The Valley View Specific Plan will be consistent with the General Plan goals and policies, by planning the project site's development in a comprehensive manner, providing mixed-use land uses consistent with those on surrounding properties. The Project will be able to mitigate any land use impacts to an acceptable level through its designing and location of specific land uses (e.g., relocation of playing field in relation to existing mobile homes). The Valley View Specific Plan is beneficial in furthering or effectuating many County General Plan goals and policies.

Provision of a Diverse Housing Stock and Jobs/Housing Balance. The adoption and implementation of the Valley View Specific Plan will provide for the probable eventual development of 2,840 new housing units of various kinds, including substantial numbers of affordable units. The project site is located adjacent to Town Center and the El Dorado Hills Business Park. It is estimated that these adjacent uses will provide space for up to 30,000 jobs at buildout. The Project will provide a variety of housing types to above-moderate-income employees in these areas. Project-proposed townhomes, condominiums, and apartments may also be affordable to moderate-income households. (DEIR, p. IV.C-.23) The provision of 2,840 residential units varying in densities and unit prices will give existing and future El Dorado Hill Business Park employees a range of housing types and costs, and an opportunity to live near their place of employment, thus encouraging a jobs/housing balance for the area and avoiding long commute trips with the attendant traffic and air quality effects.

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