FINAL ENVIRONMENTAL IMPACT REPORT

SCH #94112056

November 4, 1997

Prepared for:

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Errata Sheet
The Promontory Specific Plan
Final Environmental Impact Report
SCH #94112056

The Promontory Specific Plan Final Environmental Impact Report (EIR) was published on August 28, 1997. Based on further review of The Promontory Specific Plan Final EIR and final comments made at the November 4, 1997 El Dorado County Board of Supervisors Meeting, several minor modifications were made to the August 28, 1997 Final EIR. This document, along with the minor edits below, consist of The Promontory Specific Plan Final EIR as certified by the El Dorado County Board of Supervisors on November 4, 1997. Please note that the Board of Supervisors found that mitigation measures 4.5.2b, 4.5.2c, and 4.5.2d are infeasible and were not adopted, as identified in Resolution No. 255-97.

- Chapter 2.0 (Executive Summary) Page 2-17 (Table 2-1, Mitigation Measure 4.5.3a) is revised to read:

  "4.5.3a Implement Mmitigation Mmeasures 4.5.2a ~~and 4.5.2b~~."

- Chapter 2.0 (Executive Summary) Page 2-18 (Table 2-1, Mitigation Measure 4.5.7a):

  "4.5.7a Implement Mmitigation Mmeasures 4.5.2a ~~and 4.5.2b~~."

- Chapter 2.0 (Executive Summary) Page 2-34 (Table 2-1, Mitigation Measure 4.10.5a):

  "4.10.5a Prior to ~~approval of improvement plans for site development~~the first tentative map approval, El Dorado County..."

- Chapter 2.0 (Executive Summary) Page 2-39 (Table 2-1, Mitigation Measure 4.12.5) Mitigation Measure 4.12.5 was further modified based on subsequent correspondence submitted by William Wright (representing the School Districts):

  "4.12.5 Prior to approval of the Specific Plan, ~~Rescue Union School District, Buckeye Union School District, El Dorado Union High School District, and the project applicant shall enter into a formal agreement regarding mitigation of project impacts on school facilities. This agreement shall specifically identify mechanisms (i.e., payment of County-wide school impact fees and transfer of the elementary school site) to construct new school facilities, coordination of timing of new school facilities and build out of the project site, and construction of the project proposed elementary school site (if ultimately utilized by the Rescue Union School~~

~~District).~~, the project applicant shall execute the "Agreement to Fund School Facilities to Mitigate Impacts From New Development" to provide for the payment of fees in the amount of $8,288.00 per unit, increased annually by the construction cost index, to fund new school facilities. The School Districts shall have approved this agreement prior to approval of the first tentative map. Prior to approval of the first tentative map, the project applicant shall have negotiated and executed an agreement with the Rescue Union School District for the acquisition of a K-6 school site to serve the project and for the construction of the school facilities. Prior to approval of the first tentative map, the project applicant shall have negotiated and executed an agreement with the El Dorado Union High School District for an option to acquire a new high school site to serve the El Dorado Hills area."

- Chapter 3.0 (Comments and Responses to Comments on the Draft EIR), Page 3-58, Response to Comment 11-1 should be modified as follows to provide further clarification:

"...The County ~~is currently preparing an EIR~~prepared a negative declaration to address the environmental effects of the Interchange Project~~, including noise, air quality, safety, and traffic impacts on nearby residents~~. Some residents opposed the County's interchange design and did not agree with the findings of the negative declaration. As of October 1997, the County and affected residents are engaged in a mediation process to identify an acceptable interchange configuration.

...As indicated above, the County is ~~currently in the process of analyzing~~working with residents to mitigate the environmental impacts associated with the Interchange Project. The RIF fees that will be paid in connection with the Promontory project will fund the applicant's fair share cost of interchange improvements and the mitigation measures that will be implemented to reduce identified environmental impacts."

- Chapter 3.0 (Comments and Responses to Comments on the Draft EIR) Page 3-53, Response to Comment 10-1, Mitigation Measure 4.12.5 was further modified based on subsequent correspondence submitted by William Wright (representing the School Districts):

"4.12.5 Prior to approval of the Specific Plan, ~~Rescue Union School District, Buckeye Union School District, El Dorado Union High School District, and the project applicant shall enter into a formal agreement regarding mitigation of project impacts on school facilities. This agreement shall specifically identify mechanisms (i.e., payment of County wide school impact fees and transfer of the elementary school site) to construct new school facilities,~~

~~coordination of timing of new school facilities and build out of the project site, and construction of the project proposed elementary school site (if ultimately utilized by the Rescue Union School District).~~ the project applicant shall execute the "Agreement to Fund School Facilities to Mitigate Impacts From New Development" to provide for the payment of fees in the amount of $8,288.00 per unit, increased annually by the construction cost index, to fund new school facilities. The School Districts shall have approved this agreement prior to approval of the first tentative map. Prior to approval of the first tentative map, the project applicant shall have negotiated and executed an agreement with the Rescue Union School District for the acquisition of a K-6 school site to serve the project and for the construction of the school facilities. Prior to approval of the first tentative map, the project applicant shall have negotiated and executed an agreement with the El Dorado Union High School District for an option to acquire a new high school site to serve the El Dorado Hills area."

- Chapter 3.0 (Comments and Responses to Comments on the Draft EIR) Page 3-289, the revisions identified for pages 2-16 and 2-17 of the Draft EIR should be deleted.

- Chapter 4.0 (Minor Changes and Edits to the Draft EIR) Page 4-4, the revisions identified for pages 2-16 and 2-17 of the Draft EIR should be deleted.

- Chapter 4.0 (Minor Changes and Edits to the Draft EIR) Page 4-14, the following changes are made to Page 4.5-19 of the Draft EIR (third bullet) to provide further clarification:

  "Reconstructing the El Dorado Hills Boulevard interchange with U.S. Highway 50. (Although the El Dorado County General Plan does not describe the specific interchange improvements, the El Dorado County DOT in conjunction with Caltrans has identified preliminary reconstruction plans that ~~to~~ include a new two-lane westbound loop off-ramp, a new two-lane eastbound diagonal off-ramp, and one additional lane on the existing eastbound loop off-ramp, eastbound diagonal on-ramp, and westbound diagonal on-ramp. Figure 4.5-1 shows the preliminary interchange configuration developed by DOT. Reconstruction would also require the realignment of Saratoga Way and the elimination of the existing westbound diagonal off-ramp.)"

- Chapter 4.0 (Minor Changes and Edits to the Draft EIR) Page 4-16, the revisions identified for Page 4.5-30 of the Draft EIR should be deleted.

- Chapter 4.0 (Minor Changes and Edits to the Draft EIR) Page 4-17, the revisions identified for Page 4.5-33 of the Draft EIR should be deleted.

- Chapter 4.0 (Minor Changes and Edits to the Draft EIR) Page 4-31, the following additional changes are made to Mitigation Measure 4.10.5a:

"4.10.5a Prior to ~~approval of improvement plans for site development~~ the first tentative map approval, El Dorado County..."

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CHAPTER 1.0

INTRODUCTION

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INTRODUCTION

1.1 OVERVIEW

The Draft Environmental Impact Report (Draft EIR) on the proposed Promontory Specific Plan (SCH # 94112056) was submitted to the State Clearinghouse and released for public and agency review on June 16, 1997. A 45-day review and comment period was initiated on June 16, 1997 and closed on July 31, 1997. A public hearing was held by the El Dorado County Planning Commission on July 10, 1997, at which time verbal and written comments on the Draft EIR were solicited and received.

This document includes comments and responses to comments on the Draft EIR for the Promontory Specific Plan and comprises the Final Environmental Impact Report (FEIR) for the proposed project. The Final EIR is an informational document that must be considered by El Dorado County (the lead agency) before the El Dorado County Board of Supervisors approves or rejects the proposed project. CEQA Guidelines (Section 15132) specify that:

The Final EIR shall consist of:

(a) The Draft EIR or a revision of that draft.
(b) Comments and recommendations received on the draft EIR either verbatim or in summary.
(c) A list of persons, organizations, and public agencies commenting on the Draft EIR.
(d) The responses of the Lead Agency to significant environmental points raised in the review and consultation process.
(e) Any other information added by the Lead Agency.

In addition to consideration of the Final EIR, the Board of Supervisors is required to make findings of fact regarding the significant environmental impacts identified in the Final EIR and project alternatives, as well as a statement of overriding considerations for significant impacts which cannot be mitigated. The findings, and any statement of overriding considerations, are made after the Board of Supervisors has considered the Final EIR and are included in the public record. Likewise, the mitigation monitoring program (MMP) is adopted at the same time as the findings and is also included in the public record. However, the findings of fact, the statement of

overriding considerations, and the mitigation monitoring program are separate documents and are not included in the Final EIR.

1.2 ORGANIZATION OF THE DOCUMENT

The Final EIR is organized into five chapters. Chapter 2.0, Executive Summary, provides a brief project description and presents a summary table of project environmental effects. Chapter 3.0, Comments and Responses, provides a list of commentors, copies of written comments (coded for reference), and the lead agency responses to those written comments. Chapter 4.0, Minor Changes and Edits to the Draft EIR, includes corrections and additions to Draft EIR text as a result of comments made on the Draft EIR. Any changes to the Draft EIR in Chapters 3.0 and 4.0 are indicated by revision marks. Chapter 5.0 provides a list of the EIR authors, consultants, and persons consulted in preparation of the EIR. The Appendices include additional documentation that is summarized in Chapter 3.0.

CHAPTER 2.0

EXECUTIVE SUMMARY

CHAPTER 2.0

EXECUTIVE SUMMARY

2.1 INTRODUCTION

The proposed Promontory Specific Plan (Specific Plan) project is located in the western portion of El Dorado County (County), adjacent to the City of Folsom in Sacramento County (see **Figure 3-1**). The project is south of Folsom Lake, within the beginning of the foothills of the Sierra Nevada Mountains. The project site (or Specific Plan area) is located within the unincorporated community of El Dorado Hills, just north of U.S. Highway 50. The project site consists of approximately 999 acres along the El Dorado County and Sacramento County line. The Specific Plan area is designated as Planned Community by the El Dorado County General Plan.

The proposed project consists of the adoption of a specific plan for a mixed-use development in the El Dorado Hills area. The Promontory Specific Plan provides for the development of 1,387 residential dwelling units, 103,670 square feet of commercial and office uses, 99.8 acres of public open space, two parks, and an elementary school site.

The Promontory Specific Plan's overall goal is the development of a mixed-use planned community while preserving the natural features of the site in a manner consistent with the goals, objectives, and policies of the El Dorado County General Plan. The following objectives have been identified for the Specific Plan:

El Dorado County's objectives for the proposed project include:

- Create new balanced communities in County areas suitable for urban levels of development due to the accessibility of adequate infrastructure and general public services.

- Develop and maintain safe and efficient transportation and circulation facilities to sufficiently serve the project site, while minimizing to the extent possible traffic impacts to existing residential roadways

- Designate appropriate sites for commercial uses to provide opportunities for County residents to shop and work within the County.

- Provide a variety of housing opportunities by type tenure, price, and neighborhood character in order to meet County housing needs.

- Ensure that adequate public services and utilities (water supply, wastewater service, solid waste disposal, storm water drainage, schools, fire protection, and law enforcement) are provided concurrent to each phase of project development.

- Provide for the retention and conservation of distinct topographical features and native vegetation.

- Provide a visual and physical separation of the project site from existing communities.

- Conserve wetlands, riparian areas, natural drainages, and other wildlife habitat of significant biological, scenic, and recreational values.

The project applicant's objectives for the proposed project include:

- Develop a new mixed-use community in the El Dorado Hills area.

- Maintain the natural appearance of the project site as much as possible by careful site design, development standards, and incorporation of the natural features and topography into the project in order to preserve vegetation and natural appearance.

- Provide rural and scenic views from collector roads by providing open space buffers and limitations on development along main collector roads.

- Promote a semi-rural design character of the residential villages by reducing road widths, limiting the use of sidewalks, and reducing or eliminating the need for retaining and sound walls throughout the project site.

2.2 ISSUES TO BE RESOLVED AND AREAS OF CONTROVERSY

A Notice of Preparation (NOP) for the Promontory Specific Plan EIR was circulated for public review on November 16, 1994, pursuant to Section 15060(c) of the CEQA Guidelines. The NOP was recirculated on November 13, 1996, with no substantive changes made to the project. The NOP included a summary of probable environmental effects of the proposed project. Comments received on the 1994 NOP and the 1996 NOP were considered in the preparation of this EIR and are included in **Appendix A** of the Draft EIR. Controversies and issues raised regarding the proposed project are summarized below, as well as identification of those issues not determined to be significant and will not be evaluated further in the EIR, pursuant to Section 15060(c) of the CEQA Guidelines.

LAND USE

Comments received on the NOP identified the following concerns regarding implementation of the proposed project:

- project's contribution to regional urban sprawl;
- inconsistency with existing zoning designation;
- project's consistency with the planned Russell Ranch Specific Plan; and,
- cumulative loss of grazing land.

Land use issues raised that were not considered significant and do not need to be addressed in the EIR included the following:

- Evaluation of market supply of land uses would be a social and economic consideration which is not subject to CEQA. In addition, the El Dorado County General Plan designates land uses within the County and identifies the oversupply of residential and non-residential land use designations for providing market and landowner flexibility as a General Plan objective.

AESTHETICS

Areas of controversy regarding the aesthetic and visual effects of the proposed project identified by commentors included the following items:

- project impacts to the existing perceived open space buffer between the City of Folsom and the El Dorado Hills area;
- project's contribution to the loss of the rural character of El Dorado County;
- creation of substantial light and glare; and
- project effects on the hillsides and natural features of the project site.

POPULATION, EMPLOYMENT, AND HOUSING

Several commentors identified potential project impacts to the County's provision of affordable housing; substantial increases in County population within a small project area; effects to the County's jobs/housing balance; overstock of County housing; and growth inducement of the project.

TRANSPORTATION AND CIRCULATION

The California Department of Transportation (Caltrans) identified that the project traffic analysis should evaluate effects to U.S. Highway 50 and related interchanges, cumulative traffic conditions, identify trip reduction strategies, and identify financing programs for needed roadway improvements. Other commentors identified potential traffic concerns for Green Valley Road, the need for the inclusion of bike lanes and trails, and coordination between City of Folsom and El Dorado County on traffic impacts.

AIR QUALITY

Areas of controversy regarding project air quality effects include increases in ozone, particulate matter, and carbon monoxide, as well as other air toxics generated by project from both mobile and stationary sources.

NOISE

Comments received identified noise concerns regarding implementation of the proposed project:

- project construction generation of noise and effect on sensitive receptors;
- project generated traffic increases of ambient noise levels and related off-site effects; and
- overall noise effect on the perceived rural environment of the El Dorado Hills area.

BIOLOGICAL RESOURCES

The California Department of Fish and Game (CDFG) expressed concerns regarding project effects on wetland and riparian areas. Other items of concern for CDFG and other commentors included loss of oak woodlands, effects to potential on-site special status plant and animal species, and effects on wildlife movement.

GEOLOGY AND SOILS

The El Dorado County Soil Conservation District commented on potential project impacts related to adverse ground stability impacts from grading activities, soil suitability for site development, loss of prime farm land, and soil erosion and sedimentation. Other areas of concern identified include slope stability, seismic hazards, and potential failure of Mormon Island Dam.

HYDROLOGY AND WATER QUALITY

Areas of controversy regarding project hydrology and water quality effects include impacts to Willow and Humbug Creeks and drainages to the north of the project site, water quality, flooding

PARKS, RECREATION, AND COMMUNITY SERVICES

Comments received regarding potential park and open space issues included the following:

- project's provision of adequate parks and recreation facilities pursuant to County and El Dorado Hills Community Services District standards;
- the provision of pedestrian and bicycle facilities and access to parks;
- consideration of the establishment of regional park at the project site as a project alternative; and
- the provision of trails and linear parks consistent with County standards.

UTILITIES AND SERVICE SYSTEMS

WATER SUPPLY

Several comments were received regarding concerns over the provision of water service. The El Dorado Irrigation District (EID) comments provided information regarding the availability of water and infrastructure facilities that would provide water service. The El Dorado County Water Agency (EDCWA) expressed concerns regarding water supplies available to EID and future demands for water service from similar projects. LAFCO comments identified that evaluation of annexation into the EID Service Area would require demonstration that the extension of water services would not impact services to existing areas. Other comments received included the following:

- competition for water service with other land uses;
- future water supply sources;
- water conservation measures; and
- future water distribution improvements.

New facility costs issues are addressed in this EIR only in relation to the evaluation of physical impacts of providing water service.

WASTEWATER SERVICE

LAFCO comments regarding wastewater service identified that evaluation of annexation into the EID Service Area would require demonstration that the extension of wastewater services would not impact services to existing areas. Other areas of concern consisted of the existing and future ability of EID to provide wastewater service.

Concerns raised regarding the handling of discharge and waste and general operation of the El Dorado Hills Wastewater Treatment Plant are related to the operational activities of EID,

effects from increased runoff from the project site, identification of detention facilities, urban water quality effects, and general downstream effects.

CULTURAL RESOURCES

Comments received identified cultural resource concerns regarding implementation of the proposed project:

- affects to Native American cultural resources;
- potential for undiscovered cultural resources; and
- cumulative effects of vandalism and desecration of the Mormon Island Relocated Cemetery.

PUBLIC SERVICES

FIRE PROTECTION

Comments received from the El Dorado Hills Fire Department identify that the project site is subject to California Firesafe Regulation. According to the El Dorado Hills Fire Department, project roadways would need to meet Department standards as well as the water distribution system. The El Dorado County Local Agency Formation Commission (LAFCO) comments identified that evaluation of annexation into the El Dorado Hills Fire Department Service Area would require demonstration that the extension of fire protection services would not impact services to existing areas. Other comments identified potential fire hazards related to the steep sloped conditions of the project site.

LAW ENFORCEMENT

Areas of controversy regarding project effects on law enforcement that were identified include the provision of additional law enforcement services to the project site, potential adverse effects to law enforcement services to existing areas, and cumulative conditions.

PUBLIC SCHOOLS

Comments received from Buckeye Union School District, Rescue Union School District, and the El Dorado Union High School District express concerns regarding project generation of student and resulting school capacity problems, full consideration of project impacts on schools and the need for new facilities, and development of the project proposed elementary school site.

School funding and new facility costs issues are addressed in this EIR only in relation to the evaluation of physical impacts of project student generation.

which are not part of the proposed project. Thus, these issues will not be further evaluated in this EIR.

SOLID WASTE DISPOSAL

Concerns raised regarding solid waste disposal services consisted of identification of the amount of waste anticipated to be generated by the proposed project. Issues regarding Union Mine Disposal Site landfill operations and expansion of landfill are related to the operational activities of El Dorado Landfill, Inc., and the County, which are not part of the proposed project. Thus, these issues will not be further evaluated in this EIR.

ELECTRICITY AND NATURAL GAS

Issues of concern regarding project energy use generally consisted of determining methods to reduce project energy use.

PUBLIC HEALTH AND SAFETY

Several comments were received regarding electric and magnetic field effects from existing on-site power transmission lines. Concern raised regarding the El Dorado Hills Dump Site effects will not evaluated in this EIR, since the El Dorado Hills Dump Site is not located on or immediately adjacent to the project site.

FISCAL IMPACTS

Several comments were received regarding the economic sustainability of the project and its effects on public services. Fiscal effects of the proposed project are addressed in this EIR only in relation to the evaluation of physical impacts of public services.

2.3 ALTERNATIVES TO THE PROPOSED PROJECT

CEQA Guidelines (Sections 15123(b)(3) and 15126(d)) requires an EIR to consider a range of alternatives that could feasibly attain the basic objectives of the proposed project. Alternatives evaluated are described below.

- No Project Alternative
- Reduced Intensity Alternative
- Clustered Development/Open Space Alternative
- Off-Site Alternative

These alternatives are discussed in Chapter 5.0 of the Draft EIR.

2.4 SUMMARY OF ENVIRONMENTAL IMPACTS

Table 2-1 presents a summary of project impacts and proposed mitigation measures that would avoid or minimize potential impacts. In the table, the level of significance of each environmental impact is indicated both before and after the application of the recommended mitigation measure(s). Edits made to the table as a result of comments on the Draft EIR are demarcated by revision marks (underline and strike-out marks)

For detailed discussions of all project impacts and mitigation measures, the reader is referred to topical environmental analysis sections in Chapter 4.0 of the Draft EIR.

TABL I
SUMMARY IMPACT TABLE

Impact Number	Level of Significance Without Mitigation	Mitigation Measure	Level of Significance With Mitigation
4.2 Land Use			
4.2.1 Construction of the proposed project would produce short-term adverse effect on adjacent residential areas because of dust, noise, and construction traffic.	S	4.2.1a Prior to final approval of any project site improvement plans and the commencement of construction activities, the project applicant shall locate construction staging areas as far as feasibly possible from existing residential areas. Construction staging areas shall be identified on project site improvement plans and approved by the El Dorado County Department of Transportation. 4.2.1b During construction activities, the project applicant shall limit the amount of daily construction equipment traffic by staging construction equipment and vehicles on the project site at the end of each work day rather than removing them. 4.2.1c Prior to any construction activities requiring complete or partial closure of existing roadways surrounding the project site, the project applicant shall perform the following tasks to the satisfaction of the El Dorado County Department of Transportation: • Provide written notice to property owners along affected roadways one week prior to roadway closures. • To ensure public safety, clearly mark and secure roadway construction areas. • Steel plates shall be placed over open trenches at the end of each work day to restore vehicle access to all residents. • Roadway closure shall not occur during the a.m. and p.m. peak-hour traffic periods.	LS

S = Significant LS = Less than Significant SU = Significant Unavoidable PS = Potentially Significant CS = Cumulative Significant

Impact Number		Level of Significance Without Mitigation	Mitigation Measure		Level of Significance With Mitigation
			4.6.1	Prior to approval of improvement plans for subsequent development, project applicants shall demonstrate to the County and District their compliance with Rule 223 of the El Dorado Air Pollution Control District's Rules and Regulations handbook in written report form. This fugitive dust prevention and control plan shall briefly list all Best Management Practices (BMP) to be implemented for the control of fugitive dust emissions throughout the construction phase.	
			4.7.1a	Construction activities shall be limited to the hours of 7:00 a.m. to 6:00 p.m. on weekdays and the hours of 8:00 a.m. to 5:00 p.m. on Saturday and Sunday.	
			4.7.1b	Locate fixed construction equipment such as compressors and generators as far as feasibly possible from sensitive receptors. Shroud or shield all impact tools, and muffle or shield all intake and exhaust ports on power construction equipment.	
4.2.2	Development of the proposed Specific Plan would generally be consistent with existing and future adjacent urban development in the El Dorado Hills area and the City of Folsom.	LS	4.2.2	Since no significant impact is identified, no mitigation is required.	
4.2.3	Implementation of the proposed Specific Plan would be substantially consistent with the El Dorado County General Plan.	LS	4.2.3	Since no significant impact is identified, no mitigation is required	
4.2.4	Implementation of the proposed Specific Plan would convert the project site from grazing land to urban development, adding to the cumulative loss of grazing lands.	LS	4.2.4	Since no significant impact is identified, no mitigation is required.	

S = Significant LS = Less than Significant SU = Significant Unavoidable PS = Potentially Significant CS = Cumulative Significant

Impact Number	Level of Significance Without Mitigation	Mitigation Measure	Level of Significance With Mitigation
4.3 Aesthetics			
4.3.1 As viewed from the City of Folsom, the implementation of the proposed project would substantially alter the existing landscape characteristics of the project site from rural land to a developed urban/suburban uses.	S	4.3.1a Prior to County approval of project site grading plans, the following item shall be included in the grading plans: • Project site grading shall avoid disturbing and/or removing rock outcroppings and oak trees to the maximum extent feasible. 4.3.1b Landscaping plans for the project shall be developed and designed to preserve existing natural features, as feasible. The landscaping plans shall include the use of native species within the project site and along project roadways and frontages to blend with the natural features of the project site. Landscaping plans shall be in conformance with County and El Dorado Hills Community Services District standards. 4.3.1c Project Design Guidelines shall include the following design standards that are identified within highly visible areas (see Figure 4.3-5): • All residential structures shall be restricted to earth tone colors and designed to blend with the natural features of the project site. Such earth tone colors may include, but are not limited to, dark ochers, browns, and grays. • Structures and facilities within the Neighborhood Park and Elementary School site shall be restricted to earth tone colors (e.g., dark ochers, browns, and grays) and designed to blend with the natural features of the project site. Landscaping for both sites shall consist of native plant species and will blend with the existing vegetation on the project site. • Proposed lift stations shall be architecturally designed to blend with the surrounding natural features and/or screened with native landscaping in a manner acceptable to the El Dorado Irrigation District.	SU

S = Significant LS = Less than Significant SU = Significant Unavoidable PS = Potentially Significant CS = Cumulative Significant

Impact Number		Level of Significance Without Mitigation	Mitigation Measure		Level of Significance With Mitigation
			4.3.1d	Streetscape features, such as street lights and project entry signage, shall be incorporated into the streetscape landscaping and blend with the natural features of the site.	
			4.3.1e	Project-wide solid fences and walls shall be avoided to the maximum extent feasible (except within individual residential building envelopes). If solid fences and walls are used, the color and material used will blend with the natural features of the project site. Continuous fences and walls shall be softened with landscaping.	
			4.3.1f	Project Design Guidelines shall include standards on the placement, height, and general visibility of outdoor antennas and satellite dishes throughout the project site.	
4.3.2	Implementation of the proposed project would not substantially alter the visual characteristics of existing views from U.S. Highway 50.	LS	4.3.2	Since no significant impact was identified, no mitigation was required	
4.3.3	As viewed from existing and planned residential areas in the El Dorado Hills area adjacent to the project site, implementation of the proposed project would substantially alter the existing landscape characteristics of the project site and introduce new public facilities that would appear out of character.	PS	4.3.3a	Prior to final water and sewer system approval, sewer and water improvement plans shall include details for screening sewer lift stations and the two million gallon water storage tank in a manner acceptable to the El Dorado Irrigation District. The screening details shall also be submitted to the El Dorado Hills Design Review Committee for review. Methods of screening may include, but are not limited to, the following: 1. Architectural design of facilities to blend with the surrounding natural features. 2. Screen facilities with native landscaping. 3. Place facilities partially or completely underground.	LS
			4.3.3b	Implement mitigation measures 4.3.1b, 4.3.1d, and 4.3.1e.	

S = Significant LS = Less than Significant SU = Significant Unavoidable PS = Potentially Significant CS = Cumulative Significant

Impact Number		Level of Significance Without Mitigation	Mitigation Measure		Level of Significance With Mitigation
4.3.4	As viewed from existing and planned residential areas in the El Dorado Hills area adjacent to the project site, implementation of the proposed project could potentially obstruct ~~public~~ scenic views of Folsom Lake and the lower elevation areas of Sacramento County.	LS	4.3.4	Since no significant impact was identified, no mitigation was required	
4.3.5	Implementation of the proposed project, in combination with approved and proposed projects in the El Dorado Hills area and the City of Folsom, would result in the further conversion of the region's rural landscape to urban uses.	CS	4.3.5	Implement mitigation measures 4.3.1a through 4.3.1e and 4.3.3a.	SU
4.3.6	Daytime glare and reflection resulting from project hillside development would be visible along roadways and other public areas in the City of Folsom.	PS	4.3.6	The use of polished or reflecting building materials shall be minimized on the project site. These materials would include, but are not limited to, reflective glass and polished metal exterior materials and facilities on buildings.	LS
4.3.7	Implementation of the proposed project would result in the introduction of new nighttime light sources associated with project roadways, residential, and commercial uses that could adverse affect on adjacent residential areas.	S	4.3.7a	Outdoor light fixtures for non-residential areas shall be low-intensity, shielded and/or directed away from residential areas, and only used where necessary for safety and security purposes.	LS
			4.3.7b	Street light fixtures shall not exceed 30 feet in height and limited to the village center and major project roadway intersections.	
			4.3.7c	Native landscaping, such as shrubs and trees, shall be planted in such a manner to shield motor vehicle lights and street lights from adjacent areas.	
			4.3.7d	Lighted park sports fields shall be restricted to the community park in the village center. Light fixtures for the neighborhood park shall be limited to that required for safety purposes.	

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4.3.8	Implementation of the proposed project would be generally consistent with visual resource and aesthetic goals, objectives, and policies of the El Dorado County General Plan.	LS	4.3.8	Since no significant impact was identified, no mitigation was required.	
4.4	**Population, Housing, and Employment**				
4.4.1	Implementation of the proposed project would increase the population in the El Dorado Hills area of El Dorado County.	LS	4.4.1	Since no significant impact was identified, no mitigation is required.	
4.4.2	Implementation of the proposed project would result in the increase of housing units in the County.	LS	4.4.2	Since no significant impact was identified, no mitigation is required.	
4.4.3	Implementation of the proposed project would result in a jobs to employed resident ratio of approximately 0.07 at the project site, resulting in an imbalance of jobs to employed resident ratio.	LS	4.4.3	Since no significant impact was identified, no mitigation is required.	
4.4.4	The proposed project would be generally consistent with the General Plan, including goals, objectives, and policies related to affordable housing.	LS	4.4.4	Since no significant impact was identified, no mitigation was required.	
4.5	**Transportation and Circulation**				
4.5.1	Implementation of the proposed project will increase traffic volumes in excess of 4,000 per day on sections of Olson Lane and Ridgeview Drive.	S	4.5.1a	During the review of tentative maps for each phase of the Promontory Specific Plan, a traffic study shall be performed to determine the amount of project traffic that will be added to the local streets in El Dorado Hills. If any local residential streets would experience a total daily volume in excess of 4,000 as a result of implementing a particular phase of the Promontory Specific Plan, then the tentative map for that phase shall not be approved unless traffic circulation measures are implemented which will prevent the total daily traffic volume on local residential streets from reaching 4,000 average daily trips.	LS

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		Traffic circulation measures would include, but are not limited to: additional connections to other local residential streets (temporarily or permanently); elimination of connections to local residential streets (temporarily or permanently); construction of Russell Ranch Boulevard Extension to Green Valley Road; construction of Russell Ranch Boulevard to the City of Folsom's East Natoma Street Extension (and/or connection to U.S. Highway 50); modification of project phasing; construction of new roads to serve the project site (through the Crown Valley, Ridgeview Village Unit 3, and/or Ridgeview Village Unit 9 approved tentative maps); delay of tentative map approval; and/or reduction in the number of dwelling units. 4.5.1b In order to minimize traffic impacts to existing residential roadways, the following general project and circulation phasing plan shall be implemented (see Figure 4.5-14). Phase 1: Development of Village 6 with roadway access to Gillett Drive, Powers Drive, and Beatty Drive and construction of the Community Collector between Villages 5, 6 and 7. Phase 2: Development of Village 1 with the construction of northern portion of Russell Ranch Boulevard from the Community Collector to Green Valley Road. Phase 3: Development of Village 2 and 3 with the construction of a portion of the Community Collector north of Village 3. Phase 4: Development of Village 5 with the construction of a portion of the Community Collector north of Village 5.	

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		Phase 5: Development of a portion of Village 7 and the Village Center with the construction of Russell Ranch Boulevard from the Village Center to the Community Collector. Phase 6: Development of the remaining portions of Village 7 and the Village Center with the construction of a portion of the Community Collector north of Village 7 and the Village Center Collector. Phase 7: Development of Village 4 with the construction of a portion of the Community Collector west of Village 4. Phase 8: Development of Village 8 with the construction of accesses to Weststar Lane and the City of Folsom. The above project and circulation phasing plan may be modified based on market and development constraints. However, no additional villages beyond Village 6 shall have access to existing residential roadways east of the project site (i.e., Suffolk Way, Gillett Drive, Powers Drive, Julie Ann Way, and Beatty Drive) until additional project accesses and roadways are developed."	
4.5.2 Implementation of the proposed project would increase traffic volumes at the Blue Ravine Road/East Natoma Street/Green Valley Road intersection resulting in a deterioration of LOS from "D" to "F" during the a.m. peak hour and LOS "E" to "F" during the p.m. peak hour.	S	4.5.2a Widen Green Valley Road from two lanes to four lanes from El Dorado Hills Boulevard to the El Dorado County line ~~in El Dorado County to the East Natoma Street/Blue Ravine Road/Green Valley Road intersection in the City of Folsom.~~ 4.5.2b Widen Green Valley road from two lanes to four lanes in the City of Folsom from the El Dorado County line to the East Natoma Street/Blue Ravine Road/Green Valley Road intersection.	LS

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			4.5.2~~cb~~	Construct a free-flow right-turn lane from westbound Green Valley Road to northbound East Natoma Street and widen northbound East Natoma Street to include two departing lanes for a minimum of 1,000 feet.	
			4.5.2~~db~~	Widen southbound East Natoma Street to include dual left-turn lanes and one exclusive right-turn lane.	
4.5.3	Implementation of the proposed project will increase traffic volumes at the Green Valley Road/Francisco Drive intersection resulting in the exacerbation the of LOS "F" conditions during the p.m. peak hour.	S	4.5.3a	Implement mitigation measures 4.5.2a and 4.5.2b.	LS
			4.5.3b	The project applicant shall be responsible for their fair-share cost of the following improvements: • widen the northbound Francisco Drive approach to include dual left-turn lanes, one exclusive through lane, and one exclusive right-turn lane; • widen the westbound Green Valley Road approach to include one exclusive left-turn lane, two exclusive through lanes, and one exclusive right-turn lane; • widen the eastbound Green Valley Road approach to include dual left-turn lanes, two exclusive through lanes, and one exclusive right-turn lane; and • modify the existing traffic signal equipment as necessary to accommodate the intersection widening.	
4.5.4	Implementation of the proposed project will increase traffic volumes at the El Dorado Hills Boulevard/Francisco Drive intersection resulting in a deterioration of the LOS from "E" to "F" during the p.m. peak hour.	S	4.5.4	Install a traffic signal at the El Dorado Hills Boulevard/ Francisco Drive intersection. Since signalization of the intersection is included in the El Dorado Hills RIF, the project will be subject to the RIF concurrently with the issuance of building permits.	LS

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4.5.5	Implementation of the proposed project will increase traffic volumes at the El Dorado Hills Boulevard/Wilson Boulevard intersection resulting in a deterioration of the LOS from "A" to "F" during the a.m. and p.m. peak hours.	S	4.5.5	During the review of tentative maps for each phase of the Promontory Specific Plan, a traffic study shall be performed to determine the amount of project traffic that will be added to the El Dorado Hills Boulevard/Wilson Boulevard intersection. When the intersection warrants signalization, as determined by the El Dorado County Department of Transportation, or if the intersection is projected to operate at LOS "D", "E", or "F", as a result of implementing a particular phase of the Promontory Specific Plan, then the tentative map for that phase shall not be approved unless the intersection is signalized.	LS
4.5.6	Implementation of the proposed project will increase traffic volumes at the Latrobe Road/U.S. Highway 50 Eastbound Ramps intersection resulting in the exacerbation of the LOS "F" conditions during the p.m. peak hour.	S	4.5.6	Install a traffic signal at the Latrobe Road/U.S. Highway 50 Eastbound Ramps intersection. Since signalization of the intersection is included in the El Dorado Hills RIF, the project will be subject to the RIF concurrently with the issuance of building permits.	LS
4.5.7	Implementation of the proposed project will create a new intersection with Green Valley Road. This intersection would operate at LOS "F" during both a.m. and p.m. peak hours under existing plus project conditions.	S	4.5.7a 4.5.7b	Implement mitigation measures 4.5.2a and 4.5.2b. Install a traffic signal and turn lane improvements at the Green Valley Road/North-South Project Collector Road (Russell Ranch Boulevard Extension) intersection. The turn lane improvements shall include an exclusive westbound left-turn lane and an exclusive eastbound right-turn lane on Green Valley Road. In addition, the North-South Collector Road approach shall include a dual left-turn lane and an exclusive right-turn lane. The timing of these improvements will be predicated on the phasing of the project and the results of the traffic studies submitted with each tentative subdivision map.	LS
4.5.8	Implementation of the proposed project will increase traffic volumes at the El Dorado Hills Boulevard/Latrobe Road eastbound and westbound on- and off-ramp junctions with U.S. Highway 50 resulting in the exacerbation of the LOS "F" conditions during both a.m. and p.m. peak hours.	S	4.5.8	The project applicant shall be responsible for contributing their fair-share of the cost to reconstruct the El Dorado Hills Boulevard/Latrobe Road interchange with U.S. Highway 50. Since reconstruction of the interchange is included in the El Dorado Hills RIF and the County's State System Capacity and Interchange Traffic Impact Mitigation program, the project will be subject to the RIF and State System Capacity TIM fee concurrently with the issuance of building permits.	LS

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4.5.9	Implementation of the proposed project will increase demand for public transit service and facilities including fixed route service, commuter service, dial-a-ride service, and park-and-ride lot spaces. In order to accommodate these trips, Policies 3.11.2.3, 3.13 2.2, 3.11.2.1 of the El Dorado County General Plan require new development to install bus turnouts, bus shelters, and other public transportation-related improvements where appropriate. Since the Promontory Specific Plan does not identify bus turnouts, bus shelters, or other public transportation related improvements, this impact is considered significant.	S	4.5.9	The project developer shall be responsible for their fair-share cost of bus turnouts and transit shelters located within the project site. Bus turnouts and transit shelters will be placed along the proposed Russell Ranch Boulevard, community and village center collectors, as well as the village center. The specific location of these facilities shall be determined jointly by the El Dorado County DOT and El Dorado Transit Authority. The project applicant's fair-share cost shall be determined by the El Dorado County DOT. Construction of these improvements should occur when transit service is extended to the project.	LS
4.5.10	Implementation of the proposed project will increase demand for bicycle and pedestrian facilities. However, the Promontory Specific Plan includes bikeways and pedestrian facilities as part of the circulation plan.	LS	4.10	Since no significant impacts were identified, no mitigation measures are required.	
4.5.11	Implementation of the proposed project will increase cumulative traffic volumes at the Green Valley Road/Mormon Island Drive intersection resulting in LOS "F" conditions during the a.m. and p.m. peak hours.	CS	4.5.11a	The project applicant shall construct a barrier to prevent private vehicle access to Mormon Island Drive. This barrier shall be passable by emergency vehicles only. The specific barrier design shall be determined by the El Dorado County DOT and El Dorado Hills Fire Department. or 4.5.11b As an alternative, the intersection may be signalized to maintain a LOS "B" in the a.m. and LOS "C" in the p.m.	LS
4.5.12	Implementation of the proposed project will increase cumulative traffic volumes at the Blue Ravine Road/East Natoma Street intersection resulting in the exacerbation of LOS "D" conditions during the a.m. peak hour and a deterioration in LOS from "E" to "F" during the p.m. peak hour.	CS	4.5.12	No feasible mitigation.	SU

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4.5.13	Implementation of the proposed project will increase traffic volumes at the El Dorado Hills Boulevard/Olson Lane intersection resulting in the exacerbation of LOS "F" conditions during both peak hours. The roadway plan prepared for the El Dorado County General Plan projected this section of El Dorado Hills Boulevard to operate at LOS "E" under year 2015 conditions.	CS	4.5.13	The project applicant shall install a traffic signal at the El Dorado Hills Boulevard/Olson Lane intersection and construct exclusive left- and right-turn lanes on the Olson Lane approach.	LS
4.5.14	Implementation of the proposed project will increase traffic volumes at the El Dorado Hills Boulevard/Wilson Boulevard intersection resulting in the exacerbation of LOS "F" conditions during both peak hours. The roadway plan prepared for the El Dorado County General Plan projected this section of El Dorado Hills Boulevard to operate at LOS "E" under year 2015 conditions.	CS	4.5.14	Implement Mitigation Measure 4.5.5.	LS
4.5.15	Implementation of the proposed project will create a new intersection with Green Valley Road. This intersection would operate at LOS "F" under cumulative plus project conditions.	CS	4.5.15	Implement mitigation measures 4.5.7a and 4.5.7b.	LS
4.6	**Air Quality**				
4.6.1	Fugitive dust generated by construction activities could potentially add to ambient PM_{10} concentrations.	S	4.6.1	Prior to approval of improvement plans for subsequent development, project applicants shall demonstrate to the County and District their compliance with Rule 223 of the El Dorado Air Pollution Control District's Rules and Regulations handbook in written report form. This fugitive dust prevention and control plan shall briefly list all Best Management Practices (BMP) to be implemented for the control of fugitive dust emissions throughout the construction phase.	LS
4.6.2	Construction of the project would increase criteria air pollutant emissions from construction equipment exhaust systems during the construction phase of the project	SU	4.6.2a	The County shall encourage subsequent site development to incorporate the use of Best Available Control Technologies (BACT) for the control of construction exhaust emissions. The EDCAPCD shall be consulted to determine the appropriate BACT measures available (regular tune-ups, cleaner burning conventional fuels, alternative fueled vehicles and equipment).	SU

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		4.6.2b Prior to future final map approvals, the project applicant shall consult the County and the EDCAPCD concerning feasible transportation alternatives in order to reduce construction worker vehicle trips and associated vehicle exhaust emissions.	
4.6.3 Project-related construction activities would generate fugitive hydrocarbon emissions during construction.	S	4.6.3 Prior to future final map approvals, the project applicant shall demonstrate to the County and the EDCAPCD their compliance with Rules 215 and 224 of the EDCAPCD's Rules and Regulations handbook for the control of ROG emissions from architectural and asphalt coatings.	LS
4.6.4 Construction of infrastructure improvements will require the removal of vegetation and trees. This cleared slash could potentially be burned and disposed of on site. Any burning of slash would produce smoke containing primarily PM_{10} and CO and possibly be a nuisance to existing residents.	S	4.6.4 Prior to future final map approvals, the project applicant shall demonstrate complete compliance with the El Dorado Air Pollution Control District's open burning rules contained in Regulation III.	LS
4.6.5 Operation of the project would generate both mobile source and area source criteria air pollutants and would increase total criteria air pollutant emissions in the region.	SU	4.6.5 Implementation of the following measures would reduce, but not eliminate, the significant air quality impacts: • The project applicant shall encourage the location of neighborhood-serving shops and services in or adjacent to the Promontory Specific Plan area. By providing these shops and services within the planned commercial center (those facilities to locate in the commercial center are currently unspecified), residential shopping travel distances will be reduced, subsequently reducing mobile source criteria air pollutant emissions. Effectiveness of measure is estimated at a 1-4 percent reduction in total emissions (BAAQMD, 1996). • Public transit system improvements within the project to include: expansion of routes and schedules servicing the project, convenient access to existing or future public transportation system (i.e., possible Regional Transit light rail system extension servicing the Highway 50 corridor), and incorporation of convenient transit	SU

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				stops in project design (i.e., bus turnouts, benches with shelters). Effectiveness of measure is estimated at a 0.2-2 percent reduction in total emissions (BAAQMD, 1996). • All major surface streets are proposed to accommodate Class II bikeways and pedestrian sidewalks. These project proposed bicycle lanes in addition to the sidewalks shall be linked to the commercial center and local area network. Planned bikeways and sidewalks from the City of Folsom in the Russell Ranch Specific Plan shall be extended to connect to the proposed village center. Effectiveness of measure is estimated at a 0.1-2 percent reduction in total emissions (BAAQMD, 1996). • Prior to future final map approvals, the project applicant shall demonstrate that only EPA certified wood stoves and fireplaces inserts are installed in homes. Standard masonry fireplaces, uncertifiable by the EPA, shall not be constructed. EPA certified stoves and fireplace inserts have a 70 to 90 percent lower particulate emission rate than conventional stoves and fireplaces.	
4.6.6	Implementation of the project would increase roadside CO concentrations along heavily traveled roadways at congested intersections.	SU	4.6.6	Implement Mitigation Measure 4.6.5.	SU
4.6.7	Implementation of the project could result in emissions of toxic air contaminants (TAC).	LS	4.6.7	Since no significant impacts were identified, no mitigation is required.	
4.6.8	Implementation of the proposed project could result in an increase in odorous emissions.	PS	4.6.8	As a part of the improvement plans review and approval process, the County shall require project applicants to consult with the El Dorado County Air Pollution Control District and the El Dorado County Irrigation District (EID) regarding sewage pump/lift station odor control technologies. In the event that odor impacts occur, odor control measures shall be required by the County, District, and EID.	LS

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4.6.9	Implementation of the proposed project, by incrementally adding to regional air pollution, would contribute to a cumulative air quality impact.	CS	4.6.9	Implement mitigation measures 4.6.1, 4.6.2a, 4.6.2b, 4.6.3, 4.6.4, and 4.6.5.	SU
4.7	**Noise**				
4.7.1	Construction of the necessary infrastructure improvements, the village center, and the residential units would temporarily increase noise levels in nearby areas.	SU	4.7.1a	Construction activities shall be limited to the hours of 7:00 a.m. to 6 p.m. on weekdays and the hours of 8:00 a.m. to 5 p.m. on Saturday and Sunday.	SU
			4.7.1b	Locate fixed construction equipment such as compressors and generators as far as feasibly possible from sensitive receptors. Shroud or shield all impact tools, and muffle or shield all intake and exhaust ports on power construction equipment.	
4.7.2	Upon project buildout, subsequent local traffic increases would increase noise levels along local arterial roads. P.M. peak-hour noise levels would increase along segments of Green Valley Road, Francisco Drive, East Natoma Street, and El Dorado Hills Boulevard, exposing existing residents to excessive noise levels ~~noise levels exceeding the performance standards outlined in the El Dorado County General Plan Noise Element and the City of Folsom Noise Element where applicable.~~	SU	4.7.2	Since the identified noise impacts are an offsite consequence of project implementation, no feasible project related mitigation measures are available.	SU
4.7.3	Resultant traffic along the proposed Russell Ranch Boulevard extension would expose residents of the Shadowfax subdivision and Amys Lane to excessive noise levels ~~exceeding the performance standards of the El Dorado County Noise Element and Table 4.7-1.~~	S	4.7.3	The County shall require: • that speeds along Russell Ranch Boulevard in the area of Shadowfax and Amys Lane be posted at no higher than 30 mph (assumes posted speed limit exceedance by 5 mph and subsequently assures compliance with mitigation); and • that a 4-foot earthen berm be constructed adjacent the west side of Russell Ranch Boulevard blocking line of site between Residence #1 through #3 and Russell Ranch Boulevard.	LS

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4.7.4	Upon project buildout, subsequent local traffic increases would increase noise levels in residential areas east of the project site. Peak hour noise levels would increase along segments of Hensley Circle, Warren Lane, Governor Drive, Gillett Drive, Olson Lane, Ridgeview Drive, Wilson Boulevard, and Julie Ann Way. This increase would expose existing residents to noise levels exceeding the noise impact significance threshold criteria.	SU	4.7.4	Implement Mitigation Measure 4.5.1.	SU
4.7.5	Project generated vehicle traffic would create noise levels along the Russell Ranch Boulevard extension, community collector, and village collector roads that could potentially exceed the noise/land use performance standards outlined in the General Plan and impact future residences of the Promontory Specific Plan.	PS	4.7.5	Prior to County approval of tentative subdivision maps, project applicants shall demonstrate compliance with the transportational noise compatibility requirements outlined in the El Dorado County General Plan Noise Element. Applicants shall demonstrate compliance through noise modeling and/or noise monitoring using approved methods and equipment. Future mitigation measures shall use Best Available Control Technology (BACT), with the use of noise barriers as a last feasible means of mitigation. Housing setbacks are the preferred mitigation method.	LS
4.8 Biological Resources					
4.8.1	An undetermined acreage of oak woodland will be removed due to project implementation.	S	4.8.1	Mitigation for project impacts to trees shall include measures for tree protection, revegetation and compensation, and monitoring. All aspects of the following measures must be implemented to ensure mitigation/compensation for the impact. • The project applicant shall develop and implement a Tree Protection Plan to minimize direct and indirect impacts to oak woodland on the project site during construction and operation phases of the proposed project. The Plan shall require the use of buffers to prevent or reduce the effects of disruption in the hydrologic or edaphic (growing) environment of heritage trees. Canopy cover retention within oak woodlands shall meet the requirements of General Plan	SU

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		Policy 7.4.4.4 ~~wherever possible~~. The elements of the Tree Protection Plan shall appear as standards in the tentative subdivision maps, improvement plans, and subdivision CC&Rs. The Plan shall be implemented prior to ~~the initiation of~~ and during ground clearing, grading, or other construction activities that may impact oak trees. Unless stated otherwise, all measures shall be the sole responsibility of the project applicant. • The County or project applicant (with County approval) shall engage a qualified project biologist or equivalent professional to oversee all aspects of construction monitoring that pertain to oak tree protection. The County would be responsible for reviewing the monitoring program. The project applicant shall be responsible for reimbursing the County for all costs related to the compliance monitoring of the project. • The project biologist shall be responsible for contractor education and shall monitor all construction activities in areas supporting sensitive biological resources. The project biologist shall be responsible for scheduling and/or implementing pre-construction tree surveys, and shall inform the County, the project engineer and the project general contractor if there are construction activities that threaten protected oak trees for which no mitigation measures have been identified in this EIR. • The project biologist shall clearly mark on project maps all oak trees and oak woodlands to be avoided and provide these maps to the contractor. These areas shall be designated as "no construction" or "limited construction" zones. These areas shall be flagged by the project biologist prior to construction activities. In some cases, trees may need to be fenced or otherwise protected from direct or indirect impacts, as determined by the project biologist. • The Tree Revegetation Plan shall consist of an implementation and a monitoring component. Because	

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		the exact extent of tree loss can only be determined after final grading plans and building envelopes are defined, a detailed analysis of 1) the precise number and species of trees to be removed, and 2) the specific mitigation areas to be planted, shall be developed and identified as part of the tentative and final map processes, in compliance with General Plan Policy 7.4.5.1. Lost tree canopy cover must be replaced at the percentage required under Policy 7.4.4.4 of the County General Plan. • *The Monitoring and Management Plan* shall identify monitoring and management techniques for a recommended time ~~minimum~~ period (as determined during development of the Plan) ~~of ten years~~ following implementation. The plan shall establish success criteria (performance standards) and shall describe steps to be taken to replace vegetation not meeting the success criteria (contingency plans). Performance standards could relate to the number of trees, species and sizes of trees, area of canopy, or a combination. Appropriate data sampling and statistical treatment of data shall be developed and utilized. • A preliminary mitigation plan (based on the elements presented in this EIR) shall be submitted for review prior to approval of subsequent tentative subdivision maps. A draft mitigation plan (including draft versions of the Tree Protection Plan, Revegetation Plan, and Monitoring and Management Plan) shall be submitted with the applications for tentative subdivision maps and other subsequent approvals. The final mitigation plan shall be submitted as part of the final subdivision map process or prior to approval of a grading permit for improvement plans, whichever occurs first. Prior to implementation, the final plan shall be approved by the County. The project applicant shall identify and secure sources of funding and personnel to carry out all identified measures outlined above before any tree removal or grading permits are issued by the County.	

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4.8.2	Project development would result in the direct filling and alteration of wetlands and waters of the United States.	LS	4.8.2	Since no significant impact was identified, no mitigation is required.	
4.8.3	The project has potential to significantly affect federally and state listed and other special status species.	CS	4.8.3	The project applicant shall hire a biologist(s) approved by the County to conduct protocol surveys for the species listed in Table 4.8-2 as having a high potential to occur on the property or as being a "potential resident" of the property, which includes bald eagle (*haliaeetus leucocephalus*), long-eared bat (*myotis evotis*), long-legged myotis (*myotis volans*), yuma myotis (*myotis yumanensis*), cooper's hawk (*accipiter cooperi*), sharp-shinned hawk (*accipiter striatus*), long-eared owl (*asio otus*), short-eared owl (*asio flammeus*), ferruginous hawk (*buteo regalis*), northern harrier (*circus cyaneus*), white-tailed kite (*elanus leucurus*), and burrowing owl (*speotyto cunicularia*). In addition, the biologist(s) shall also conduct protocol surveys for any new special status species that may occur on the project site, which are listed by CDFG and/or USFWS subsequent to the certification of this EIR. Results of the protocol surveys shall be submitted to CDFG~~,~~ and/or USFWS, as required, and to the County prior to approval of subsequent tentative subdivision maps. If no sensitive species are located on-site, no further mitigation is necessary. If listed species are located on the property, the applicant and County shall enter into informal consultation with the appropriate resource agency ~~CDFG and USFWS~~ and begin preparation of a Biological Assessment or Habitat Conservation Plan, as applicable. The precise mitigation/compensation for direct and indirect impacts to sensitive species will depend on agency consultation and agreements. The project applicant shall implement all measures identified by the CDFG and USFWS to protect and mitigate impacts to listed and other special status species.	SU

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4.8.4	Project implementation has the potential to introduce or promote the spread of non-native plant species.	PS	4.8.4	The objective of this mitigation measure is to reduce the potential for introduction or dispersal of non-native plant species to less-than-significant levels. The following measures will be performed: • ~~All seeds and straw material shall be certified weed free by the California Department of Food and Agriculture (CDFA) seed laboratory. All gravel and fill material used during project construction and maintenance shall be certified weed free by the County Agriculture Commissioner's Office. The removal site for all fill materials shall be examined for the presence of noxious weeds by the local County Agriculture Commissioner's Office. Material transported between counties shall be approved by the local County Agriculture Commissioner's Office in the county receiving the materials.~~ Project landscaping shall conform to County and California Native Plant Society guidelines within and adjacent to public and private open space areas. Table 4.8-3 presents a list of species that should not be used for project landscaping.	LS
4.8.5	The project would result in disturbance to, or direct mortality of, common wildlife species.	LS	4.8.5	Since no significant impact was identified, no mitigation is required.	
4.8.6	Project development would result in a worst-case scenario the loss of up to 637 acres of California annual grassland.	LS	4.8.6	Since no significant impact was identified, no mitigation is required.	
4.8.7	The proposed development would contribute incrementally to the cumulative loss and alteration of oak woodlands on a local and regional basis and habitat for sensitive and common plant and animal species.	CS	4.8.7	The project applicant shall implement mitigation measures 4.8.1, 4.8.3, and 4.8.4.	SU

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4.9	**Geology and Soils**				
4.9.1	Development of the project site would include substantial grading activities that would result in ground instability and soil erosion	PS	4.9.1a	Prior to approval of the improvement plans for site development, the project applicants shall hire an engineering geologist or equivalent professional to prepare a site specific geotechnical report that will include the following: • Identification of areas of potential slope hazards and measures to minimize the project's impacts to slope stability. • Identification of areas susceptible to soil erosion and measures to minimize the project's impact on soil erosion. • Determination of the suitability of excavated material as engineering fill, topsoil, or other type of reuse onsite.	LS
			4.9.1b	To the maximum extent practicable, project site development shall avoid areas determined by the site specific geotechnical report to have unstable ground conditions.	
			4.9.1c	Prior to approval of the improvement plans for site development, the project applicant will submit an erosion control plan to the County. Erosion control measures will include techniques such as physical and vegetative stabilization measures and runoff diversion measures. Additionally the plan will specify measures for reuse or disposal of excavated material. If excavated material is suitable for use at the project site, the plan should minimize elapsed time between excavation and reuse and provide adequate stockpile coverage and protection from wind and water erosion during the entire storage period. If excavated material is unsuitable for reuse at the project site, the plan will include specific information regarding the eventual reuse or disposal site, transportation	

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		methods, disposal reuse management, and schedule. The plan will be consistent with the El Dorado County Grading, Erosion, and Sediment Control Ordinance and the El Dorado County Resource Conservation District's Erosion Sediment Control Guidelines~~Erosion and Sediment Control Plan~~. 4.9.1d Stabilize grading areas left unprotected during the rainy season, as specified by the County Grading, Erosion, and Sediment Control Ordinance. Stabilization measures may include National Pollutant Discharge Elimination System (NPDES) Construction Activity best management practices such as hydroseeding, geotextiles and mats, and straw bale or sand bag barriers. 4.9.1e Implement water quality mitigation measures, including retention of vegetation and avoidance of grading activities near water channels to the maximum extent feasible. Water quality mitigation measures are described in detail in Section 4.10, Hydrology and Water Quality.	
4.9.2 Implementation of the proposed project would expose people and structures to major seismic hazards.	PS	4.9.2a Prior to approval of the improvement plans for site development, a seismicity report will be completed by an engineering geologist or equivalent professional regarding possible damage from seismic shaking and secondary hazards such as landsliding, liquefaction and lateral spreading. This report will include: • An analysis of seismic hazards anticipated at the project site from regional faults. • A discussion and recommendations for seismic mitigation at the project site. Recommendations may include use of reinforced concrete foundations and avoidance of potentially unstable foundation materials.	LS

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		4.9.2b The project applicant will incorporate the recommendations of the seismicity report into the design for all structures proposed at the project site. All structures will be designed for Seismic Zone 3 and will be designed to withstand the anticipated seismic hazards determined in the seismicity report. Plans for all structures shall be reviewed by the County prior to approval of the improvement plans and building permits.	
4.9.3 Implementation of the proposed project may affect mineral resources at the project site.	LS	4.9.3 Since no significant impact was identified, no mitigation was required.	
4.10 Hydrology and Water Quality			
4.10.1 Construction of subsequent projects under the Specific Plan would result in temporary degradation of downstream surface water quality of Willow Creek, Humbug Creek, Lake Natoma, and Folsom Lake.	S	4.10.1 Prior to approval of improvement plans for site development, the project applicant shall submit erosion control plans and hazardous materials control program to the County consistent with El Dorado County's Grading, Erosion, and Sediment Control Ordinance and El Dorado Resource Conservation District's Erosion and Sediment Control Guidelines ~~Erosion and Sediment Control Plan~~. The plan should include Best Management Practices to minimize and control pollutants in storm water runoff. Suggested water quality control practices should include the following: ***Construction Measures*** • Native vegetation will be retained where possible. Grading and excavation activities will be limited to the immediate area required for construction. • Stockpiled topsoil shall be placed in disturbed areas outside of natural drainageways. Stockpile areas shall be designated on project grading plans.	LS

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		• No construction equipment or vehicles will disturb natural drainageways without temporary or permanent culverts in place. Construction equipment and vehicle staging areas will be placed on disturbed areas and will be identified on project grading plans. • If construction activities are conducted during the winter or spring months, storm runoff will be regulated by temporary on-site detention basins. • Temporary erosion control measures (such as silt fences, staked straw bales, and temporary revegetation) will be employed for disturbed slopes until permanent revegetation is established. • No disturbed surfaces will be left without erosion control measures during the winter and spring months. • Sediment will be retained on-site by a system of sediment basins, traps, or other appropriate measures. • Immediately after the completion of grading activities, erosion protection will be provided for finished slopes. This may include revegetation with native plants (deep-rooted species for steep slopes), mulching, hydroseeding, or other appropriate methods. • Energy dissipaters will be employed where drainage outlets discharge into areas of erodible soils or natural drainageways. Temporary dissipaters may be used for temporary storm runoff outlets during the construction phase. • A spill prevention an countermeasure plan will be developed identifying proper storage, collection, and disposal measures for pollutants used on-site. No-fueling zones shall be indicated on grading plans and shall be situated at least 100 feet from natural drainageways.	

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		Operation Measures • All storm drain inlets will be equipped with silt and grease traps to remove oil, debris, and other pollutants, which will be routinely cleaned and maintained. Storm drain inlets will also be labeled "No Dumping - Drains to Streams and Lakes". • Parking lots will be designed to allow as much runoff as feasible to be directed toward vegetative filter strips to help control sediment and improve water quality. • Storm runoff from service stations or other similar uses will be treated with an oil/water separator. • Permanent energy dissipaters will be included for permanent outlets. • The detention/retention basin system on the site will be designed to provide effective water quality control measures. Design and operation features of detention/ retention basins will include: 1. Construct basins with a total storage volume that permits adequate detention time for settling of fine particles even during high flow conditions. 2. Maximize the distance between basin inlets and outlets to reduce velocities, perhaps by using an elongate basin shape. 3. Incorporate some below grade area within the main detention basin for sediment settling. 4. Allow vegetation to reduce velocities and naturally filter water by encouraging vegetation establishment and ensuring adequate water supply to maintain vegetation cover. 5. Establish basin maintenance responsibility and schedules to periodically remove basin sedimentation, excessive vegetation growth, and debris that may clog basin inlets and outlets.	

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Impact Number		Level of Significance Without Mitigation	Mitigation Measure		Level of Significance With Mitigation
4.10.2	Operation of the project site would result in long-term water quality degradation from urban runoff.	S	4.10.2	Implement Mitigation Measure 4.10.1 (operation measures).	LS
4.10.3	Implementation of the proposed project would result in the increase of impervious surfaces on the site, limiting areas for groundwater recharge.	LS	4.10.3	Since no significant impact was identified, no mitigation was required.	
4.10.4	Implementation of the proposed project would expose future residents and structures to inundation in the event of the failure of the Mormon Island Dam.	PS	4.10.4	Prior to improvement plan approval for the Village Center and/or Villages 1, 2, 3, 5, and/or 7, ~~approval of improvement plans for site development~~, the project applicant, in coordination with the El Dorado County Office of Emergency Services and the U.S. Bureau of Reclamation, will develop an evacuation plan for the project site. The evacuation plan will include the establishment of protocol in the event of the failure of Mormon Island Dam and will be consistent with the El Dorado County Operation Area Multi-Hazard Functional Emergency Operations Plan.	LS
4.10.5	Implementation of the proposed project, in conjunction with approved and proposed developments in the El Dorado Hills area and the City of Folsom, would result in increased flows in Willow and Humbug creeks in the City of Folsom. This cumulative increase in flows could result in on-site and downstream flooding in the City of Folsom.	CS	4.10.5a	Prior to approval of improvement plans for site development, El Dorado County shall coordinate with the City of Folsom and the City of Folsom/El Dorado County Joint Powers Authority (JPA) in developing a formal drainage agreement identifying shared drainage facilities and volumes, pre- and post-development runoff volumes that maintain existing 100-year storm drainage flows, and a review process of future project-specific drainage plans. The JPA was formed to address development-related issues along the County line that affect both the City of Folsom and El Dorado County. Since a portion of the Promontory and neighboring developments in El Dorado County are at the headwaters to the Willow and Humbug Creeks in the City of Folsom, the JPA has the authority to coordinate the design of drainage facilities to ensure facilities are property planned. The drainage agreement shall be approved by both the City of Folsom and El Dorado County.	LS

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		4.10.5b Prior to approval of improvement plans for site development, the project applicant shall prepare a hydrologic study in conformance with the El Dorado County Drainage Manual which would support the project drainage plans. The project applicant shall submit both the hydrologic study and drainage plans to the County for review and approval. These drainage plans shall clearly demonstrate that build-out peak storm runoff flows from the project site will remain at or below existing peak storm runoff flows. The drainage plan will provide details on ultimate location and design of retention/detention basins and other drainage facilities, as well as a maintenance program for all drainage facilities. The drainage plan shall also identify the 100-year floodplain on the project site, or verify that no 100-year flood zones will exist on the site. The drainage plan shall be in conformance with the El Dorado County Drainage Manual, as well as any additional requirements set forth the City of Folsom/El Dorado County drainage agreement described in Mitigation Measure 4.10.5a. ~~4.10.5c Prior to County approval, the County shall submit project drainage plans to the City of Folsom for review and comment.~~ 4.10.5d<u>c</u> If the drainage plan described in Mitigation Measure 4.10.5b identifies 100-year flood plain on the project site, project development shall not occur in those areas identified, unless flood protection improvements approved by the County are implemented.	

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Impact Number		Level of Significance Without Mitigation	Mitigation Measure		Level of Significance With Mitigation
4.10.6	Implementation of the proposed project would result in an increase in storm runoff flows in a northern drainageway that drains into Folsom Lake. An increase in flows could result in flooding of residential areas north of the project site.	PS	4.10.6	Implement the procedures outlined in Mitigation Measure 4.10.5b, specifically with regards to the northern drainageway.	LS
4.11 Cultural Resources					
4.11.1	The proposed project would result in the development of the open space and recreational areas in the location of the four archaeological resources.	LS	4.11.1	Since no significant impact was identified, no mitigation was required.	
4.11.2	Previously undiscovered historic or prehistoric archaeological resources could be encountered during project-related construction activities.	S	4.11.2	The project applicant shall implement the following measures to minimize potential impacts to undiscovered cultural resources: A. Prior to the approval of subsequent tentative subdivision maps for project development, the project applicant shall retain a qualified archaeologists to perform an archaeological survey for the tentative subdivision map area. The archaeological survey shall employ current field survey and record search methods and standards. Significant archaeological resources discovered shall be recorded and avoided and/or mitigated, pursuant to state and federal standards. The findings of the archaeological survey shall summarized in a report and submitted to the County prior to tentative subdivision map approval. B. In the event that any prehistoric or historic subsurface cultural resources are discovered during construction-related earthmoving activities, all work within 20 meters of the resources shall be halted and the project applicant shall consult with a qualified archaeologist to assess the significance of the find. If any find were determined to be significant by the qualified archaeologist, then representatives of the project applicant, El Dorado County, and the qualified archaeologist would meet to determine the appropriate course of action. If the discovery includes	LS

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		human remains, Section VIII of CEQA Guidelines Appendix K would be followed, requiring coordination with the Native American Heritage Commission if the human remains are of Native American origin. All significant cultural materials recovered would be subject to scientific analysis, professional museum curation, and a report prepared by the qualified archaeologist according to current professional standards.	
4.11.3 The proposed project would contribute to the population growth anticipated within the County. As stated in the County's General Plan EIR, this increase in population would increase the likelihood for persons to vandalize or desecrate the existing Mormon Island Relocated Cemetery.	CS	4.11.3 If the County establishes a program to provide fencing or other physical barriers around existing cemeteries to prohibit unlawful entry, the project applicant would contribute a pro-rata share to construct a fence or physical barrier around the existing Mormon Island Relocated Cemetery.	SU

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Impact Number	Level of Significance Without Mitigation	Mitigation Measure	Level of Significance With Mitigation
4.12 Public Services			
4.12.1 Implementation of the proposed project would result in an increased demand in fire and medical services. The proposed project would also increase the level of funding for these services via new development fees and property taxes. The El Dorado Hills Fire Department Ten Year Plan, which incorporates factors associated with growth, forecasts revenue surpluses while maintaining adequate service through the 2005/06 fiscal year.	LS	4.12.1 Since no significant impact was identified, no mitigation is required.	
4.12.2 The project site would increase demand for emergency water supply, storage, and conveyance facilities. The project site would be accessible to fire and emergency service vehicles and is located within the 8-minute fire and 10-minute medical emergency response zones for community regions.	LS	4.12.2 Since no significant impact was identified, no mitigation is required.	
4.12.3 Implementation of the proposed project would locate homes on steep terrain next to open space. Placing homes in this area could increase the potential for wildland fire hazards in the area. The steep terrain within Villages 4 through 8 could impede emergency access and/or response time to these areas.	S	4.12.3a Prior to approval of tentative subdivision maps and improvement plans, the project applicant shall submit project design plans to the El Dorado Hills Fire Department for review and approval to ensure that project site design meets Department standards. This would include, but is not limited to, providing at least two permanent access roads into the project site throughout project development. In addition, all project gates shall be designed to Department standards unless approved otherwise by the Department. All project roadways and access points shall be designed according to El Dorado Hills Fire Department and El Dorado County Department of Transportation standards to ensure adequate emergency access, in accordance with General Plan Policies 5.7.1.1, 5.7.4.1, 6.2.3.1, and 6.2.3.2. 4.12.3b Prior to subsequent tentative map approval for Villages 4 through 8, the project applicant shall prepare and submit a fuel modification plan to the El Dorado Hills Fire Department for review and approval. This plan shall include measures to reduce natural fire hazards, such as removal of overgrown vegetation near homes, and shall conform to Department and State standards.	LS

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Impact Number		Level of Significance Without Mitigation	Mitigation Measure		Level of Significance With Mitigation
4.12.4	Implementation of the proposed project would increase demand for law enforcement services.	LS	4.12.4	Since no significant impact was identified, no mitigation was required.	
4.12.5	Implementation of the proposed project would increase student enrollment in the local school districts beyond current capacity.	S	4.12.5	Prior to approval of the Specific Plan ~~tentative subdivision maps~~, Rescue Union School District, Buckeye Union School District, El Dorado Union High School District, and the project applicant shall enter into a formal agreement regarding mitigation of project impacts on school facilities. This agreement shall specifically identify mechanisms (i.e., payment of County-wide school impact fees and transfer of the elementary school site) to construct new school facilities, coordination of timing of new school facilities and build-out of the project site, and construction of the proposed elementary school site (if ultimately utilized by the Rescue Union School District).	LS
4.12.6	The proposed project would increase demand for parks and recreational facilities. The 13.6 acres of parkland included in the project and existing parkland in the El Dorado Hills Community Service District would provide an adequate amount of parkland for project residents.	LS	4.12.6	Since no significant impact was identified, no mitigation is required.	
4.12.7	The proposed project is generally consistent with the El Dorado County General Plan policies relevant to parks, recreation, and community services.	LS	4.12.7	Since no significant impact was identified, no mitigation was required.	
4.12.8	Implementation of the proposed project would be generally consistent with the El Dorado County Hiking and Equestrian Trails Master Plan.	LS	4.12.8	Since no significant impact was identified, no mitigation was required.	
4.12.9	Implementation of the proposed project would result in increased demand for library service. Residents in the El Dorado Hills area, including future project residents, are assessed up to $25 per family to provide library service.	LS	4.12.9	Since no significant impact was identified, no mitigation is required.	

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Impact Number	Level of Significance Without Mitigation	Mitigation Measure	Level of Significance With Mitigation
4.13 Utilities and Service Systems			
4.13.1 Implementation of the project would increase demand for water service in the EID service area.	CS	4.13.1a In accordance with EID Policy Statement No. 22, the project applicant shall prepare a Facility Plan Report (FPR) for the proposed project. The FPR shall address the expansion of the water and sewer facilities and the specific fire flow requirements for all phases of the project. 4.13.1b In accordance with General Plan Objective 4.5.1, water-efficient housing features, such as low-volume and low-flow plumbing fixtures, shall be installed to reduce water consumption. 4.13.1c Efficient irrigation systems shall be installed in common landscaped areas to minimize runoff and evaporation and maximize the water that will reach plant roots. One or any combination of the following methods of increasing irrigation efficiency shall be employed: drip irrigation, soil moisture sensors, and automatic irrigation systems. Mulch shall be used extensively in all common landscaped areas. Drought resistant and native vegetation shall be used in common landscape areas.	LS
4.13.2 Implementation of the proposed project would require the extension of the existing water distribution infrastructure to the project site. The proposed water system identifies the necessary on-site water distribution infrastructure.	LS	4.13.2 Since no significant impact was identified, no mitigation is required.	
4.13.3 Implementation of the proposed project would require the extension of wastewater infrastructure to the project site. Currently there are adequately sized off-site conveyance facilities to handle project wastewater flows.	LS	4.13.3 Since no significant impact was identified, no mitigation was required.	

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4.13.4	Implementation of the proposed project would generate additional wastewater flows that would be treated at the El Dorado Hills Wastewater Treatment Plant (EDHWTP).	LS	4.13.4	Since no significant impact was identified, no mitigation was required.	
4.13.5	Implementation of the proposed project would result in an increase in the amount of solid waste accepted by the Western El Dorado Recovery Systems ~~at the Union Mine Disposal Site~~.	LS	4.13.5	Since no significant impact was identified, no mitigation was required.	
4.13.6	Implementation of the proposed project would result in increased demand for electrical and natural gas service.	LS	4.13.6	Since no significant impact was identified, no mitigation is required.	
4.13.7	Implementation of the proposed project would result in increased residential, commercial, and industrial demand for telephone services in the El Dorado Hills area.	LS	4.13.7	Since no significant impact was identified, no mitigation was required.	
4.13.8	Development at the project site would result in increased demand for cable television service.	LS	4.13.8	Since no significant impact was identified, no mitigation was required.	
4.14 Public Health and Safety					
4.14.1	Implementation of the proposed project would not likely result in the exposure to contaminants on the project site.	LS	4.14.1	Since no significant impact was identified, no mitigation was required.	
4.14.2	The project could pose impacts related to the storage and use of hazardous chemicals.	LS	4.14.2	Since no significant impact was identified, no mitigation was required.	
4.14.3	Exposure to electric and magnetic fields generated by power lines in the transmission corridor on the project site would expose future project occupants to electromagnetic forces. While no definitive conclusions regarding potential health threats of EMF can be drawn on the basis of direct scientific measurements, recent published literature suggests strongly that this impact would be less than significant.	LS	4.14.3	Since no significant impact was identified, no mitigation was required.	

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CHAPTER 3.0

COMMENTS AND RESPONSES TO COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT REPORT

CHAPTER 3.0

COMMENTS AND RESPONSES TO COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT REPORT

3.1 INTRODUCTION

No new significant environmental issues, beyond those already covered in the Draft Environmental Impact Report (Draft EIR), were raised during the comment period, and El Dorado County, the lead agency, directed that a Final EIR be prepared. Comments received on the Draft EIR do not indicate new significant impacts or "significant new information" that would require recirculation of the Draft EIR pursuant CEQA Guidelines Section 15088.5.

3.2 LIST OF COMMENTORS

The following individuals and representatives of organizations and agencies submitted comments on the Draft EIR:

Code /a/	Individual or Signatory	Affiliation	Date Prepared
1	Brian K. Veerkamp, Assistant Chief	El Dorado Hills Fire Department	June 19, 1997
2	Scott Stewart, Deputy	El Dorado County Sheriff's Department	June 23, 1997
3	David C. Kraus	Resident	June 23, 1997
4	Sue Silver, President	El Dorado County Pioneer Cemeteries Commission	July 3, 1997
5	John E. Breslin	Resident	July 6, 1997
6	Mark Adams, Planning Engineer	Pacific Bell	July 7, 1997
7	Gary B. Bardini	Parkview Heights Coalition	July 9, 1997
8	James & Joan Barlow	Residents	July 15, 1997
9	Dave Spiegelberg	El Dorado County Department of Transportation	July 15, 1997
10	William M. Wright	Attorney representing the Buckeye Union Rescue Union, and El Dorado Union High School Districts	July 17, 1997
11	Eleanor Miller, Ruth Horner, and James Miller	Concerned Citizens Against Roadway Encroachment (C.A.R.E.)	July 21, 1997

Code /a/	Individual or Signatory	Affiliation	Date Prepared
12	John Sorenson, APAC Chairperson	El Dorado Hills Area Planning Advisory Committee	July 22, 1997
13	Mindy Jackson, Transit Director	El Dorado Transit	July 22, 1997
14	Joni Royal, Hilary Krogh, & Bobbie James	El Dorado Hills Townhouses Association	July 22, 1997
15	Kim Ryan & Robert L. Beegle	C.A.R.E.	July 22, 1997
16	Tim Crane	Resident	July 22, 1997
17	Richard & Victoria Salmeri	Residents	July 22, 1997
18	James Miller & Patty J. Mason	Residents	July 22, 1997
19	Nora Bertotti	Resident	July 22, 1997
20	Alice & William Norberg	Residents	July 22, 1997
21	Joanne Springer Murray	Resident	July 22, 1997
22	Bradley and Jennifer Nystrom	Residents	July 22, 1997
23	Gerald R. Ogden, Ph.D.	Resident	July 22, 1997
24	Gerald R. Ogden, Ph.D.	Resident	July 22, 1997
25	Gary B. Bardini, Civil Engineer	Parkview Heights Coalition	July 24, 1997
26	Jane Whitnack	Resident	July 24, 1997
27	Melinda Burns	Resident	July 28, 1997
28	John Gladish	Resident	July 28, 1997
29	John F. Burns	Resident	July 28, 1997
30	Antero A. Rivasplata, Chief	State of California, Governor's Office of Planning & Research, State Clearinghouse	July 28, 1997
31	Kevin & Mary Beth Herritt	Residents	July 29, 1997
32	Jerome Dover	Dover Construction, Inc.	July 29, 1997
33	Harriet B. Segel	Resident	July 29, 1997
34	Jeffrey Pulverman, Chief	Caltrans, District 3, Sacramento Area Office	July 29, 1997
35	Roseanne Chamberlain, Executive Officer	El Dorado Local Agency Formation Commission	July 29, 1997
36	Kirk Bone, Project Manager	Parker Development Company	July 30, 1997
37	Velma Gambles, Director of Special Projects	El Dorado Hills Community Services District	July 29, 1997
38	Lewis W. Archuletta, Support Services Planner	El Dorado Irrigation District	July 30, 1997
39	Bobbie North, Senior Administrative Analyst	El Dorado County General Services Department	July 30, 1997
40	Tad Thomas	Resident	July 30, 1997
41	Not Provided in Comment Letter	El Dorado County Taxpayers for Quality Growth	July 30, 1997

Code /a/	Individual or Signatory	Affiliation	Date Prepared
42	David J. Shield	Resident	July 30, 1997
43	James Miller	Resident	July 30, 1997
44	David Storer, Director	City of Folsom - Planning, Inspections, & Permitting	July 30, 1997
45	Linda Emerson	Dickenson, Peatman, & Fogarty	July 10, 1997
46	Dan Millington	Resident	July 30, 1997
47	Gail Furness de Pardo, Senior Planner	City of Folsom - Planning, Inspections, & Permitting	July 30, 1997
48	E.J. & B. Salata	Residents	July 22, 1997
49	Jack Stadler	Resident	July 22, 1997
50	Troy & Margaret Gandy	Residents	July 22, 1997
51	Bruce & Victoria Bockie	Residents	July 23, 1997
52	Varda Disho & family	Residents	July 22, 1997
53	R., Mary, and Lisa Worrall	Residents	July 22, 1997
54	Joyce Newby	Resident	July 22, 1997
55	Stanley W. Johnson	Resident	July 25, 1997
56	Mark Gottlieb	Resident	July 25, 1997

/a/ Commentor Number

3.3 COMMENTS AND RESPONSES TO COMMENTS

Written comments on the Draft EIR are reproduced on the following pages, as well as responses to those comments. To assist in referencing comments and responses, each commentor has been assigned a number, and each comment a corresponding number. Responses are coded to correspond to the codes used in the margin of the comment letters. Where changes to the Draft EIR text result from responding to comments, those changes are included in the response and demarcated with revision marks (underline for new text, strike-out for deleted text). Comments which present opinions about the project or which raise issues not directly related to the substance of the EIR are noted without response (in some cases, a response is also provided as it relates to issues discussed in the EIR).

Comment-initiated text revisions to the Draft EIR are also provided and are demarcated with revision marks in Section 4.0 of this document.

1

EL DORADO HILLS FIRE DEPARTMENT

990 LASSEN LANE, EL DORADO HILLS, CALIFORNIA 95762

TELEPHONE (916) 933-6623
FAX PHONE (916) 933-5983

June 19, 1997

97 JUN 23 AM 11:17
RECEIVED
PLANNING DEPARTMENT

Mr. Roger Trout
El Dorado County Planning Department
2850 Fairlane Court
Placerville, CA 95667

Re: Promontory Draft EIR

Dear Roger:

After reviewing the above reference project, the El Dorado Hills Fire Department makes the following comments:

The section on public safety and water effectively addresses wildland fire protection and water requirements, but does not address structural fire protection. Therefore, please add the following:

1. Require the payment of current fire protection development fee upon issuance of building permits.

2. Ensure two permanent access roads are available to the site during all phases of development. 1-1

3. Position fire hydrants per our standard.

4. Construct project roadways in conformance with County standards unless a design waiver is granted by the County.

5. If gates are to be utilized, they must be to our installation and operational requirements.

If you have any questions, please contact me or Chief Russell between the period of June 23rd to July 13th. Thank you.

Sincerely,

EL DORADO HILLS FIRE DEPARTMENT

B. K. Veerkamp

Brian K. Veerkamp
Assistant Chief

BKV:kc

1. BRIAN K. VEERKAMP, ASSISTANT CHIEF, EL DORADO HILLS FIRE DEPARTMENT

Response 1-1 As generally described on page 4.12-3 of the Draft EIR, the payment of current fire projection development fees is required as part of the building permit process, a ministerial process and, therefore, is not required to be a special condition of the project. Pages 4.12-4 and 4.12-23 of the Draft EIR identify that the project's water system would be required to meet the El Dorado Hills Fire Department standards for new development (including fire hydrant spacing), while Mitigation Measure 4.12.3a requires that all project roadways be designed to County standards.

The commentor's concerns regarding access roads and gating are addressed with the following text changes to the Draft EIR:

- Page 2-37 (Table 2-1, Mitigation Measure 4.12.3a), pages 4.12-23 and 4.12-24 (Mitigation Measure 4.12.3a), the text of Mitigation Measure 4.12.3a is revised to read:

  "4.12.3a Prior to approval of tentative subdivision maps and improvement plans, the project applicant shall submit project design plans to the El Dorado Hills Fire Department for review and approval to ensure that project site design meets Department standards. <u>This would include, but is not limited to, providing at least two permanent access roads into the project site throughout project development. In addition, all project gates shall be designed to Department standards unless approved otherwise by the Department.</u> All project roadways and access points shall be designed according to El Dorado Hills Fire Department and El Dorado County Department of Transportation standards to ensure adequate emergency access in accordance with General Plan Policies 5.7.1.1, 5.7.4.1, 6.2.3.1, and 6.2.3.2."

As described on page 4.12-1 of the Draft EIR, the average response time to emergency incidents is five minutes or less from Station One and Station Two to the western portion of the El Dorado Hills Fire Department's Service Area. Response times to the project site are anticipated to be within the eight minute response time identified in Policy 5.1.2.2 of the El Dorado County General Plan (Veerkamp, 1997).

2

EL DORA O COUNTY SHERIFF'S DEP RTMENT
INTER-OFFICE MEMO
OFFICE OF EMERGENCY SERVICES

TO: Planning Department DATE: 6-23-97

FROM: Deputy Scott Stewart SUBJECT: Russell Ranch Ltd. SP94-03.

This application represents subdividing 999 acres into 1,387 residential lots and will increase the population of El Dorado County by approximately 5,548.

An increase in the population is a concern to the Sheriff's Department due to the impact it places on the department to provide adequate law enforcement protection with existing personnel. In order for the Sheriff's Department to provide adequate law enforcement protection and mitigate the adverse impact that an increase in population has on providing services, and appropriate number of sworn personnel needs to be maintained. 2-1

A desirable ratio of sworn personnel is 1.8 deputies per 1,000 population. Based upon this desirable ratio, to mitigate the impact of the increase population that this application will create, the Sheriff's Department needs to increase its sworn personnel by 9.98. Associated cost will be approximately $599,184.00.

C: Sheriff Barker

2. SCOTT STEWART, DEPUTY, EL DORADO COUNTY SHERIFF'S DEPARTMENT

Response 2-1 The commentor estimates that the proposed project will result in a population increase of approximately 5,548. However, subsequent discussions with the El Dorado County Sheriff's Department have clarified that the commentor's estimate is too high and that the number of additional residents resulting from the project should be approximately 4,000 as stated in the Draft EIR (Whealton, 1997).

The commentor is correct that the recommended goal for the number of sworn officers per 1,000 people is 1.8 and not 1.0 as indicated in the Draft EIR. Accordingly, the Sheriff's Department would need to increase its sworn personnel by 7 officers. The associated annual cost per officer would be $56,435 (salary and benefits), requiring approximately $395,045 per year (Whealton, 1997).

The proposed project would provide for adequate law enforcement protection as indicated under Impact 4.12.4 on page 4.12-24 of the Draft EIR. The Promontory Specific Plan Fiscal Impact Study (prepared by Economic & Planning Systems) identified that revenues generated by the project site would exceed County general service expenditures (including sheriff protection) by $249,142. Thus, funding from revenues generated by the project would be adequate to address the need for additional law enforcement services for the project site.

The following text changes are made to the Draft EIR to reflect the above information:

- Page 4.12-5, first paragraph, the second sentence is revised to read:

  "The current ratio of sworn officers to County residents is 0.9 per 1,000, which is ~~slightly~~ lower than the Department's goal of ~~1~~ 1.8 sworn officers to 1,000 residents."

- Page 4.12-24, first paragraph under Impact 4.12.4:

  "Implementation of the proposed project, at full buildout, would result in a population increase of almost 4,000 residents. Thus, development of the project site would result in an increased demand for law enforcement services from the County. ~~In order to maintain the existing level of service in the County and provide adequate service to the project, four additional deputies would be required. This number would maintain the current goal of one sworn deputy per 1,000 residents.~~"

Response times to the project site are anticipated to be within the eight minute response time identified in Policy 5.1.2.2 of the El Dorado County General Plan.

3

El Dorado County Planning Dept
2850 Fairland Court
Placerville, CA 95667

97 JUN 24 AM 11:25
RECEIVED
PLANNING DEPARTMENT

June 23, 1997

RE: Promontory Project

In the last several months, I have received notices from both you and the developer regarding the Promontory Project. My home is located just below the planned development on the eastern side of the slope.

First, we will mourn the loss of such beautiful wild property which frames the view from our backyard. It seems the goal of development in this part of the county is to turn as much of the land as possible into concrete. Sad to see. 3-1

Being realists, however, we recognize this development is going forward. Now it's time to attend to the details that concern us — specifically, water runoff.

Water intrusion, both surface and below ground, has been an on-going problem to those of us with homes on this side of the slope. The developer has assured us in his communications that *there will be no additional runoff as a result of the Promontory Project*. From those assurances, I assume the plan specifies a storm drain, etc. to divert the water runoff into the storm system. 3-2

At your earliest convenience, please advise what provisions AKT Development and Palisades Properties, Inc. have made to handle the increased water runoff. I would appreciate a copy of the plan or detail map ~~that~~ for third-party engineering review. Please also include the name and title of the person in your office responsible for the project. 3-3

This subject is of critical importance to those of us living below the development. You need to take the proper actions now which will negate the need for unpleasant legal actions later.

On behalf of all of us living on Shelby Circle, we ask for your cooperation.

Sincerely,

David C. Kraus, Colonel, USAF (Ret)
1985 Shelby Circle
El Dorado Hills, CA 95762
(916) 933-4378

3. DAVID C. KRAUS, RESIDENT

Response 3-1 See Response to Comment 11-4. In addition, as described in the Draft EIR (Chapter 3.0, Project Description, Section 4.3, Aesthetics), the proposed project will incorporate natural features of the project site (e.g., designation of major on-site waterways as public open space).

Response 3-2 A tentative subdivision map application has already been submitted to the County for the commentor's area of concern (Village 6 tentative map). Included with the submittal was a preliminary analysis of the drainage requirements for that area. That analysis reveals that lots on Shelby and Albert Circles are currently being impacted by storm runoff. This condition has arisen because the developer(s) of those lots did not install a drainage swale at the rear of the lots to collect the existing drainage from The Promontory site. The developer(s) did, however, provide drainage pipes (with easements) in two locations extending from Shelby and Albert Circles to the edge of The Promontory site.

As part of The Promontory's development, the runoff from Village 6 would be collected via a drainage swale at the rear of the Village 6 lots. This swale would be lined with a netting-type material on which grass would be grown, thereby providing water quality enhancement. The swale would meander so as to take into consideration existing natural features, such as trees and rock outcroppings. The swale would convey the runoff to the existing drainage pipes stubbed to The Promontory site, where it would be carried to the existing drainage pipes under the streets of Albert and Shelby Circles. The Village 6 drainage improvements would thus address both future storm water runoff associated with the proposed development and the existing drainage problem in the area.

Response 3-3 See Response to Comment 3-2.

PRESERVE
PROTECT
RESTORE

4

"Many have filled unknown graves, far from home and kindred, with no kind friends to drop a tear or plant a sprig over their unmarked graves..."
Pioneer Days in California; John Carr (1891)

97 JUL 11 P1 2:54

PLANNING DEPARTMENT

July 3, 1997

Roger Trout, Project Planner
El Dorado County Planning Department
2850 Fairlane Court
Placerville, CA 95667

Re: Application # SP94-03 (The Promontory)

Dear Mr. Trout:

Thank you for the opportunity to comment on the possible adverse effects of the above referenced project.

From the map in Figure 3 (page 2-5), it appears that the northwest corner of the subdivision will abut the Mormon Island Relocated Cemetery at the southeast corner of the grounds. This cemetery, the site of fourteen relocated historic graveyard remains, monuments and tombstones, is especially sensitive to increased population, traffic and other activities which are associated with growth and development in a previously rural location. With the future inclusion of the Prairie City Cemetery remains which were recently removed by Caltrans along Highway 50, this cemetery will represent a total of fifteen pioneer cemeteries already affected by progress and growth. 4-1

Figure 2 (page 2-4) clearly shows a planned golf course which will affect the southern boundary of the cemetery and will increase potential adverse impacts to the grounds. As we submitted to the planning department in reference to the proposed Sunridge Golf Course at Latrobe, which abutted the Latrobe Cemetery, the potential for damage to historic tombstones and monuments by golf balls is considered significant. (Please see Peter Maurer for a copy of these comments.) 4-2

EDC-PCC has been in contact with the General Services Department regarding these and other concerns. Without adequate protection, we are concerned about the effects and potential for vandalism and breakage resultant from the subdivision and golf course's proximity to the boundary of this cemetery. 4-3

As we recently noted in our response to Application # TM97-1330 (Silver Springs), the California Health and Safety Code governs cemeteries and their protection. Those requirements must be addressed. A 1961 California appellate court ruling has stated: "Public policy of [the] state is to protect and preserve burial grounds against interference, molestation or desecration."

EL DORADO COUNTY
PIONEER CEMETERIES COMMISSION
2551 Deer Trail Lane
Placerville, CA 95682

Telephone: (916) 677-8525
or (916) 676-1420
Fax: (916) 676-5924

As a subdivision of the state, El Dorado County must provide these protections. Therefore, we recommend that our concerns regarding the potential for significant adverse impacts be addressed through the planning process by conditioning the approval of this subdivision and requiring that methods of adequate protection be addressed by the developer.

4-3 CONT.

Specifically, we would recommend the following:

1. Substantial improvements to fencing to inhibit unwarranted access to the cemetery from the affected boundaries.

2. Landscaping improvements to retain the cemetery's sense of time and place and to provide a visual buffer to the subdivision for those who might visit the cemetery. Though this cemetery was relocated in 1954, at that time the grounds were established in an entirely rural location. This sense of place should be retained.

3. Placement of protective netting be used in conjunction with landscaping along boundaries subject to potential hazards from golf balls and golfing related incidents. (Our fears are not of the golfers, themselves, but of the potential for flying golf balls and the impact associated with the damage which will result from the velocity of these objects.)

El Dorado County is the responsible authority for these grounds. We understand that the General Services Department will also be offering comment on this project.

Again, thank you for the opportunity to provide our comments. Should you have any questions, please contact me at (916) 6767-1420.

Sincerely,

SUE SILVER, President

cc: George C. Cuttrell, Director of General Services
Honorable Sam Bradley, District 1 Supervisor

4. SUE SILVER, PRESIDENT, EL DORADO COUNTY PIONEER CEMETERIES COMMISSION

Response 4-1 As shown on page 3-8, Figure 3-3, of the Draft EIR, the Mormon Island Relocated Cemetery consists of a parcel which is bisected by the Sacramento/El Dorado County line adjacent to the northwest portion of the project site. A small portion of the cemetery abuts Village 1 of the proposed project. No direct access is proposed between the project site and the Shadowfax neighborhood where the cemetery is located. Potential project impacts to the Mormon Island Relocated Cemetery are discussed on page 4.11-5 of the Draft EIR.

Response 4-2 As indicated in Chapter 3.0, Project Description, of the Draft EIR, the proposed project does not include a golf course. Proposed land uses adjacent to the Mormon Island Relocated Cemetery consist solely of residential uses. Figure 4.2-1 on page 4.2-2 of the Draft EIR does show that a golf course is planned for the Russell Ranch Specific Plan Area in the City of Folsom (Sacramento County). Therefore, concerns regarding adverse impacts from the planned golf course on the cemetery should be directed to the City of Folsom.

Response 4-3 Page 4.11-5, Impact 4.11.3, of the Draft EIR identifies that the project's contribution to population adjacent to the Mormon Island Cemetery would increase the likelihood of vandalism and desecration of the cemetery. Although the proposed project would not provide direct access to the cemetery, Mitigation Measure 4.11.3 would nevertheless require the project applicant to contribute a pro-rata share to a County program established to protect existing cemeteries, should the fee be established. However, because of the uncertainty of the County establishing the cemetery program, this impact was considered significant and unavoidable. Concerns regarding adverse impacts from the planned golf course on the cemetery should be directed to the City of Folsom.

The following changes are made to the text of the Draft EIR to clarify Mitigation Measure 4.11.3.

- Page 4.11-5 (Mitigation Measure 4.11.3), the first sentence after Mitigation Measure 4.11.3 is revised to read:

  "Implementation of this mitigation measure would minimize impacts to the Mormon Island Relocated Cemetery and is considered feasible mitigation. However, because of the uncertainty of the County establishing the cemetery program, this impact was considered significant and

unavoidable.~~is not considered feasible since the County has not established such a funding program.~~"

- Page 6-24 (Mitigation Measure 4.11.3), the paragraph after Mitigation Measure 4.11.3 is revised to read:

  "Implementation of this mitigation measure would minimize impacts to the Mormon Island Relocated Cemetery and is considered feasible mitigation. However, because of the uncertainty of the County establishing the cemetery program, this impact was considered significant and unavoidable.~~Implementation of this mitigation measure is not considered feasible since the County has not established such a funding program. Therefore, this impact would remain significant and unavoidable.~~"

5

El Dorado County Planning Department
2850 Fairlane Court
Placerville, Ca. 95667
Attn: Roger Trout, Senior Planner

July 6, 1997

97 JUL -8 AM 9:55
PLANNING DEPARTMENT

Dear Mr. Trout,

I am in receipt of the Notice of Completion of a Draft Environmental Impact Report for the Promontory Project. We reside at 2220 Tabari Court and have done so for the past six years. This property adjoins the proposed Promontory Project.

I wish to take this opportunity to express a serious concern my family and I have relative to this project. Our home presently has a wonderful view of Folsom Lake. My wife spends a good amount of time each morning in our library doing her work and enjoying this wonderful view. This vista is in fact the principal reason we purchased the home. Three years ago we purchased the adjacent lot to our residence in order to maintain our valley view from the south side of our home. We did this because the then property owner was about to construct a two story house fifteen feet in front from our kitchen picture window which would have completely blocked the view. Because the owner insisted on selling the property for nothing less than what he paid for it, we were forced to purchase this property at well above the market value at $110,000. This represented an expenditure from which we will probably never recover. We are reminded of this fact with each monthly mortgage payment on this vacant lot. I am telling you this only to illistrate how important the views issue is to us and to the property value of our home. The loss of the lake view would have an even greater negative impact on the value of our residence and the quality of life we currently enjoy. 5-1

I fully understand that development is fact of life in the beautiful El Dorado Hills area. Those of us who presently enjoy the benefits of residing here would not have been able to do so without development. It seems however, that development can take place in such a way as to not cause irreparable harm to the current residants adjacant to this project. There are very few homes that currently have the Folsom Lake view in our neighborhood. Because of this limited number of properties, it would seem that providing a green belt in this restricted area that would protect these views would be a reasonable accomodation on the part of this project.

Thank you for your consideration of this issue. I look forward to future communications and developments.

Sincerely,

John E Breslin

John E. Breslin

2 TABARI CT.
95682

5. JOHN E. BRESLIN, RESIDENT

Response 5-1 As described in Response to Comment 45-4, the revised Promontory Specific Plan would include development standards that would require staggered residential loting patterns and large lots (30,000 square feet minimum lot size) adjacent to existing residential areas. This would minimize potential impacts to the private views of existing residents adjacent to the project site. In addition, as identified in the Promontory Specific Plan, building heights would be restricted in Village 6 to 45 feet. The commentor is referred to Response to Comment 45-4 for a complete description of the development standards.

It should be noted that the Draft EIR did evaluate project alternatives which would provide open space areas to improve the rural landscape characteristics of the project site. However, the eastern portion of Village 6 was identified as an appropriate area to develop because of this area's gentle slopes.

6

PACIFIC BELL
A Pacific Telesis Company

July 7, 1997

97 JUL 11 PM 2:59
RECEIVED
PLANNING DEPARTMENT

Robert Trout, Project Planner
El Dorado County Planning Department
2850 Fairlane Court
Placerville, CA 95667

RE: SP94-03, The Promontory Specific Plan

Dear Mr. Trout:

The single point of contact for this project and others in the El Dorado Hills Area will be myself. I have attached a business card for your reference. Please feel free to contact me.

Regarding the Promontory Specific Plan, Page 3-17, Figure 9, Russell Ranch Boulevard, and Page 3-24, Figure.21, Valley Two Way, both of those typicals **do not** include a 12.5 foot PUE. A PUE on both sides of each road is a requirement. 6-1

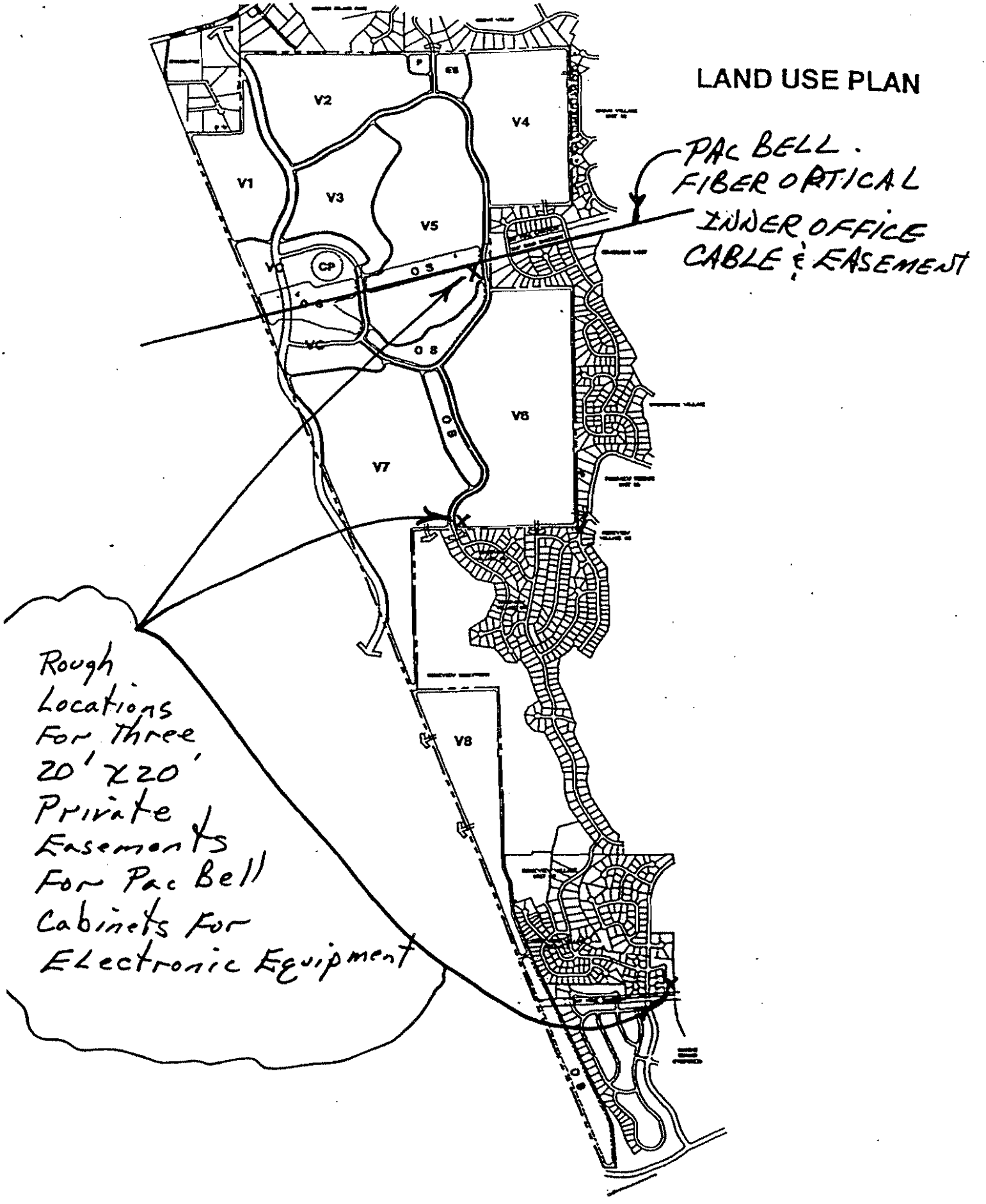
Pacific Bell will also need (3) three, 20x20 foot private easements to locate cabinets to house electronic equipment. Attached is a map that roughly depicts these three locations. The locations marked on the map is a guide, the actual locations can be selected by the developer. However certain objectives must be kept in mind: 6-2

- Safe parking for Pacific Bell vans, so as not to affect the flow of traffic.
- Easement must attach to PUE, to allow conduits in and out of easement.
- Site must have commercial electric service from the power company.
- Site must be free from flooding hazard.

Pacific Bell desires the developer be made fully aware of the fiber optical inner office cable and easement that is located on the south side of the High Voltage Power Lines. This location has been noted on the attached map. This is a very important link for Pacific Bell and the people of El Dorado County. A cut or damaged cable must not occur. 6-3

Regards,

Mark Adams
Planning Engineer


LAND USE PLAN
PAC BELL.
FIBER ORTICAL
INNER OFFICE
CABLE & EASEMENT
V1
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Rough
Locations
For three
20' X 20'
Private
Easements
For Pac Bell
Cabinets for
Electronic Equipment

6. MARK ADAMS, PLANNING ENGINEER, PACIFIC BELL

Response 6-1 The following text changes are made to the Draft EIR:

- Page 4.13-21, last paragraph under Impact 4.13.7, the following sentence is added after the second sentence:

  "The project site would be connected with infrastructure in the surrounding subdivisions (Willard, 1996). A 12.5 public utility easement will generally be provided on both sides of each project roadway. Pacific Bell would..."

Response 6-2 The following text changes are made to the Draft EIR:

- Page 4.13-21, last paragraph under Impact 4.13.7, the following sentence is added after the fourth sentence:

  "Pacific Bell would install the necessary main line facilities that would be required to serve the site at buildout of the proposed project. Pacific Bell has indicated that three 20 by 20 foot private easements will be needed to house necessary electronic equipment per Pacific Bell's standards (Adams, 1997). Pacific Bell shall be ..."

Response 6-3 The following text changes are made to the Draft EIR:

- Page 4.13-7, first paragraph under Telephone, the following sentence is added to the end of the paragraph:

  "Pacific Bell currently has a fiber optical inner office cable and easement on the project site located within the southern portion of the transmission lines bisecting the northern portion of the site."

Please copy to PC. Zoys Trans Doug 7/11/97 DB

7

July 9, 1997

RECEIVED AT MEETING:

DATE: 7/10/97

By Kim Peters

Mr. Doug Noble, Chairman
El Dorado County Planning Commission
2850 Fairlane Court
Placerville, CA 95667

Subject: **Promontory Project Traffic Impacts on Parkview Heights Neighborhood**

Dear Mr. Noble:

A Draft Environmental Impact Report (EIR) for the proposed Promontory Project is currently being circulated by the El Dorado County Planning Department. The EIR reflects a significant traffic increase of about four (4) times the existing levels on Ridgeview Drive near Gillett Drive. This will exacerbate the existing unsafe conditions for neighborhood residences on Ridgeview Drive from Gillett Drive through Governors Drive due to excessive vehicle speeds generated by extreme street grades (15%). Inadequate sight distances at Moonstone and neighborhood driveways located along or near a tight horizontal curve on Ridgeview Drive, poor sight distances on a crest vertical curve near Gillett Drive on Ridgeview Drive, no sidewalks and no traffic enforcement add to the health and safely hazards to neighborhood residences. 7-1

A coalition of area residents in the Parkview Heights neighborhood have concerns over the traffic impacts on Ridgeview Drive between Gillett Drive and Governors Drive and seek proper traffic mitigation on Ridgeview Drive. This coalition of Parkview Heights neighbors plan to submit formal written comments on the EIR following the Planning Commission meeting.

Attached is a draft summary and review of the Promontory EIR along with some recommended mitigation measures from the Parkview Heights Neighborhood Coalition. If you have any questions regarding the Promontory EIR analysis or the neighborhood coalition, please call Gary Bardini at (916) 933-1951 or Kim Peters at (916) 933-6426.

Sincerely,

Gary B. Bardini, P.E.
Parkview Heights Coalition

Attachments

Preliminary Review and Comments of the Promontory Draft EIR on Parkview Heights and Neighboring Area Traffic Impacts

Background

The Promontory Specific Plan is over a 999-acre area located north of U.S. Highway 50 and south of Green Valley Road, adjacent to and east of the El Dorado/Sacramento line in the unincorporated area of El Dorado County. The project proposes to develop a maximum of 1,387 dwelling units with park sites, open space, and a village center which includes commercial land uses and multi-family units. The Draft EIR for the Promontory Specific Plan discloses potential significant impacts that may result from the project, including impacts to : 1) Transportation and Circulation, 2) Aesthetics, 3) Noise, 4) Air Quality, 5) Biological Resources and 6) Cultural Resources.

7-2

Parkview Heights and Neighboring Area Traffic Impacts

A number of local two-lane residential streets will provide direct access to the proposed project, which include Gillett Drive, Ridgeview Drive, and Hensley Circle to Warren Lane. Major roads that will be used by the project traffic include U.S Highway 50, El Dorado Hills Blvd, Latrobe Road, Green Valley Road, Francisco Drive, Governor Drive, Olson Lane, Wilson Blvd, East Natomas Street and Blue Ravine Road. Several new streets will be constructed, the most significant is Russell Ranch Boulevard in Folsom connecting East Natomas to U.S. Highway 50.

7-3

- Traffic Study Scenarios. The EIR provides daily and peak-hour traffic volumes for key roads in the study area under four specific conditions. The four conditions or traffic scenarios analyzed by the consultant Fehr & Peer Associates are summarized below:

  - ◊ Existing Condition - 1997 traffic condition without Promontory Project
  - ◊ Existing Plus Project - Complete development of Promontory Project under 1997 conditions
  - ◊ Cumulative Condition - 2015 proposed circulation system under the El Dorado County General Plan without Promontory Project
  - ◊ Cumulative Plus Project - Complete development of Promontory Project under 2015 conditions

  The proposed circulation system for the year 2015 used the Cumulative Conditions Scenarios contain the planned widening of existing roads or the construction of new roads listed below:

  - ◊ Widening El Dorado Hills Blvd at several locations
  - ◊ Widening Francisco Drive between El Dorado Hills Blvd and Green Valley Road
  - ◊ Widening Green Valley Road
  - ◊ Extending Saratoga Way to Folsom
  - ◊ Reconstructing the El Dorado Hills Blvd. interchange with U.S. Highway 50
  - ◊ Widening U.S. 50 to eight lanes
  - ◊ New Russell Ranch Blvd Connecting U.S. Highway 50 to East Natomas

- Average Daily Traffic. The EIR provides average daily traffic (ADT) for the four traffic scenarios for key roads in the study area, including Ridgeview Drive at Gillett Drive, Gillett Drive at Olson Lane, Olson Lane at El Dorado Hill Blvd, Warren Lane at Governors Drive, and Governors Drive at El Dorado Hills Blvd (Exhibit A). Results of the ADT traffic volumes for the four traffic scenarios from existing traffic counts and traffic modeling in the Park View Heights area are summarized below:

Table 1 - Summary Average Daily Traffic (ADT) in Parkview Heights Area

Location	Existing Conditions	Existing Plus Project	Cumulative No Project	Cumulative Plus Project
Ridgeview @ Gillett	1,130	3,600	1,200	2,690
Gillett @ Olson	560	3,960	600	2,700
Olson @ El Dorado Hills Blvd	1,550	4,950	1,800	3,900
Warren Ln. @ Governors Drive	800	3,640	900	2,960
Governors @ El Dorado Hills	3,300	6,140	3,600	5,660

- Peak Hour Traffic Volumes. The EIR measures peak hour traffic volumes for the four traffic scenarios at several existing major intersection along U.S. Highway 50, El Dorado Hill Blvd (including El Dorado Hills Blvd/Olson Lane and El Dorado Hills Blvd/Governor Drive), Green Valley Road and Blue Ravine, and new intersections at Russell Ranch Blvd/U.S. Highway 50, Blue Ravine Road/East Natomas Street, and El Dorado Hills Blvd/new collector street near Crown Village. The analysis procedures for these intersection rely on qualitative levels of service (LOS) to describe operation performance. Service levels vary from "A" (the best) to "F" (the worst). Results of the peak traffic volumes for the four traffic scenarios from existing traffic counts and traffic modeling in key El Dorado Hills locations are summarized below:

Table 2 - Summary A.M. and P.M. Peak Hour Intersection and Ramp Junction Levels of Service

Location	Existing Condition		Existing Plus Project		Cumulative No Project		Cumulative Plus Project	
	AM	PM	AM	PM	AM	PM	AM	PM
El Dorado Hills Blvd/Olson	A	A	A	B	F	F	F	F***
El Dorado Hills Blvd/Governors	B	B	B	B	B	B	B	C
El Dorado Hills Blvd/U.S. 50	F	F	F	F**	B	B	B	B
Green Valley/Francisco	E	F	E	F*	E	D	E	E
Russell Ranch Blvd/U.S. 50	N/A	N/A	N/A	N/A	B	B	B	B
Blue Ravine/East Natomas	D	E	F	F*	D	E	D	F

7-4

* Level "B" After Proposed Mitigation (Street Widening)
** Level "D" After Proposed Mitigation (New Interchange)
*** Level "B" After Proposed Mitigation (Traffic Light)

- Impacts/Mitigation Measures. According to the results of the EIR several locations are projected to operate at levels worse than considered acceptable by the significance criteria under the two Project scenarios at 1997 and 2015 level of roadway conditions. The impacts and mitigation measures identified in the EIR for traffic in the Parkview Heights area are summarized below:

  ◊ *Olson Lane and Ridgeview Drive.* The proposed project will increase traffic volumes in excess of 4,000 per day on sections of Olson Lane and Ridgeview Drive under the Exist with Project Scenario and almost exceeds 4,000 per day in the Cumulative with Project Scenario. The proposed mitigation is during the review of tentative maps for each phase of the Promontory Specific Plan, a traffic study shall be performed to determine the amount of project traffic that will be added to the local streets in El Dorado Hills. If any local streets experience a total daily volume in excess of 4,000, then the tentative map for that phase shall not be approved unless traffic circulation measures are implemented. 7-5

  ◊ *El Dorado Hills Blvd/Olson Lane Intersection.* The proposed project will increase traffic volumes at the El Dorado Hills Blvd/Olson Lane intersection resulting in the exacerbation of LOS "F" during both peak hours under both Project Scenarios. The proposed mitigation is to install a traffic signal at the El Dorado Hills Blvd/Olson Lane intersection and construct exclusive left and right-turn lane on the Olson Lane approach. El Dorado County DOT will determine the cost of signalization and turn lane improvements and determine the fair-share cost of the project applicant.

EIR Comments on Parkview Heights and Neighboring Area Traffic Impacts

The EIR is willfully inadequate and fatally flawed in several areas with regards to traffic circulation in the Parkview Heights and neighboring areas. The EIR does not address the following traffic considerations.

- Physical Road Limitations. The EIR does not consider physical characteristics of existing local residential street to support significant increase in traffic volume, such as existing widths, road grades and stopping sight distances of existing streets. Many streets are not suitable for large volumes of traffic at 4,000 ADT due to physical limitations of the streets. 7-6

  Ridgeview Drive from Gillett Drive through Governors Drive already represents a health and safety risk to area residents due to excessive vehicle speeds generated by extreme street grades (15%), which is the maximum grade for a boat launch ramp with concrete "V" grooves. Additional traffic from Promontory through Ridgeview Drive will exacerbate the problem. El Dorado County's own "Design and Improvement Standards Manual" (County Design Manual), adopted May 27, 1986 states on Standard Plan 101B (Exhibit B) that 15% grades for 36-foot wide streets is maximum grade allowed and requires County Engineer approval. Standard Plan 101B also states that 2,000 ADT is the maximum ADT allowed on the street. 7-7

  Inadequate sight distances exist at the Moonstone Circle/Ridgeview Drive intersection and neighborhood driveways located along or near a tight horizontal curve (250 feet) on Ridgeview Drive near Moonstone Circle. A 250-foot horizontal curve is the minimum horizontal street radius for 25 miles/hour as defined in the CALTRANS Highway Design Manual. The existing sight distance at the Moonstone Circle/Ridgeview Drive intersection is less than 150 feet and many residential driveways are less than 100 feet near the 250 foot horizontal curve with a 15% grade. The El Dorado County Design Manual states on Standard Plan 103D for local access road to collector and Standard Plan 7-8

103A-1 (Exhibit C) for single unit residence with rolled curb and gutter that the minimum sight distance is 200 feet. 7-8 CONT.

The poor sight distances on a crest vertical curve (180 feet) near Gillette Drive on Ridgeview Drive, which is the minimum sight distance on a crest vertical curve for 25 mile/hour as defined in the CALTRANS Highway Design Manual along with no sidewalks and no traffic enforcement add to the traffic health and safely risks to neighborhood residences. 7-9

- Local Residential Traffic Patterns. The EIR does not address or consider any increase traffic volumes on Ridgeview Drive between Gillett Drive and Governors Drive. The existing condition traffic study in the EIR clearly reflects that 50% of the current traffic at the Gillett Drive/Ridgeview Drive intersection utilize Ridgeview Drive over Gillett Drive. However, the Existing with Project and Cumulative with Project scenarios reflect all additional traffic volume on Gillett Drive. The EIR gives no explanation on specific traffic patterns utilizing existing residential streets and no consideration for additional traffic along Ridgeview Drive between Gillett Drive and Governors Drive. 7-10

- Through Traffic Considerations. The EIR reflects some increase in traffic volumes on local residential streets associated with additional traffic created from connecting El Dorado Hills local streets with the City of Folsom and U.S. 50 at several locations. The additional traffic volume due to through traffic considerations is estimated at about 20% according to planning staff for Promontory project. With level "D" through "F" conditions occurs on existing El Dorado Hill streets in every Project scenario, several residential streets will become the preferred traffic pattern for existing and future vehicle traffic and is under estimated in the EIR. 7-11

- 4,000 ADT Plus Traffic Circulation Measures not Addressed in Mitigation. The EIR identifies that Olson Lane and Ridgeview Drive will exceed 4,000 ADT and states that traffic circulation measures will be implemented if any local streets experience a total daily volume in excess 4,000 ADT. These traffic circulation measures have not been identified in the EIR and represent additional local street impacts. The Olson Lane traffic circulation measures could result in even greater total average daily volumes for Ridgeview Drive between Gillett Drive and Governors Drive in an effort to direct traffic to Governors Drive and away from Olson Lane. 7-12

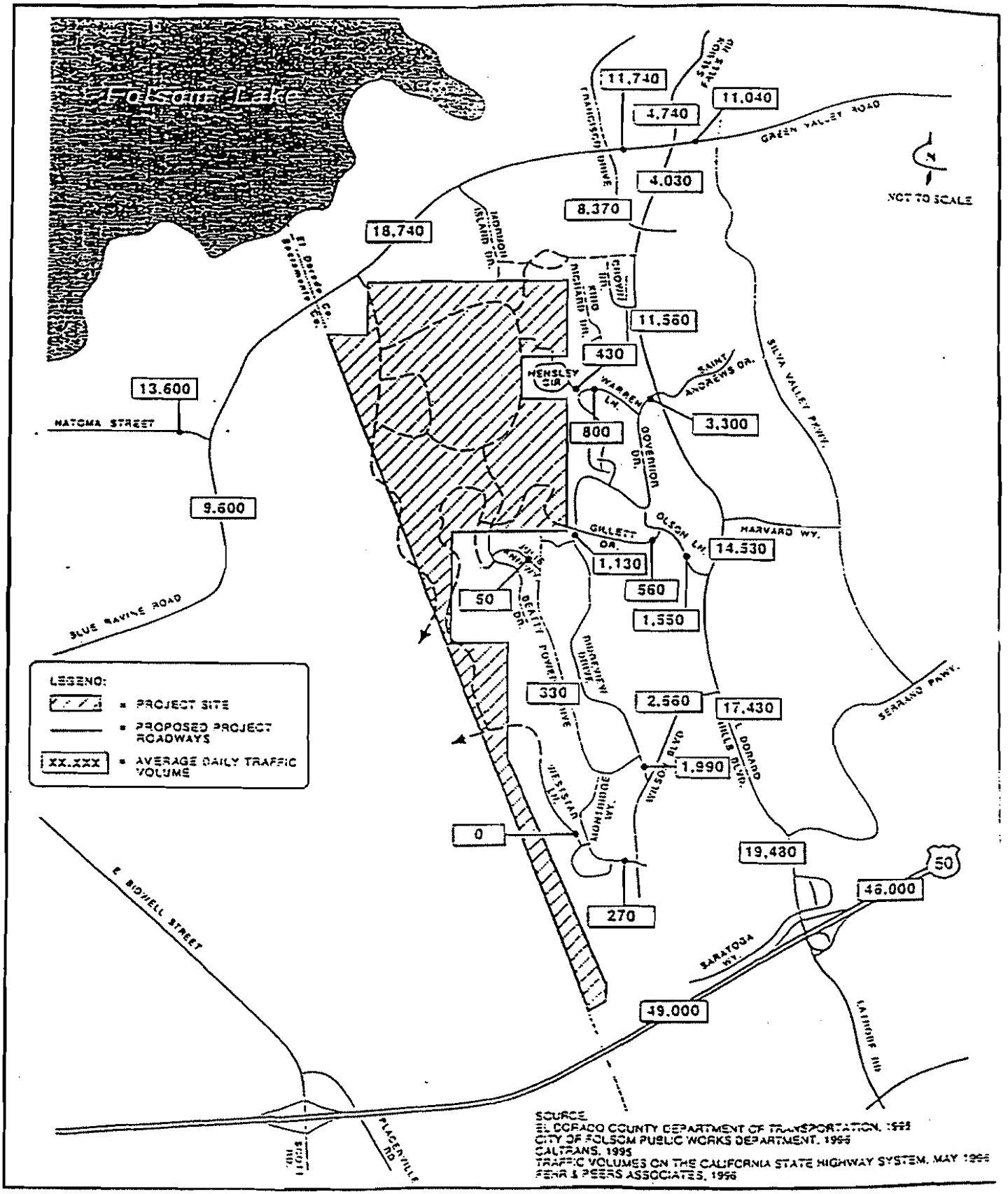
The physical characteristics of Ridgeview Drive between Gillett Drive and Governors Drive along with a depiction of the anticipate traffic patterns with the proposed connection of El Dorado Hills to the City of Folsom is shown in Exhibit D.

Proposed Mitigation Measures

- Traffic Barrier. Due to the health and safety concerns of additional traffic on Ridgeview Drive, it is recommended that the project applicant or the County of El Dorado construct a barrier near the Ridgeview Drive/Gillett Drive intersection to prevent private vehicle access on Ridgeview Drive between Gillette Drive and Moonstone Ct. This barrier shall be passable by emergency vehicles only, if required by the El Dorado Hills Fire Department, similar to the barrier proposed in the EIR for Mormon Island Drive. The specific barrier design shall be determined by the El Dorado County DOT and El Dorado Hills Fire Department. 7-13

- Speed Humps/Sidewalks. A less effective mitigation measure is the installation of sidewalks for area residents and the installation of Speed Humps currently being used in many Counties. Speed Humps (Exhibit E) are designed by their very nature to be annoyances to vehicles and in particular are designed to target excessively speeding

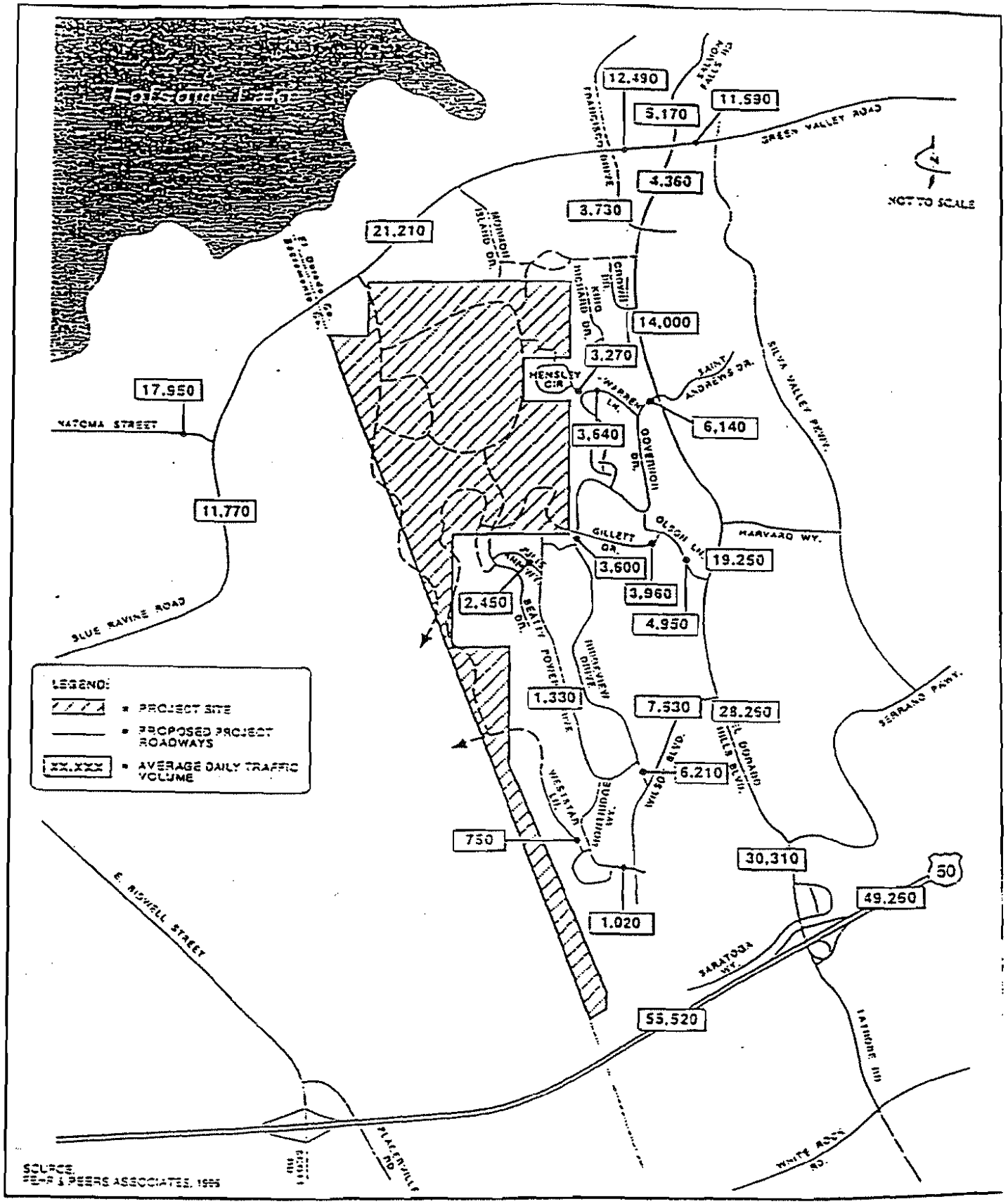
vehicles. They are radically different but very similar, in results, to the Speed Bumps which are commonly found in private parking lots. 7-13 CONT.



The Promontory Specific Plan/95010

SOURCE: Fehr & Peer Associates

Figure 4.5-
Existing Average Daily Traffic Volum

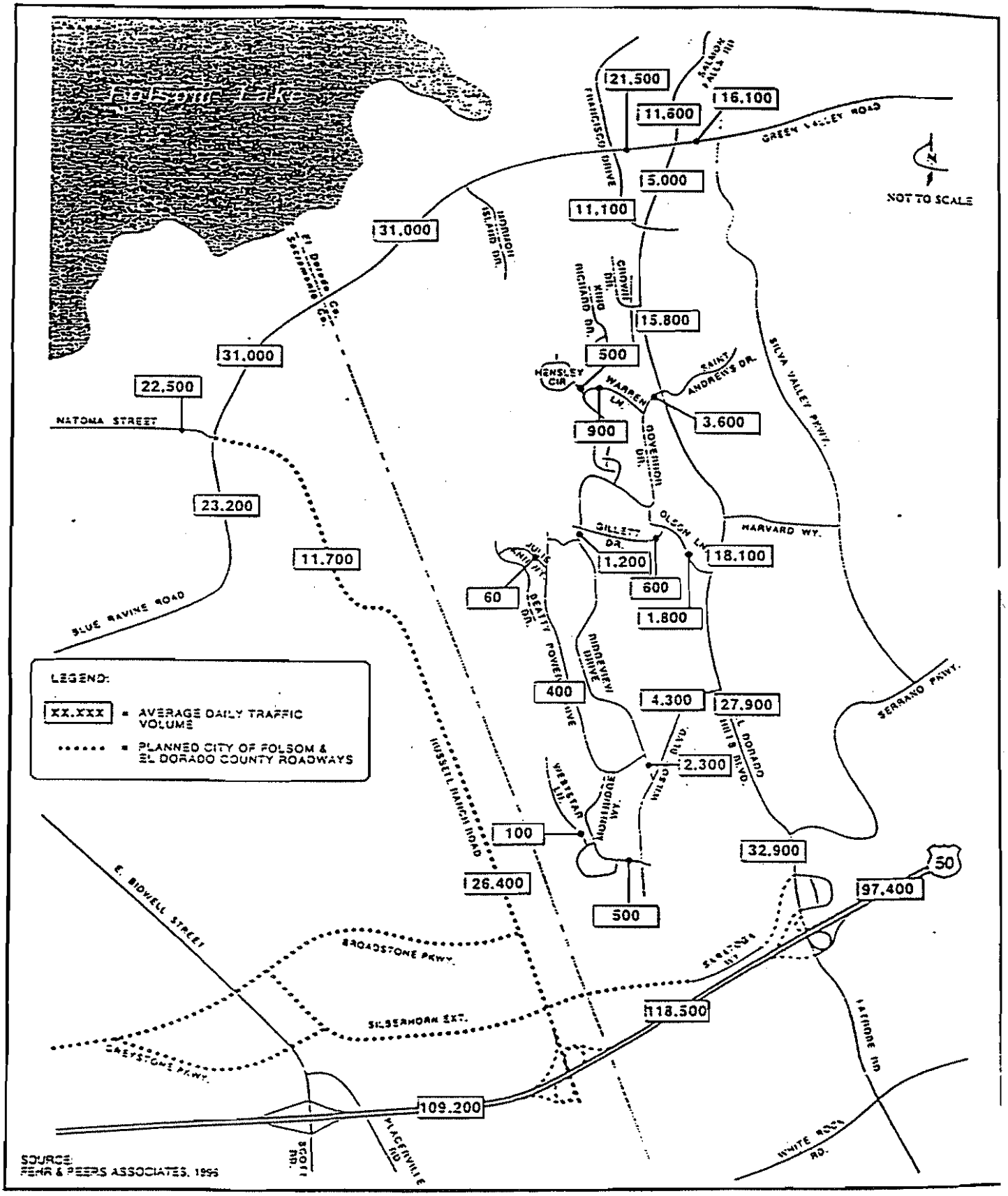


SOURCE: Fehr & Peer Associates

Figure 4.5-

Existing Plus Project Average Daily Traffic Volume

Appendix "A"

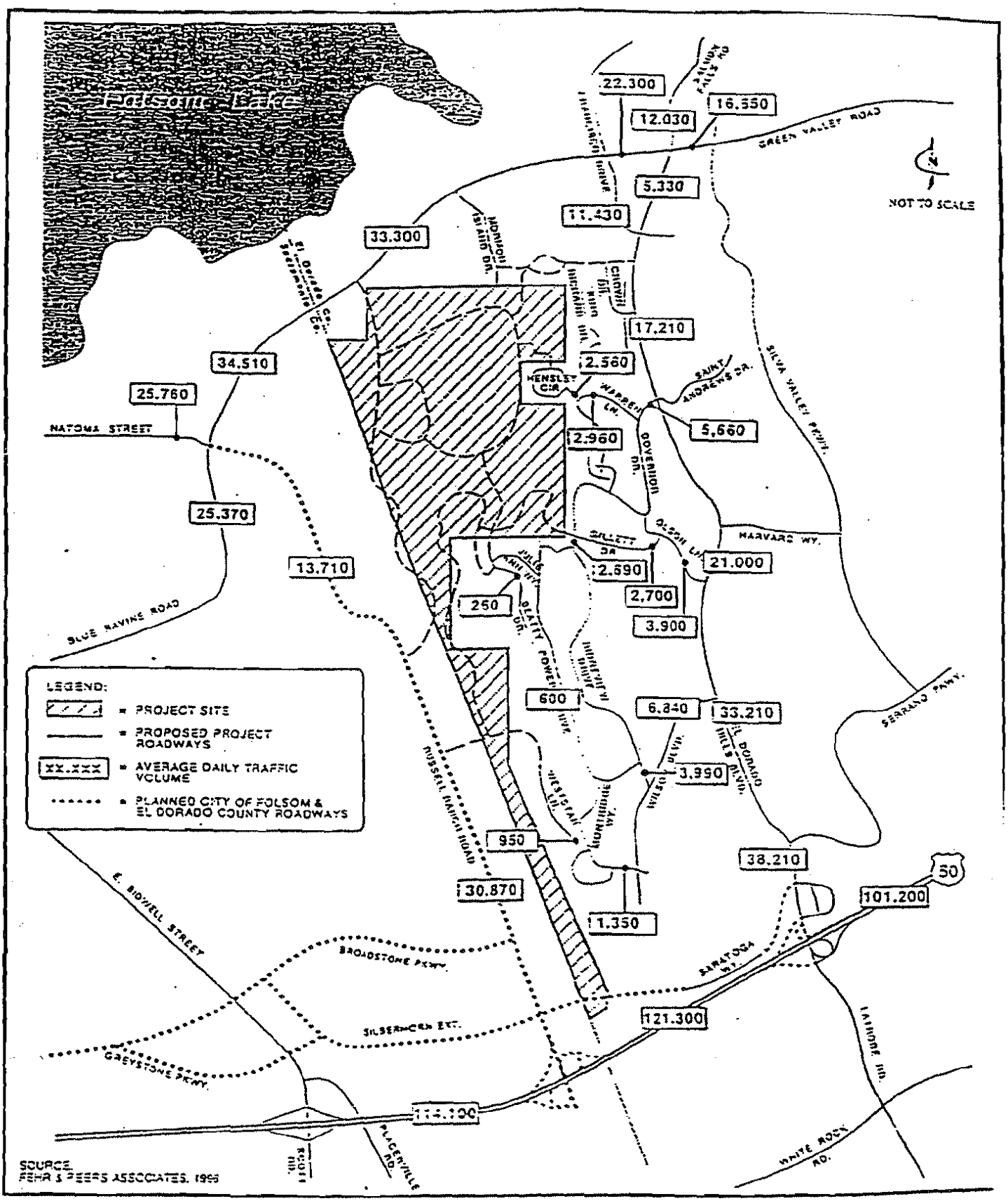


SOURCE: Fehr & Peer Associates

The Promontory Specific Plan /950107

Figure 4.5-

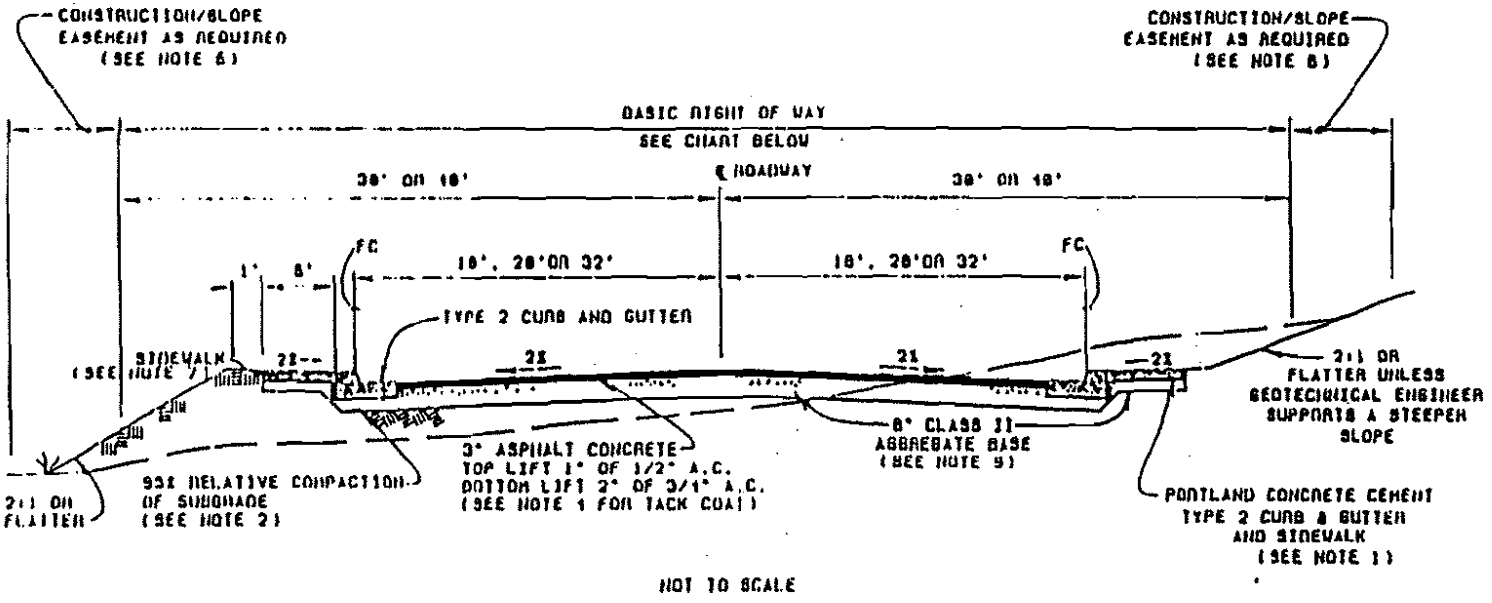
Cumulative No Project Average Daily Traffic Volume



SOURCE: Fehr & Peer Associates

Figure 4.5-

Cumulative Plus Project Average Daily Traffic Volum



NOT TO SCALE

R/W	ROADWAY WIDTH (CURB FACE TO CURB FACE)	ADT	DESIGN SPEED	MAX. GRADE
58'	28' RR	0-350 R	25 R	15% R
58'	36' RR	351-2000	25	15% R
60'	40'	2001-5000	35	12%
80'	64'	5001-10000	40	10%

R WITH COUNTY ENGINEER'S APPROVAL
RR TYPE I ROLLED CURB AND GUTTER

Appendix "B"

NOTES:

1. IN EXISTING CUT SECTIONS, SCARIFY AND RECOMPACT SUBGRADE TO 95% REL. COMPACTION. KEY IN SLOPES OVER 10%.
2. TOP 6" OF NATIVE SUBGRADE SHALL BE COMPACTED TO 95% (C.T.M. 231F OR A.S.T.M. 1557)
3. CLASS 2 AGGREGATE BASE COMPACTED TO 95%, PER CALTRANS STANDARD SPECIFICATIONS SECTION 26. (C.T.M. 231F OR A.S.T.M. 1557) INCLUDING THE 4" UNDER CURB & GUTTER, AND SIDEWALKS.
4. OVER ALL AGGREGATE BASE, ASPHALT CONCRETE SHALL BE TYPE B PER CALTRANS STANDARD SPECIFICATION 39. AGGREGATE 1/2" MAX. MEDIUM TYPE B, ASPHALT GRADE AR-4000. FOR GRADES EXCEEDING 7%, AND ELEVATIONS OVER 3000 FT., A.C. TO BE ONLY 3/4" MAX. MEDIUM. TACK COAT TO BE USED BETWEEN A.C. LIFTS.
5. FOG SEAL SS-1 OVERALL A.C. PRIME COAT TO BE SC70.
6. WHEN THE GRADING FOR CUT AND FILL SLOPES EXTENDS OUTSIDE OF THE BASIC RIGHT OF WAY WIDTH, SLOPE EASEMENT WILL EXTEND 2' BEYOND HINGES, TOES AND DRAINAGE STRUCTURES.
7. ADJACENT TO SCHOOLS, SIDEWALKS SHALL BE 8 FEET WIDE, AND EXTEND BETWEEN SCHOOL PROPERTY LINES.
8. ADT'S SHALL BE THOSE SHOWN IN THE LAND CAPABILITY REPORT UNLESS DETERMINED TO BE OTHERWISE BY THE COUNTY ENGINEER.
9. PAVEMENT, BASE, AND SUBGRADE COMPACTION THICKNESS MAY BE CHANGED IF DESIGNED BY A REGISTERED CIVIL OR GEOTECHNICAL ENGINEER. R-VALUE TEST RESULTS MUST BE SUBMITTED.
10. UPON SPECIAL APPROVAL CURB, GUTTER AND SIDEWALK MAY BE CHANGED TO A.C. DIKE AND OVERSIDE DRAINS WHEN CONNECTING ONTO EXISTING A.C. FACILITIES.

ESTIMATED	REVISIONS	APPROVED:
01/06/00		Director of Transportation
10/01/89		

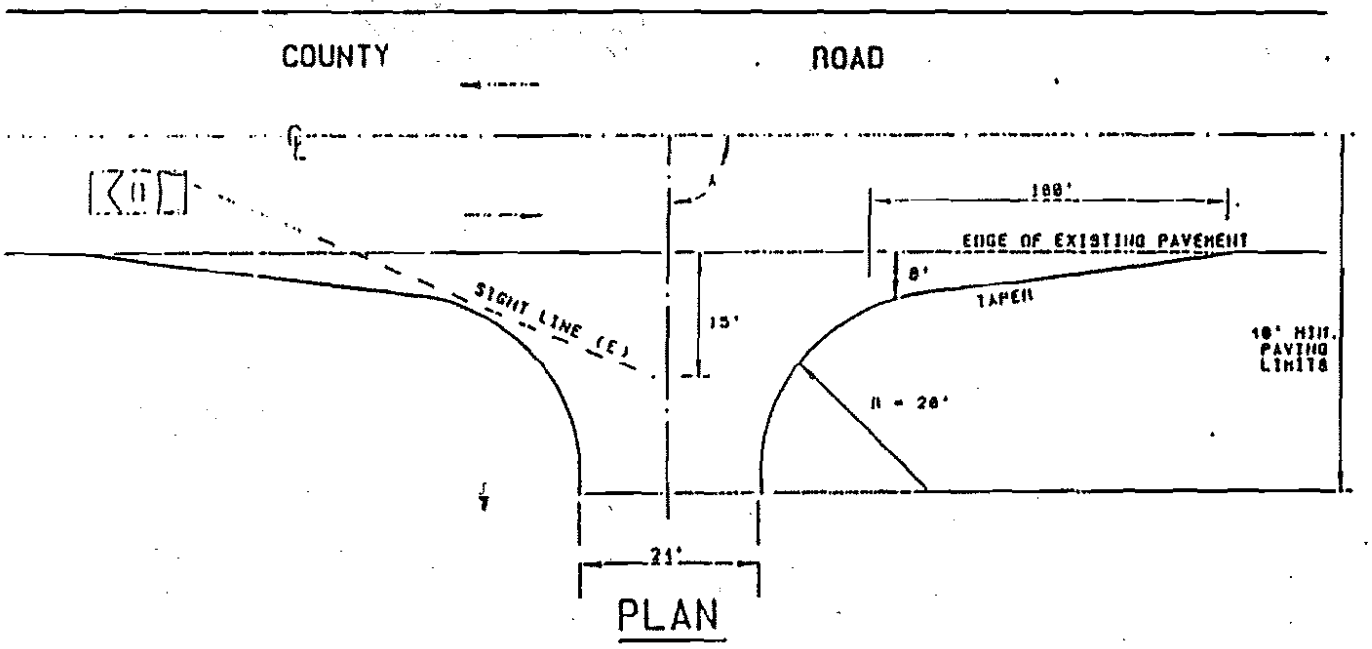
EL DORADO COUNTY
DEPARTMENT OF TRANSPORTATION

DESIGN STANDARDS

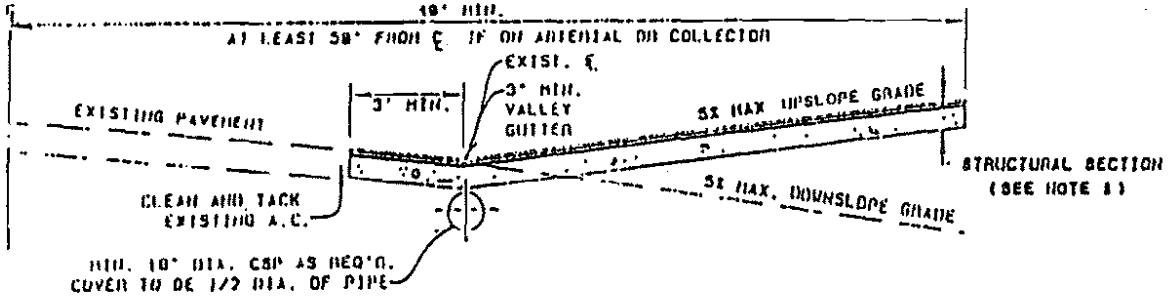
DOT

CLASS I SUBDIVISION and PARCEL MAP
(LAND TRUST & ACRES THE TOWNSHIP AREA)

STD. PLAN



PLAN



PROFILE

Appendix "C"

NOTES:

ENCROACHMENT CLASSIFICATION				
	I	II	III	IV
A	70° - 110°			
E	10 TIMES THE OPERATIONAL SPEED OF TRAFFIC			
W	21' MAX.			

1. THE STRUCTURAL SECTION IS 2 1/2" OF ASPHALT CONCRETE PER CALTRANS SPEC. SECTION 39, OVER 6" OF CLASS II AGGREGATE BASE PER CALTRANS SPECS.
2. ADDITIONAL DRAINAGE STRUCTURES NEEDED IF HYDROLIC STUDIES WARRANT.

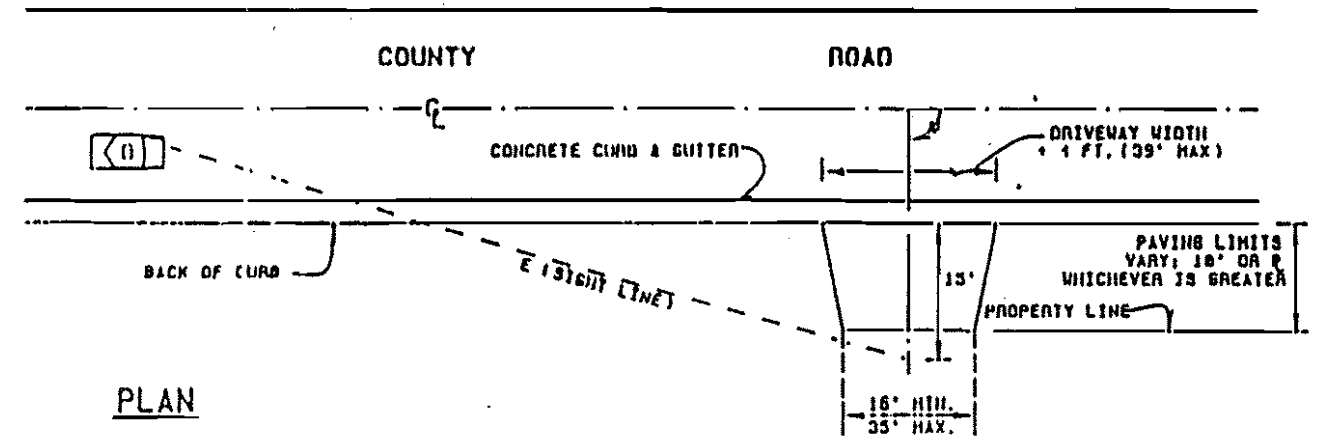
NOT TO SCALE

GENERATED	REVISIONS	APPROVED:
01/06/00		Scott Chrisholm
		DIRECTOR OF TRANSPORTATION

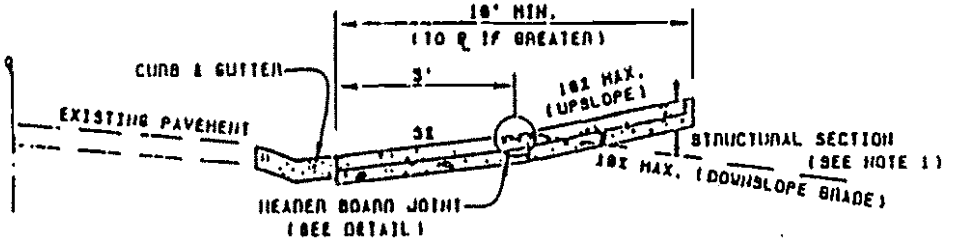
EL DORADO COUNTY
DEPARTMENT OF TRANSPORTATION
DESIGN STANDARDS

I LOCAL ACCESS ROAD TO COLLECTOR/ARTERIAL
II MAJOR COMMERCIAL COMPACT. (WITHOUT C & G) TO MAJ.COLL.
III MINOR COMMERCIAL TO MAJOR COLLECTOR
IV UNIT UNIT RESIDENTIAL TO

STD. PLAN 103D

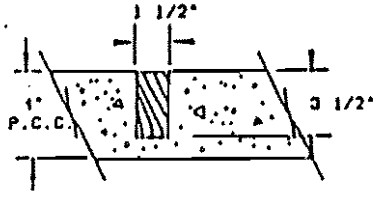


PLAN



PROFILE

HEADER BOARD JOINT DETAIL



NOTES:

E = 200' MINIMUM SIGHT DISTANCE FOR LOCAL ST., 100' FOR A CUL-DE-SAC.

A = ANGLE OF DRIVEWAY CENTERLINE IN RELATION TO ROAD CENTERLINE, THE ANGLE WILL BE BETWEEN 70° - 90°

1. THE DRIVEWAY STRUCTURAL SECTION IS 4" OF PORTLAND CEMENT CONCRETE ON 2 1/2" ASPHALT CONCRETE OVER 4" OF AGGREGATE BASE.
2. THOSE DRIVEWAYS EXCEEDING 20%, EITHER UP OR DOWN IN GRADE, WILL REQUIRE A GRADING PERMIT.
3. NO PORTION OF A DRIVEWAY WILL BE WITHIN 25' FROM A RADIUS RETURN, NOR 10' FROM A FIRE HYDRANT.

NOT TO SCALE

Appendix "C"

ORIGINATED	REVISIONS	APPROVED:
4:		
3: 03/16/00		DIRECTOR OF TRANSPORTATION
2:		
1: 11/28/89		C33427

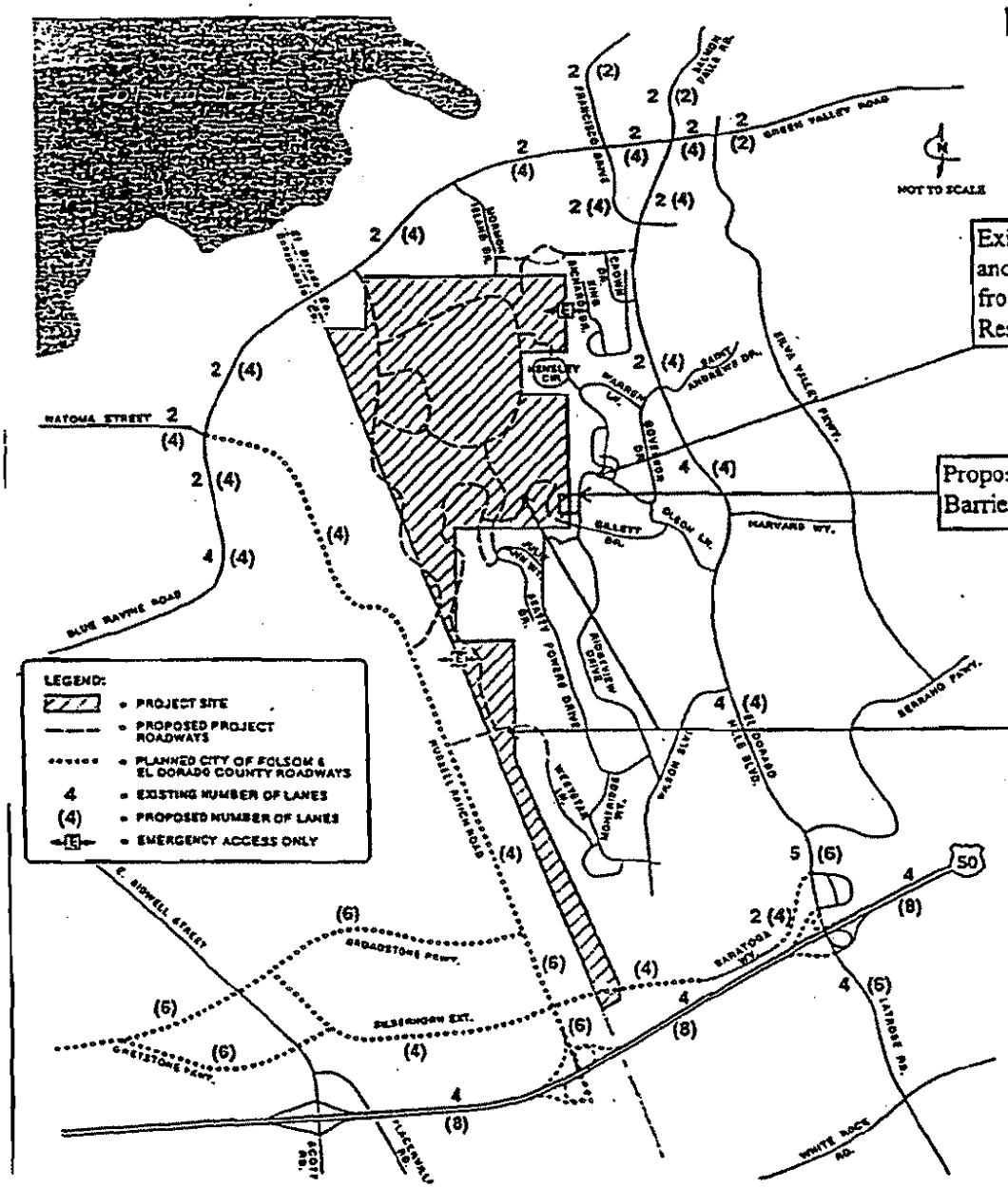
EL DORADO COUNTY
DEPARTMENT OF TRANSPORTATION

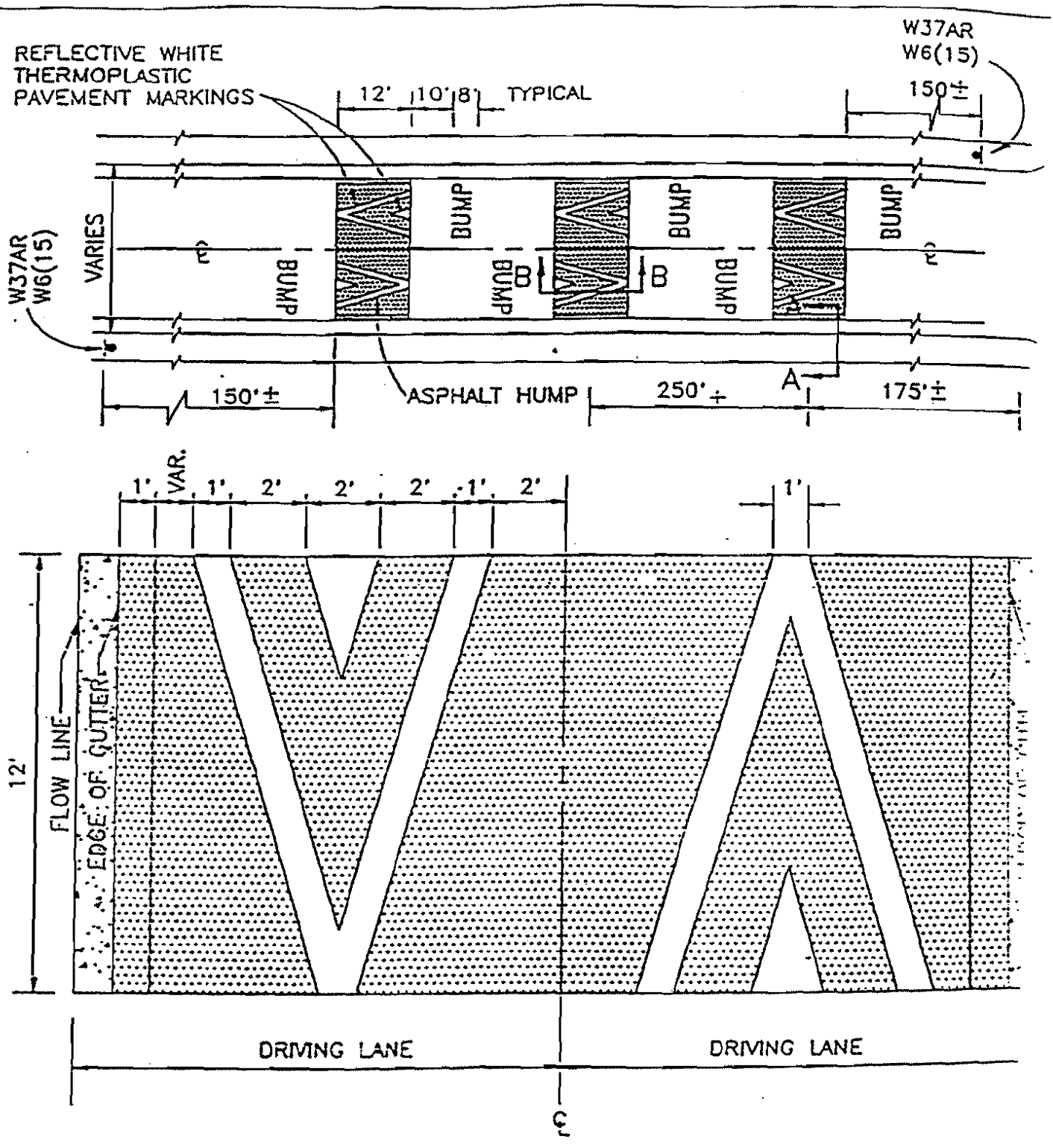
DESIGN STANDARDS

DRIVEWAY CONNECTION
SINGLE UNIT RESIDENCE

CLASS I SUBDIVISION WITH ROLLED CONCRETE CURB AND GUTTER

STD. PLAN 1098A-1


Existing Street with 15% slope and inadequate sight distance from road Intersections and Resident Driveways
Proposed Mitigation (Install Barrier)
New Through Traffic Pattern using local residential road conditic
NOT TO SCALE
GREEN VALLEY ROAD
NATOMA STREET
BLUE RAVINE ROAD
E. BIDWELL STREET
SILBERHORN EXT.
LEGEND:
PROJECT SITE
PROPOSED PROJECT ROADWAYS
PLANNED CITY OF FOLSOM & EL DORADO COUNTY ROADWAYS
EXISTING NUMBER OF LANES
PROPOSED NUMBER OF LANES
EMERGENCY ACCESS ONLY



SPEED HUMP MARKING

Appendix "E"

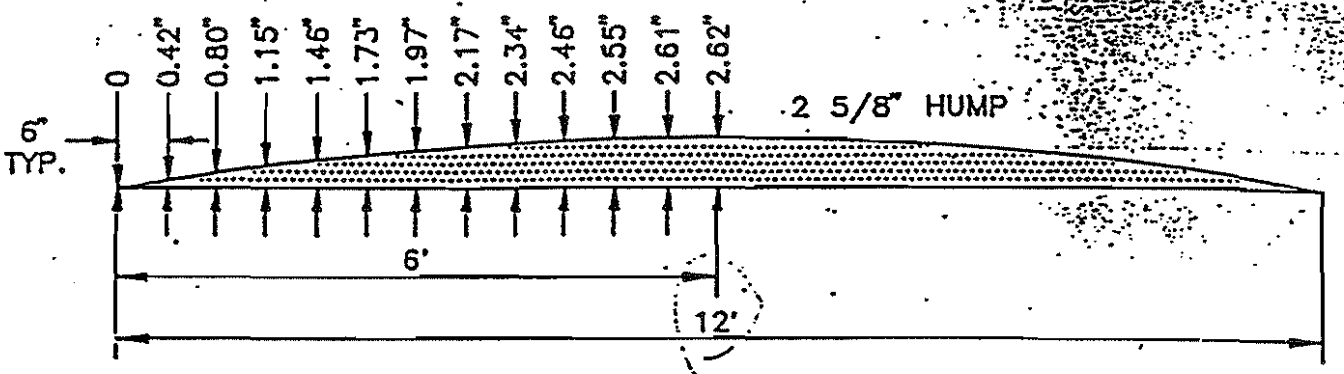
SPEED HUMP INSTALLATION DETAILS

1. SPEED HUMPS SHALL NOT BE PLACED OVER MANHOLES, WATERGATES, JUNCTION CHAMBERS, ETC.
2. EDGE OF SPEED HUMPS SHALL BE 5 FEET MINIMUM FROM EDGE OF DRIVEWAY.
3. WHERE POSSIBLE SPEED HUMPS SHOULD BE PLACED AT PROPERTY LINES INSTEAD OF MID-LOT.
4. WHERE POSSIBLE SPEED HUMPS SHOULD BE PLACED ADJACENT TO STREET LIGHTS.
5. EXACT LOCATION OF SPEED HUMPS SHALL BE DETERMINED BY LADOT ENGINEER.
6. ALL ASPHALT CONCRETE PAVEMENT INSTALLATION SHALL

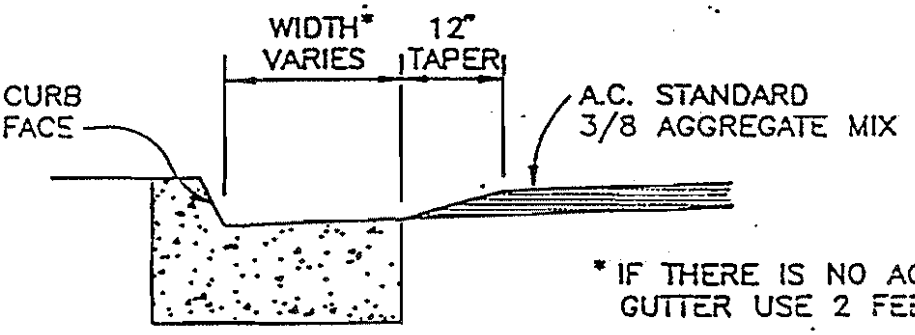
APPROVED 12/19/94
GENERAL MANAGER

SPEED HUMP

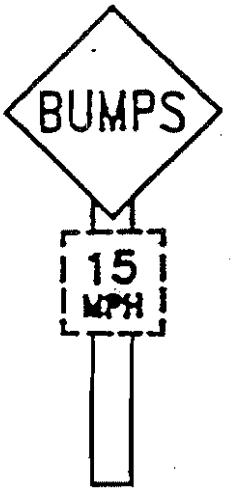
CITY OF LOS ANGELES
DEPARTMENT OF TRANSPORTA
Robert R. Yates, General Manage



SECTION B–B



SECTION A–A



WARNING FLAGS
(FIRST WEEK)

30" X 30" W37AR
WARNING SIGN
BLACK ON YELLOW
6" SERIES "E"
LETTERS

W6(15) SIGN

EXACT SIGN LOCATIONS
SHALL BE DETERMINED
BY LADOT ENGINEER

ADVANCE SIGNING

Appendix "E"

APPROVED _____

GENERAL MANAGER

SPEED HUMP

CITY OF LOS ANGELES
DEPARTMENT OF TRANSPORTAT
Robert R. Yates, General Manage

7. GARY B. BARDINI, PARKVIEW HEIGHTS COALITION

Response 7-1 The traffic impact analysis conducted for the Draft EIR assessed impacts to residential streets such as Ridgeview Drive. According to the *Design and Improvement Standards Manual*, County of El Dorado, Revised May 18, 1990 and the El Dorado County Department of Transportation, residential streets with homes fronting the street are capable of accommodating up to 4,000 vehicles per day. This standard applies to all residential streets regardless of the design features and was used in the Draft EIR to evaluate the significance of adding project traffic to existing residential streets.

The addition of project traffic to Olson Lane and Ridgeview Drive was identified as a significant impact based on this criteria under "existing plus project" conditions. The "existing plus project" analysis is a worst-case traffic analysis that assumes buildout of the project under existing conditions without planned roadway improvements in place in El Dorado County and the City of Folsom. It is unlikely that the project site would be developed so quickly without future planned roadway improvements (e.g., Russell Ranch Boulevard) in place. The commentor is referred to Section 4.5, Transportation and Circulation, of the Draft EIR for a complete description of planned roadway improvements near the project site.

As mitigation, the project applicant would be required to conduct traffic studies for each tentative map. If any local residential streets would experience a total daily traffic volume in excess of 4,000 vehicles per day as a result of implementing a particular phase of the Promontory Specific Plan, then the tentative map for that phase shall not be approved unless traffic circulation measures are implemented that will prevent the total daily traffic volume on local residential streets from reaching 4,000. (See page 4.5-28 of the Draft EIR regarding Mitigation Measure 4.5.1).

However, in further response to the commentor's concerns regarding the residential street impacts of the proposed project, the following additional mitigation measure will be added to the Draft EIR to clarify the phasing of roadway improvements on the project site.

- Page 2-14 (Table 2-1, Impact 4.5.1) and page 4.5-28 (Impact 4.5.1), the following revisions to Mitigation Measure 4.5.1 and new mitigation measure are added:

  "4.5.1a During the review of tentative maps for each phase of the Promontory Specific Plan, a traffic study shall be performed to determine the amount of project traffic that will be added to the local streets in El Dorado Hills. If any local residential streets

would experience a total daily volume in excess of 4,000 as a result of implementing a particular phase of the Promontory Specific Plan, then the tentative map for that phase shall not be approved unless traffic circulation measures are implemented which will prevent the total daily traffic volume on local residential streets from reaching 4,000 average daily trips.

Traffic circulation measures would include, but are not limited to: additional connections to other local residential streets (temporarily or permanently); elimination of connections to local residential streets (temporarily or permanently); construction of Russell Ranch Boulevard Extension to Green Valley Road; construction of Russell Ranch Boulevard to the City of Folsom's East Natoma Street Extension (and/or connection to U.S. Highway 50); modification of project phasing; construction of new roads to serve the project site (through the Crown Valley, Ridgeview Village Unit 3, and/or Ridgeview Village Unit 9 approved tentative maps); delay of tentative map approval; and/or reduction in the number of dwelling units.

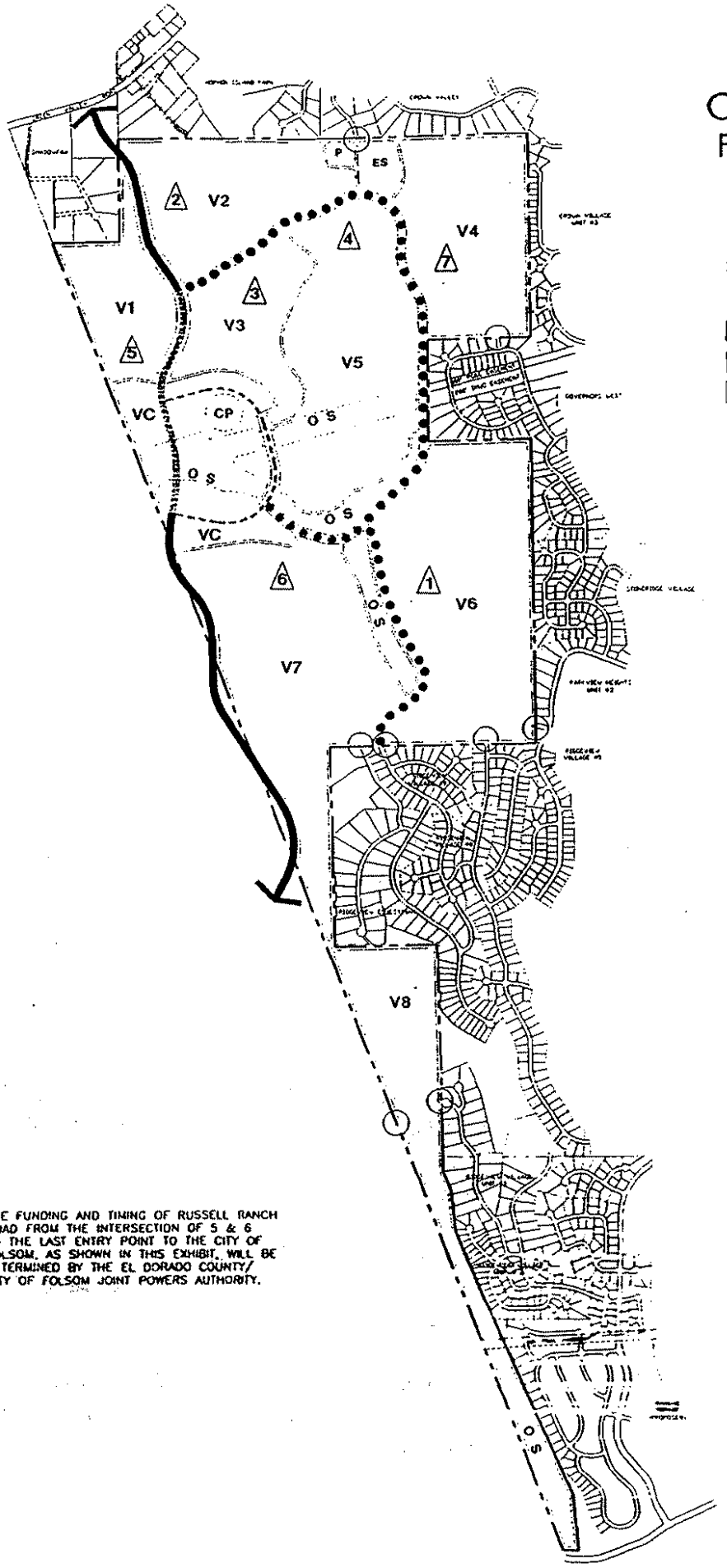
4.5.1b In order to minimize traffic impacts to existing residential roadways, the following general project and circulation phasing plan shall be implemented (see Figure 4.5-14).

Phase 1: Development of Village 6 with roadway access to Gillett Drive, Powers Drive, and Beatty Drive and construction of the Community Collector between Villages 5, 6 and 7.

Phase 2: Development of Village 1 with the construction of northern portion of Russell Ranch Boulevard from the Community Collector to Green Valley Road.

Phase 3: Development of Village 2 and 3 with the construction of a portion of the Community Collector north of Village 3.

Phase 4: Development of Village 5 with the construction of a portion of the Community Collector north of Village 5.



CIRCULATION PHASING PLAN

LEGEND:

- ARTERIAL
- VILLAGE CENTER COLLECTOR
- COMMUNITY COLLECTOR
- POINT OF MINOR ACCESS

ROAD SEGMENTS

1
2
3
4
5
6
7

NOTE:
THE FUNDING AND TIMING OF RUSSELL RANCH ROAD FROM THE INTERSECTION OF 5 & 6 TO THE LAST ENTRY POINT TO THE CITY OF FOLSOM, AS SHOWN IN THIS EXHIBIT, WILL BE DETERMINED BY THE EL DORADO COUNTY/ CITY OF FOLSOM JOINT POWERS AUTHORITY.

APPROX. SCALE 1"=600'

COOPER THORNE & ASSOCIATES, INC.

Figure 4.5-14
Circulation Phasing Plan

SOURCE: Cooper, Thorne & Associates, 1997

Phase 5: Development of a portion of Village 7 and the Village Center with the construction of Russell Ranch Boulevard from the Village Center to the Community Collector.

Phase 6: Development of the remaining portions of Village 7 and the Village Center with the construction of a portion of the Community Collector north of Village 7 and the Village Center Collector.

Phase 7: Development of Village 4 with the construction of a portion of the Community Collector west of Village 4.

Phase 8: Development of Village 8 with the construction of accesses to Weststar Lane and the City of Folsom.

The above project and circulation phasing plan may be modified based on market and development constraints. However, no additional villages beyond Village 6 shall have access to existing residential roadways east of the project site (i.e., Suffolk Way, Gillett Drive, Powers Drive, Julie Ann Way, and Beatty Drive) until additional project accesses and roadways are developed."

Implementation of this additional mitigation measure would further reduce potential traffic impacts to existing residential roadways east of the project site by limiting project site development and access to residential roadways to Village 6 until such time that additional project accesses and roadways are developed. Development of Village 6 would generate approximately 1,710 daily trips. The table below summarizes the distribution of Village 6 trips on existing residential roadways.

TABLE 3-1
VILLAGE 6 TRAFFIC IMPACT SUMMARY

Residential Street	Average Daily Traffic Volume			
	Existing Conditions	Project Conditions	Existing Plus Project Conditions	Does Existing Plus Project Volume Exceed 4,000 ADT /a/?
Gillett Drive (Ridgeview Drive to Olson Lane)	560	1,040	1,600	No
Olson Lane (Gillet Drive to El Dorado Hills Blvd.)	1,550	1,040	2,590	No
Ridgeview Drive (Gillett Dr. to Wilson Blvd.)	1,990	470	2,460	No
Powers Drive (Julie Ann Way to Ridgeview Drive)	330	100	430	No
Ridgeview Drive (Gillett Dr. to Governor Dr.)	n/a	100	n/a	No/b/

n/a not available
/a/ (ADT) average daily trips
/b/ Although an existing traffic count is not available, observations of traffic levels on this segment and a review of traffic counts on surrounding roadways suggest that the existing average daily traffic volume is substantially less than 1,000.

As shown in Table 3-1, traffic volumes associated with Village 6 (Phase 1) are anticipated to be well below the County's 4,000 average daily trip standard.

This comment, as well as other comments, also state that existing residential streets such as Ridgeview Drive, Olson Lane, Gillett Drive, Moonstone Circle, Hensley Circle, and Governor Drive are unsafe. Accident data is typically used a primary indicator of a health and safety risk on any roadway. According to available accident data contained in the *County of El Dorado Department of Transportation's 1996 Annual Accident Location Study,* which is compiled at the end of each calendar year, the following accidents have occurred on residential streets in the study area:

- Ridgeview Drive between Wilson Boulevard and Gillett Drive -

  Four accidents occurred on this segment from 1994 to mid 1997:

  9/12/94 - Vehicle #1 hit Vehicle #2 due to unsafe backing movement of Vehicle #2 in violation of Section 22106 of the California Vehicle Code (CVC)

  11/20/94 - Vehicle #1 hit Vehicle #2 in violation of CVC Section 2101 left turn failure to yield right of way, and violation of CVC Section 14601 driving while license suspended.

1/25/96 - Vehicle #1 rear-ended Vehicle #2 due to inattentive driving and driving an unsafe speed in violation of CVC Section 22350, the driver of Vehicle #1 did not have a valid California driver's license.

10/21/96 - Unoccupied vehicle hit parked vehicle due to the failure of the last driver to turn his wheels into the curb and setting the parking brake in violation of CVC Section 22515(a).

- Ridgeview Drive between Gillett Drive and Governor Drive

  Three accidents occurred on this segment from 1994 to mid 1997:

  9/7/94 - Vehicle #1 hit parked car due to driver inattention, unsafe turning movement in violation of CVC Section 22107.

  9/16/96 - Parked vehicle #1 hit parked car. Vehicle #1 rolled when operator was backing a small bobcat tractor off a trailer connected to Vehicle #1.

  4/23/97 - Single car accident. Driver had been drinking, violations of CVC Section 23152(a), and 4000(a), and 4462(b).

- Gillett Drive between Ridgeview Drive and Olson Lane

  One accident occurred on this segment from 1994 to mid 1997:

  3/8/96 - Single car accident. Driver cited for defective equipment.

- Olson Lane between Gillett Drive and El Dorado Hills Boulevard

  One accident occurred on this segment from 1994 to mid 1997:

  4/7/95 - Vehicle #1 broadsided Vehicle #2 due to inattention and failure to yield the right of way, violation of CVC 21801.

- Hensley Circle north of Warren Lane

  One accident occurred on this segment from 1994 to mid 1997:

  8/17/95 - Bicycle only accident. Four year old rode out of his driveway and catapulted over the handlebars.

Based on the review of traffic accident records, none of these reported accidents were related to the physical design of the roadway or the placement of traffic control devices. No fatalities occurred as a result of these accidents and injuries were limited to two people involved in the accidents on Gillett

Drive and Hensley Circle. Further, the County's accident study has not identified any locations on the residential streets mentioned above that are considered in need of improvement to correct a physical design for the purpose of reducing accidents.

A speed survey was taken on Ridgeview Drive in two locations. Both surveys were taken over a period of an hour. The average speed on Ridgeview Drive near Cyprine Court was 29 mph. The average speed for the easterly direction on Ridgeview Drive at Moonstone Circle is 33 mph.

El Dorado County Department of Transportation reviewed the existing sight distance for Moonstone Circle at its westerly intersection with Ridgeview Drive. The construction of the fill slope on lot 105, the location of the utility box and landscaping on the same lot, does not allow achievement of the standard sight distance for the intersection. This location should be considered for a three-way stop. The existing procedure for consideration of traffic control devices will be used to determine the appropriateness of the proposal. The Traffic Advisory Committee (TAC) will make a determination and recommendation to the Board of Supervisors for a final decision.

Response 7-2 As identified in the Draft EIR (Chapter 2.0, Executive Summary), the Draft EIR analyzes potential significant impacts to Land Use, Aesthetics, Population/Housing/Employment, Transportation and Circulation, Air Quality, Noise, Biological Resources, Geology and Soils, Hydrology and Water Quality, Cultural Resources, Public Services, Utilities and Service Systems, and Public Health and Safety. The commentor had failed to identify all the issue areas covered in the Draft EIR.

Response 7-3 No response is required. The comment summarizes information contained in the Draft EIR.

Response 7-4 This comment summarizes intersection and ramp junction level of service (LOS) information contained in the Draft EIR. However, the comment does not accurately reflect the LOS results contained in the Draft EIR. Specific LOS results should be taken from Tables 4.5-7, 4.5-8, 4.5-9, and 4.5-10.

Response 7-5 No response is required. The comment summarizes information contained in the Draft EIR.

Response 7-6 See Response to Comment 7-1.

Response 7-7 As stated in Response to Comment 7-1, residential streets were analyzed in the Draft EIR according to the County's stated threshold of 4,000 vehicles per

day, which applies to all residential streets regardless of design. Nevertheless, Standard Plan 101B does show a range of volumes that apply to the design of residential streets. However, these ranges are not maximum values. According to the El Dorado County Department of Transportation, these volumes are the desirable ranges while 4,000 vehicles per day is the maximum.

Response 7-8 The only applicable County standard regarding the addition of traffic from new development to existing residential streets is the 4,000 vehicles per day threshold used in the Draft EIR. Also see Response to Comment 7-1.

Response 7-9 As stated in the comment, the sight distance near Gillett Drive on Ridgeview Drive does meet the minimum sight distance standard. See Response to Comment 7-1 and 7-7.

Response 7-10 The assignment of project traffic to the roadway system was based on trip distribution information shown in Figure 4.5-6 of the Draft EIR. The specific assignment of trips to local residential streets that access more regional roadways such as El Dorado Hills Boulevard was based on the shortest travel time routes. Under this approach, no project traffic was assigned to Ridgeview Drive between Gillett Drive and Governor Drive. The shortest route between the access from Village 6 in the Promontory and El Dorado Hills Boulevard is along Gillett Drive to Olson Lane. The alternative route of using Ridgeview Drive to Governor Drive is up to twice as long.

Response 7-11 The construction of new roadways through the Promontory will provide new connections to the City of Folsom. Some of these connections will rely on existing residential streets in El Dorado Hills (e.g., Gillette Drive, Westar Lane, and the new Crown Valley Collector) to complete a trip to or from Folsom, which could cause a redistribution of existing trips and increase traffic volumes on residential streets in El Dorado Hills above existing levels. Nevertheless, daily traffic volumes on these streets will not exceed the County's threshold of 4,000. Mitigation measure 4.5.1a requires the project applicant to conduct traffic studies for each tentative map to ensure that daily traffic volumes on residential streets do not exceed 4,000.

Response 7-12 At this stage of project development, specific traffic circulation measures to limit daily traffic volumes to 4,000 on local residential streets can not be identified because the phasing and construction schedule for the project is tied to uncontrollable market forces. Further, court interpretations of the California Environmental Quality Act (CEQA) have made it clear that mitigation measures that rely on future actions are adequate if a performance standard is provided (Remy *et. al*, 1996). Mitigation Measure 4.5.1a states

that traffic circulation measures shall be constructed or the tentative map will not be approved if traffic levels on any local residential street affected by the project exceed the stated performance measure of 4,000 vehicles per day. This mitigation measure would also apply to any increase in traffic volume resulting from diversions of traffic due to the implementation of traffic circulation measures. In addition, implementation Mitigation Measure 4.5.1b (new mitigation measure) will further assist in minimizing traffic impacts local residential streets (see Response to Comment 7-1).

Response 7-13 Traffic barriers are counter productive to local circulation and, therefore, are not considered as an option.

The subdivision was approved without sidewalks. At the time, sidewalks were an option, but was not chosen for installation. Installation of sidewalks at this time would be the financial responsibility of the existing residents and could be funded by an assessment district of some similar funding mechanism.

Speed bumps are currently not an acceptable traffic control device. It is not sanctioned by either Caltrans or the Manual of Uniform Traffic Control Devices (MUTCD). Current studies based on demonstration projects indicate that the maximum grade for a street with speed bumps is 8%. Ridgeview Drive would not meet this criteria.

Copy to Roger T. 7/21
copy to Craig McKibbin 7/21

July 15, 1997

8

Mr. Doug Noble, Chairman
Planning Commission, El Dorado County
2850 Fairlane Court
Placerville, CA 95667

RECEIVED
PLANNING DEPARTMENT

RE: Response to Environmental Impact Report Promontory Project

Dear Mr. Noble,

My husband and I moved onto Ridgeview Drive in mid-April. We have enjoyed our new home and even asked why the previous owners would have left such nice surroundings. The comments fromthem and many neighbors in those early spring conversations were a resounding "traffic moves too fast through here"!. "We were afraid our little ones would get out front and try to cross the street. A teenager flipped a car right on the corner of Burnett and Ridgeview last year!" "Passing traffic moves way too fast up and down Ridgeview Drive". 8-1

Within weeks of those conversations, we noticed the same thing. Our children are grown, so we're not worried about them being run over, but just trying to back out of our driveway is difficult at any time as the cars coming around the corner from Governor or the other way down Ridgeview from the hill above are going too fast to safely stop for pedestrians and/or cars backing out. Visibility is an issue. Speed is an issue.

Being new to the area, I investigated who to call in the Department of Transportation. I left a voicemail regarding application processes to attain speed bumps or humps for this neghborhood. I was called back and told "there is not enough money for street signs let alone speed bumps". "You will never ever see them in California, it was up to the driver to be responsible for safely adhering to the speed limit". I laughed and said "I guess it takes a child getting killed in order to get that changed". Where I am from, a petition is drafted and signed, along with a report submitted, and the neighborhood could get *Slow, Children Playing* signage and speed humps. It can and should be done.

I am writing because I started a new job July 10th and was not able to attend the 8:30 am meeting. I am sure many working neighbors could not be there due to the time. I concerned about this issue and urge you to look carefully at the report that Gary Bardini submitted and consider about impact additional traffic using Olson Lane and Ridgeview Drive to drive home into this new Promontory development will have on much of this Parkview and Ridgview area. 8-2

Now is the time to make these important decisions, while the development is in the planning stages, not after existing neighborhoods are plagued by accidents or injuries.

Sincerely,

James & Joan Barlow
2956 Ridgeview Drive
El Dorado Hills, CA 95762
(h) 939-2262

cc: Dan Millington
Gary Bardini
Michael Stoltz
Sam Bradley
Robert Slater
Randy Pesses

8. JAMES AND JOAN BARLOW, RESIDENTS

Response 8-1 See Response to Comment 7-1. The use of traffic control devices or geometric design features to alter the speed, volume, or type of traffic using residential streets is often determined through a residential traffic control program. These types of programs are becoming more common and are in place in nearby communities such as the City of Sacramento and the City of Roseville. Creation of a residential traffic control program may be appropriate for El Dorado County. Mitigation Measure 4.5.1a could be incorporated into this type of program as a condition of approval for the Promontory project. The commentor is also referred to Response to Comment 7-13.

Response 8-2 See Response to Comment 7-1 and 7-3 through 7-13.

Department of Transportation
Interoffice Communication

9

Date: 7/15/97

97 JUL 16 AM 11:21
RECEIVED
PLANNING DEPARTMENT

To: Craig McKibbin, Supervising Civil Engineer (acting)

From: Dave Spiegelberg

Subject: Promontory DEIR - Hydrology Review

The DEIR was reviewed for surface water hydrology issues and the following comments are offered for consideration.

1) The supporting hydrologic document "*A Study of Drainage Impacts from Development in El Dorado County on the Folsom East Area*" July 1991, Cooper, Thorne and Associates, Inc. does not conform to the provisions of the *El Dorado County Drainage Manual*. While the analysis is adequate for the purposes of the EIR, the site hydrologic and hydraulic studies and basin drainage plans should be supported by a hydrologic study prepared in conformance with the *Manual*. 9-1

2) Mitigation Measure 4.10.5a appears to require that the Joint Powers, through the agreement, will determine the flows and volumes passing from the County into the City of Folsom. I do not believe this to be the case. 9-2

The Study required under Mitigation Measure 4.10.5b or similar document, prepared by the project proponents, should estimate the pre- and post-development flows and volumes, necessary mitigation measures and facillities, subject to the approval of both agencies through the agreement. 9-3

The Agencies and the JPA will develop the agreement, and coordinate the review and approval of hydologic and hydraulic studies under the conditions of said agreement, but the applicants will be required to prepare the studies. 9-4

The verbage in the EIR should be modified to accurately represent the responsibilities and authority of each entity in a general sense. 9-5

c: Bob Slater
Roger Trout

9. DAVE SPIEGELBERG, EL DORADO COUNTY DEPARTMENT OF TRANSPORTATION

Response 9-1 El Dorado County and the City of Folsom are currently seeking to address drainage issues on a regional basis. The Cooper Thorne study has been reviewed as a part of that process. A Draft Memorandum of Understanding (MOU) has been developed based on more recent drainage studies and been submitted to the City of Folsom/El Dorado County Joint Powers Authority (JPA). The Draft MOU identifies shared drainage facilities and volumes, pre- and post-development runoff volumes that maintain existing 100-year storm drainage flows, and a review process for future project-specific drainage plans.

A drainage report has been prepared for the Promontory in accordance with the El Dorado County Drainage Manual (see Preliminary Engineering Report for The Promontory, attached as Appendix B to this Final EIR). This report has been submitted to the County and, in accordance with the terms of the Draft MOU, to the City of Folsom. Although no written comments have been received from the City, discussions with City staff indicate that the City is in general agreement with the methodology and conclusions of the report.

Response 9-2 See Response to Comment 9-1 and Appendix B to this Final EIR.

Response 9-3 Mitigation Measure 4.10.5b sets forth specific requirements for the drainage study, but also makes clear that the study must conform to the requirements of the El Dorado County Drainage Manual and any additional requirements imposed by the MOU. See also Response to Comment 9-1 and Appendix B.

Response 9-4 The commentor is correct that the project applicant will be required to prepare drainage studies for its development projects. As indicated in Response to Comment 9-1, a drainage study has been prepared for the Promontory project and has been submitted to the County and the City of Folsom for review and approval by those agencies.

Response 9-5 The following text changes are made to the Draft EIR:

- Page 2-34 (Table 2-1, Mitigation Measure 4.10.5a), page 4.10-15 (Mitigation Measure 4.10.5a), and page 6-22 (Mitigation Measure 4.10.5a). Mitigation Measure 4.10.5a is revised to read:

  "4.10.5a Prior to approval of improvement plans for site development, El Dorado County shall coordinate with the City of Folsom and the City of Folsom/El Dorado County Joint Powers Authority (JPA) in developing a formal drainage agreement identifying

shared drainage facilities and volumes, pre- and post-development runoff volumes that maintain existing 100-year storm drainage flows, and a review process of future project-specific drainage plans. The JPA was formed to address development-related issues along the County line that affect both the City of Folsom and El Dorado County. Since a portion of the Promontory and neighboring developments in El Dorado County are at the headwaters to the Willow and Humbug Creeks in the City of Folsom, the JPA has the authority to coordinate the design of drainage facilities to ensure facilities are property planned. The drainage agreement shall be approved by both the City of Folsom and El Dorado County."

10

WILLIAM M. WRIGHT
ATTORNEY AT LAW

2828 Easy Street
Placerville, California 95667

(916) 622-2278
FAX (916) 622-9614

PLANNING DEPARTMENT

July 17, 1997

Roger Trout, Senior Planner
Planning Commission
2850 Fair Lane Court
Placerville, CA 95667

Re: The Promontory Project
Response to Draft Environmental Impact Report

On behalf of the Buckeye Union School District, the Rescue Union School District and the El Dorado Union High School District, please consider this response to the Draft Environmental Impact Report prepared for the above project.

The primary comment submitted at this time is that the Mitigation Measure set forth in the EIR should be revised to provide that the Agreement between the developer and the School Districts will be entered into prior to approval of the specific plan rather than prior to approval of the tentative map. The Agreement should be approved at the time the zoning and land use changes occur. 10-1

In addition to the payment of fees for facilities, the Agreement will also need to address the school site for the Rescue Union School District that will serve this project.

The High School has also provided this office with comments indicating that the High School District capacity and enrollment figures presented in Table 4.12-2 are incorrect. The correct numbers are included in the attached Table. 10-2

Under Section 4.12-7, the High School District operates three comprehensive high schools and three alternative schools. With passage of a General Obligation bond on June 3, 1997, the new Township High School is scheduled for construction over the next 2 years, for opening in the 1999/00 school year.

Under Section 4.12-8, you should note as of July 1, 1997 the Development Fee has increased to $8,288. The Agreement that will be negotiated with the developers provides for an escalation index according to increases in the cost of construction. 10-2 CONT.

Thank you for your consideration.

Very truly yours,

William M. Wright
Attorney at Law

WMW/dh

cc: Lorraine Garcy
Joyce Flanigan
David Murphy
Mike McDougall, Palisades Development

Enclosure

THE PROMONTORY PROJECT
EIR REVIEW

June 26, 1997

PAGE(S)	COMMENTS
4.12-6	The El Dorado Union High School District capacity and enrollment figures presented in Table 4.12-2 are incorrect. The correct numbers are the following (see attached "School Capacities" table):

10-3

SCHOOL	PERMANENT CAPACITY	1996/97 CBEDS ENROLLMENT	REMAINING CAPACITY (Shortage)
El Dorado High School	1,460	1,750	(290)
Oak Ridge High School	1,492	1,813	(321)
Ponderosa High School	1,128	2,015	(887)
Pondorado Alternative Education Center	75	77	(2)
Independence High School	75	140	(75)
Independent Learning Center	112	123	(11)
TOTAL	4,342	5,918	(1,576)

4.12-7	The District operates three comprehensive high schools and three alternative schools.
	With the passage of a General Obligation bond on June 3, 1997, the new Township High School is scheduled for construction over the next 2+ years, for opening in the 1999/00 school year.

10-4

4.12-8	As of July 1, 1997, the County Development Fee will be $8,288. Developments not subject to the County fee are subject to AB 2926 impact fees of $1.84 per square foot for residential and $0.30 per square foot for commercial/industrial development. Currently, over 90% of new developments pay AB 2926 fees.

10. WILLIAM M. WRIGHT, ATTORNEY FOR BUCKEYE UNION, RESCUE UNION, AND EL DORADO UNION HIGH SCHOOL DISTRICTS

Response 10-1 The following text changes are made to Mitigation Measure 4.12.5.

- Page 2-38 (Table 2-1, Mitigation Measure 4.12.5) and page 4.12-26 (Mitigation Measure 4.12.5), Mitigation Measure 4.12.5 is revised to read:

"4.12.5 Prior to approval of the Specific Plan~~tentative subdivision maps~~, Rescue Union School District, Buckeye Union School District, El Dorado Union High School District, and the project applicant shall enter into a formal agreement regarding mitigation of project impacts on school facilities. This agreement shall specifically identify mechanisms to construct new school facilities, coordination of timing of new school facilities and build-out of the project site, and construction of the project-proposed elementary school site (if ultimately utilized by the Rescue Union School District)."

Response 10-2 The following changes are made to the text of the Draft EIR:

- Page 4.12-6, Table 4.12-2 is revised to read:

TABLE 4.12-2
SCHOOL DISTRICT ENROLLMENT AND CAPACITY

District/School	Grades	Current Capacity	Current Enrollment	Remaining Capacity (Capacity Shortage)
Rescue School District /a/		**3,080**	**2,751**	**329**
Green Valley	K-6	696*	640	56
Jackson	K-6	522	478	44
Lake Forest	K-6	673*	539	134
Marina Village	7-8	638	608	30
Rescue	K-6	551	486	65
Buckeye School District /b/		**3,496**	**3,451**	**45**
Buckeye	K-6	712	664	48
Brooks	K-6	462	373	89
Blue Oak	K-6	727*	816	(89)
Silva Valley	K-6	711*	699	12
Camerado Springs	7-8	884	509	(15)
Rolling Hills**	7-8		390	
El Dorado Union High School District /c/		~~6,329~~4,342	~~6,027~~5,918	~~302~~(1,576)
El Dorado High School	9-12	~~1,904~~1,460	~~1,794~~1,750	~~110~~(290)

Oak Ridge High School	9-12	~~1,884~~1,492	~~1,839~~1,813	~~45~~(321)
Ponderosa High School	9-12	~~2,144~~1,128	~~2,020~~2,015	~~124~~(887)
~~Ponderado~~ Pondorado Alternative Education Center		~~150~~75	~~90~~77	~~60~~(2)
Independence High School		75	140	(75)
Independent ~~High School~~/Learning Center		~~247~~112	~~284~~123	~~(37)~~(11)

/a/ Rescue Union School District Facility Master Plan

/b/ Buckeye Union School District, School Facility Fee Justification Report & 1996 Ten Year School Facilities Plan

/c/ ~~El Dorado Union High School District Facilities Master Plan 1996/97 - 2000/01~~Wright, 1997

* Capacity is based on a 20% increase in traditional capacity due to space created by using a multi-track schedule.

** Rolling Hills Middle School shares existing facilities on the Camerado Springs site.

SOURCE: Rescue Union School District, 1995; Buckeye Union School District, 1996; ~~El Dorado Union High School District, 1996~~Wright, 1997

- Page 4.12-7, the fourth paragraph is revised to read:

"The El Dorado Union High School District (EDUHSD) office is located in Placerville. EDUHSD includes three comprehensive high schools: El Dorado High School, Oak Ridge High School, and Ponderosa High School. The District also ~~contains two continuation/alternative institutions~~operates three alternative schools (~~Ponderado~~ Pondorado Alternative Education Center, Independence High School, and Independent ~~High School~~/Learning Center) (El Dorado County, 1996b). Including the use of portable classrooms, District capacity for the 1996/97 school year ~~to 6,329~~is 5,918 students (**Table 4.12-2**) (~~El Dorado Union High School District, 1996~~Wright, 1997)."

- Page 5-5, last paragraph, the last sentence is revised to read:

"This alternative would generate 974 fewer students than the proposed project and would be within current capacities of Rescue School District, and Buckeye School District~~,~~. However, this alternative would still result in further impacts to student overcrowding in the El Dorado Union High School District ~~and El Dorado High School District, resulting in a less than significant impact to public schools.~~"

- Page 5-9, fourth paragraph, the third sentence is revised to read:

"This student generation would be beyond the capacities of ~~Rescue Union, and Buckeye Union school districts~~the project area school districts, resulting in a significant impact."

- Page 4.12-7, last paragraph, the fourth sentence is revised to read:

  "Site work drawings for El Dorado Township High School received final approval from the Division of the State Architect on November 4, 1994~~; however, construction has been postponed due to lack of funding.~~ With the passage of a general obligation bond in June 3, 1997, the El Dorado Township High School is scheduled for construction over the next two years, for opening in the 1999/00 school year (Wright, 1997)."

- Page 4.12-8, second paragraph, the fifth sentence is revised to read:

  "~~Currently~~As of July 1, 1997, $~~7,797~~8,288 per new residential development is collected by the County (~~Jackson, 1996~~Wright, 1997). Developments not subject to the County fee are subject to AB 2926 impact fees of $1.84 per square foot for residential and $0.30 per square foot for commercial/industrial development. Currently, over 90 percent of new developments in the County pay AB 2926 fees."

- Page 4.12-26, third paragraph, the second sentence is revised to read:

  "These fees, at the maximum rate of $8,288~~7,797~~ per residential unit for 1,387 units, would contribute approximately $11.5~~10.8~~ million towards construction of new school facilities."

Response 10-3 See Response to Comment 10-2.

Response 10-4 See Response to Comment 10-2.

11

7/21/97

To: The Eldorado County Planning Commission

From: C.A.R.E. (Concerned Area Residents for the Environment)
Concerned Citizens Against Roadway Encroachment.

97 JL [illegible] PM 2:03
PLANNING DEPARTMENT

On page 4.5 of the Promontory E.I.R. it is stated "the extension of Saratoga Way to meet the Silberhorn Extention to Folsom." 11-1

This means the developer must be aware that this will increase the noise for the residents near the freeway, but on page 4.7 the noise monitoring is only done on the assumption of the freeway noise without the extra noise from Saratoga.

This should be a study made to include the projected traffic on Saratoga included in the E.I.R.

Will the developer tell the buyers if the purchase near the road that the noise levels will be very high? The developer has not included any mitigation that the excess traffic will have on Crescent Ridge and Park Village. 11-2

Will the crime rate become very high for the residents near an access road to the freeway?

Here in El Dorado Hills we have been a rural type community. Promoters will change that to a real urban community with all the problems that go with a large city. 11-4

The no project alternative seems to be the only answer to keep El Dorado Hills from becoming another L.A. type situation. 11-5

With the bad air, noise problem and lack of water we will have to take a second look at all the planned projects and try to understand we are creating some bad health problems for people in the future. 11-6

A concern of ours is the dangerous building on steep terrain in 4 and 8 with 667 units that could contribute to the total distruction of El Dorado Hills due to a fire storm. Can this really be mitigated? 11-7

Members of C.A.R.E.
Eleanor Miller
Ruth Hansen
James C Miller

6 KINGS CANYON DR.
DORADO HILLS CA 95762

11. ELEANOR MILLER, RUTH HORNER, AND JAMES MILLER, CONCERNED CITIZENS AGAINST ROADWAY ENCROACHMENT (C.A.R.E)

Response 11-1 The commentor expresses concerns regarding noise and traffic impacts related to the County's planned realignment of Saratoga Way. As indicated in the Draft EIR, the El Dorado Hills Boulevard/U.S. Highway 50 Interchange project (the "Interchange Project") is currently under review by the El Dorado County Department of Transportation. Although no final design of the interchange and the realignment of Saratoga Way has been approved, Figures 4.5-1 and 4.5-9 through 12 of the Draft EIR identify the general configuration currently supported by County staff. The County is currently preparing an EIR to address the environmental effects of the Interchange Project, including noise, air quality, safety and traffic impacts on nearby residents.

The cumulative traffic analysis for the Promontory Draft EIR indicates that, of the 11,857 average daily trips anticipated from the project site, approximately 5,310 (24 percent) of those trips are expected to impact the Interchange Project. Traffic generated by the Promontory site would make up approximately 14 percent of the total cumulative traffic impact to the Interchange Project. As indicated in Mitigation Measures 4.5.6 and 4.5.8 of the Draft EIR, the project applicant would be required to pay the applicable El Dorado Hills Roadway Improvement Fund (RIF) fee, which will fund improvements for the Interchange Project. The Draft EIR also indicates that, although some minor project-generated traffic may use Saratoga Way, it is not anticipated to be a major route for project traffic to access U.S. Highway 50. Rather, the major access routes to U.S. Highway 50 are expected to be Russell Ranch Boulevard and El Dorado Hills Boulevard, as well as the residential streets identified in the Draft EIR's traffic analysis.

The environmental effects of project traffic on the Interchange Project and surrounding area were programmatically evaluated in the Draft EIR. Section 4.6 of the Draft EIR identified a significant and unavoidable impact under "existing plus project" conditions for roadside carbon monoxide concentrations at the Interchange Project site. Section 4.7 of the Draft EIR analyzed increases in traffic noise along El Dorado Hills Boulevard in the vicinity of Saratoga Way, and identified that increased noise levels for residential areas along El Dorado Hills Boulevard would be significant and unavoidable.

As indicated above, the County is currently in the process of analyzing the environmental impacts associated with the Interchange Project. The RIF fees that will be paid in connection with the Promontory project will fund the interchange improvements and the mitigation measures that will be implemented to reduce identified environmental impacts. Thus,

implementation of Mitigation Measures 4.5.6 and 4.5.8 of the Draft EIR would minimize the project's contribution to the environmental effects of the Interchange Project.

Response 11-2 See Response to Comment 11-1.

Response 11-3 See Response to Comment 11-1.

Response 11-4 The commentor expresses concern that the proposed project will change the character of El Dorado Hills from a rural to an urban community. However, as explained in Section 4.2 of the Draft EIR, development of the project site was anticipated by the County General Plan. The proposed Specific Plan area is located within the boundaries of a "Community Region" and is designated "Planned Community" in the General Plan. In addition, the project would be located adjacent to numerous residential development projects which have already been approved, including Ridgeview West, Crown Valley, Rancho Dorado and Russell Ranch.

Response 11-5 The commentor opines that adoption of the "No Project" alternative is the only way to keep El Dorado Hills from becoming another "L.A." As indicated in Response to Comment 11-4; however, urbanization of the project site was anticipated by the County General Plan.

Response 11-6 The environmental effects of County-wide growth, including the development of designated planned communities such as the proposed project, were addressed in the El Dorado County General Plan EIR.

Response 11-7 As described on pages 4.12-23 and 4.12-24 of the Draft EIR, potential wildland fire impacts would be minimized through the implementation of Mitigation Measures 4.12.3a and 4.12.3b. Those measures would require the review and approval of project site development plans by the El Dorado Hills Fire Department, as well as the implementation of an approved fuel modification plan.

El Dorado Hills
Area Planning
Advisory
Committee
1021 Harvard Way
El Dorado Hills, CA 95762

97 JUL 23 11:10:52
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PLANNING DEPARTMENT

1997 Board
John Sorensen
Chairperson
933-3106

Don Sgamba
Vice Chairperson
Project Review
939-1980

Ellison Rumsey
Secretary/Treasurer
933-1240

12

July 22, 1997

Roger Trout
El Dorado County
Planning Department
2850 Fairlane Ct.
Placerville, Ca 95667

Subject: Promontory Specific Plan EIR Comments

Dear Mr. Trout

The EDH Area Planning Advisory Committee (APAC) submits the following comments to the Promontory Specific Plan Draft Environmental Impact Report. These comments were approved by the APAC committee by a 7 to 1 vote.

GENERAL COMMENT: We are very concerned by the number of sections that have items that are noted as "significant and unavoidable" impact with no mitigation measure to reduce the impact to less than significant (14 items out of 40 judged "significant impact") 12-1

APAC's specific comments are listed below and are indexed to table 2-1 numbering system for mitigation measure response.

I Land Use

4.2.1c Add to mitigation measure that road closures be limited in duration to a minimum of (1 hour) 12-2

4.7.1a Request that mitigation measure be modified to include, that construction not start before 7 am and be completed by 5 pm on a daily basis. No construction activity on Sundays. 12-3

4.7.1b Add to the mitigation measure that noise should not exceed 65 db from site during construction. 12-4

II Aesthetics

4.3.3a Include in the mitigation measure that the water storage tank should be screened in a manner also acceptable to the El Dorado Hill Design Review Committee. Utilities should all be underground and CC&R's should prohibit outdoor antennas. 12-5

III Population, Housing and Employment

No comment.

IV Transportation and Circulation

General comment: The EIR should address all off-site connection roads conditions such as slopes, widths, alignment and what speed control devices should be utilized for each impacted road. 12-6

4.5.1 The number 4,000 is high for daily trips on residential streets. A more appropriate number is 3,000. We believe that the top priority in construction of traffic mitigating roads should be the connection of Russell Ranch Road to the East Natoma Street extension. 12-7

4.5.2 Add to mitigation measure that no building permits would be issued if Green Valley Road from EDH Blvd. to Folsom City limits has deteriorated to LOS level F during peak traffic hours. 12-8

4.5.5 This section should include a provision that if signalization at Wilson and EDH Blvd. does not return the LOS to E, no additional building permits will be issued. 12-9

4.5.7b Add to the mitigation measure that the timing of these improvements will be implemented prior to reaching LOS F. 12-10

4.5.9 The bus turnouts should be included in the road improvements for the project during the construction of the improvements. 12-11

4.5.12 If the impact is significant, it must be mitigated in some manner such as alternate routes, new collector streets or an alternate road to Oak Parkway. 12-12

V Air Quality

General Comment: CC&R's should include a prohibition on the use of 2 cycle engines for lawn maintenance equipment. Deed restrictions should also forbid the use of charcoal fired barbecues. 12-13

4.6.8 The project proponent should apply to the city of Folsom for discharge of sewer effluent rather than plan for lifting sewage wastes a substantial elevation, an inevitable source of potential odor escape and worse. 12-14

VI Noise

4.7.1a Modify the mitigation measure so that construction not start before 7 am and be completed by 5 PM on a daily basis. No construction activity on Sundays. 12-15

4.7.2 Include in the mitigation measure that the applicant agree to paying their fair share toward the construction of landscape corridors along local arterial roads , these corridors to be maintained by lighting and landscape districts maintained by home owners associations. 12-16

4.7.4 The number 4,000 is high for daily trips on residential streets. A more appropriate number is 3,000. The decrease in peak hour noise levels would derive from having fewer trips. 12-17

If you have any questions regarding APAC's comments, please feel free to call me at 933-3106 or Norm Rowett, Subcommittee chair at 933-2211. The Promotory Subcommittee also included Velma Gambles, F.J. Leslie, Ellison Rumsey, and Curt Scoville.

No minority report was available as of this writing.

Sincerely,

John Sorensen
APAC Chairperson

cc: Sam Bradley
Mike McDougal
EDH Community Council
Velma Gambles EDHCSD

12. JOHN SORENSON, CHAIRPERSON, EL DORADO HILLS AREA PLANNING ADVISORY COMMITTEE

Response 12-1 There is no requirement that the Draft EIR demonstrate that the proposed project would result in no significant and unavoidable impacts. The provisions of CEQA "are intended to be used in conjunction with discretionary powers granted to a public agency by law in order to achieve the objective of mitigating or avoiding significant effects on the environment when it is feasible to do so" (emphasis added) (Public Resources Code section 21004(a)). Consistent with the legislative intent of CEQA, the Draft EIR identifies significant impacts of the proposed project and provides mitigation for such impacts where feasible.

Response 12-2 Limiting road closures to one hour may be too restrictive during construction activities. However, the following text change is made to the Draft EIR.

- Page 2-1 (Table 2-1, Mitigation Measure 4.2.1c), and page 4.2-21 (Mitigation Measure 4.2.1c), the following bullet is added to Mitigation Measure 4.2.1c:

  "Roadway closure shall not occur during the a.m. and p.m. peak-hour traffic periods."

Response 12-3 The proposed modifications to Mitigation Measure 4.7.1a would not further reduce the overall construction noise impacts identified in Impact 4.7.1. Thus, no changes are made to Mitigation Measure 4.7.1a.

Response 12-4 Implementation of the proposed modification to Mitigation Measure 4.7.1b (i.e., requiring construction noise not exceed 65 dBA) would not be feasible. As identified on pages 4.7-9 through 4.7-11 of the Draft EIR, construction vehicles and equipment are anticipated to generate noise levels of upwards of 89 dBA, L_{eq}, depending on the topography and distance to the construction activity. Although mitigation measures are identified that would reduce construction noise impacts on adjacent residents, the noise impact is considered significant and unavoidable.

Response 12-5 The following changes are made to the text of the Draft EIR.

- Page 2-12 (Impact 4.3.1), page 4.3-17 (Impact 4.3.1), page 6-8, the following mitigation measure is added:

"4.3.1f Project Design Guidelines shall include standards on the placement, height, and general visibility of outdoor antennas and satellite dishes throughout the project site."

- Page 2-12 (Mitigation Measure 4.3.3a), page 4.3-18 (Mitigation Measure 4.3.3a), page 6-8 (Mitigation Measure), the following text changes are made to Mitigation Measure 4.3.3a:

"4.3.3a Prior to final water and sewer system approval, sewer and water improvement plans shall include details for screening sewer lift stations and the two million gallon water storage tank in a manner acceptable to the El Dorado Irrigation District. The screening details shall also be submitted to the El Dorado Hills Design Review Committee for review. Methods of screening may include, but are not limited to, the following:

1. Architectural design of facilities to blend with the surrounding natural features.
2. Screen facilities with native landscaping.
3. Place facilities partially or completely underground."

Response 12-6 See Response to Comment 7-1.

Response 12-7 The threshold of 4,000 vehicles per day is based on the current *Design and Improvement Standards Manual*, County of El Dorado, Revised May 18, 1990. This threshold has been applied to other projects approved in El Dorado Hills including, most recently, the Ridgeview West project adjacent to the proposed Promontory project. Any changes to the threshold would need to be reviewed and accepted by the County Board of Supervisors as a revised standard.

As described in Response to Comment 7-1, a new mitigation measure will be added to the EIR which will restrict access to local residential streets to Village 6 (Phase 1) until additional project roadway and accesses are built (see Response to Comment 7-1).

Response 12-8 El Dorado County should determine whether this modification to Mitigation Measure 4.5.2 is appropriate. However, the County should understand that the Green Valley Road widening is tied to new building permits through the RIF program and the proposed modification to the mitigation measure would effectively place a moratorium on any development in the Promontory since this section of Green Valley Road currently operates at level of service "F". The County General Plan analyzed the traffic impact to Green Valley Road

and it was determined that the proposed improvements in the 20 year Capital Improvement Program (CIP) would be adequate to support the projected traffic. Because the RIF fee is collected at the building permit stage, a moratorium on building permits would eliminate funding for the necessary improvements in the 20 year CIP.

Response 12-9 According to the El Dorado County Department of Transportation staff, the operation of the El Dorado Hills Boulevard/Wilson Boulevard intersection will be analyzed in the traffic impact studies prepared for each tentative map submitted for the Promontory project. As a requirement of these studies consistent with the Policy 3.5.1.1 of the El Dorado County General Plan, the level of service at this intersection shall be maintained at "E" or better.

Response 12-10 The timing of improvements identified in Mitigation Measure 4.5.7b will be determined by the El Dorado County Department of Transportation based on the findings of the subsequent traffic studies that will be required for each tentative map submitted for the Promontory project. The commentor is also referred to Response to Comment 47-9.

Response 12-11 According to the El Dorado County Department of Transportation staff, Mitigation Measure 4.5.9 will be implemented as a condition of approval. This approach has been used for similar specific plans such as Carson Creek.

Response 12-12 See Response to Comment 12-8, 47-9, and 47-10.

Response 12-13 The air quality analysis in the Draft EIR (Section 4.6) was programmatic and identified anticipated substantial stationary and mobile emission amounts and sources from project development. The air quality analysis did not evaluate stationary emission sources from lawn maintenance equipment or barbecues. The El Dorado County Air Pollution Control District currently has no emission estimates or standards for evaluating lawn maintenance equipment or barbecues, while the California Air Resources Board (ARB) only has emission estimates and standards for lawn maintenance equipment. The ARB estimated that County-wide emissions from lawn maintenance equipment consist of 15.96 tons of reactive organic gases (ROG), 106.8 tons of carbon monoxide (CO), 0.40 tons of nitrogen oxides (No_x), and 0.30 tons of particulate matter (PM_{10}) annually (ARB, 1995).

As identified on page 4.6-16 of the Draft EIR, the proposed project alone (not including considerations of barbecues or lawn maintenance equipment) would annually generate 34.5 tons of ROG, 354.2 tons of CO, 47.6 tons of No_x, and 206.4 tons of PM_{10}. Thus, the emission contributions of project lawn maintenance equipment and barbecues are considered minor.

The proposed project would be required to comply to the El Dorado Hills Community Services District's CC&Rs. Implementation of the commentor's proposed mitigation measures would likely be infeasible to implement and would not reduce any of the identified air quality impacts.

Response 12-14 The project applicant is currently further exploring the potential of obtaining wastewater service from the City of Folsom rather than the El Dorado Irrigation District (EID). However, the proposed project still assumes service would be provided by EID.

Response 12-15 See Response to Comment 12-3.

Response 12-16 The development of landscape corridors along local arterial roads (e.g., Green Valley Road and El Dorado Hills Boulevard) could potentially reduce noise levels along these roadways. The establishment of landscape corridors could occur concurrently with the future roadway widening of El Dorado Hills Boulevard and Green Valley Road. However, there is no program such as a lighting and landscaping district for the project to contribute funding to and is considered infeasible. In addition, implementation of the commentor's proposed mitigation would not necessarily reduce Impact 4.7.2 to a level of less than significant.

Response 12-17 As discussed in Response to Comment 7-1, the 4,000 vehicles per day is a residential traffic volume standard set forth by the County. Restricting the residential roadways analyzed in Impact 4.7.4 to 3,000 vehicles per day may reduce noise levels along those streets, but would result in increased traffic and noise impacts on other roadways. Thus, implementation of the commentor's mitigation measure is considered infeasible.

EL DORADO TRANSIT

P.O. BOX 286
PLACERVILLE, CA 95667-0286
(916) 642-5383
FAX (916) 622-BUSS
(2877)

RECEIVED
PLANNING DEPARTMENT
JUL 23 11 11:

July 22, 1997

Roger Trout, Senior Planner
El Dorado County Planning Department
2850 Fairlane Court
Placerville, CA 95667

Re: SP94-03, The Promontory
Russell Ranch Ltd. Partnership/Palisades Properties Inc./Cooper Thorne and Associates, Inc.

Dear Roger,

The El Dorado County Transit Authority (EDCTA) appreciates the opportunity to review and comment on The Promontory specific plan project, as identified by the application numbers above. This letter is in response to the Initial Consultation notice dated June 23, 1997, as well as the Notice of Completion of a Draft Environmental Impact Report (DEIR), received June 16, 1997.

The EDCTA has considered the potential impact of this project in relation to transit facilities and services, and has determined the following conditions of approval are applicable to the proposed project. 13-1

- To serve the Village Center area and surrounding high density land uses, provide and construct a minimum of two (2) bus turnouts and bus shelter spaces on Russell Ranch Boulevard, in the area shown for apartments and office/commercial development. There should be a bus turnout/bus shelter area located and constructed on each side of the roadway, i.e., one located for the northbound lanes at the Village Green, and one located for the southbound lanes nearly opposite the Village Green location, near the intersection. (Ref. Figure 6, Village Center Illustrative Concept, The Promontory Specific Plan).

The conditions of approval should require that the locations for the transit related improvements be shown on the final subdivision maps, and be included in any development agreement.

As the result of reviewing the DEIR, there are also two transit related issues that need to be addressed regarding this project, that are contained in Mitigation Measure 4.5.9: 13-2

1) First, the statement is made that "Bus turnouts and transit shelters will be placed along the proposed community and village center collectors, as well as the village center." Information reviewed for this project indicates that the streets to the residential villages would have gated controls, and it is unlikely that any future transit service route would be extended into those residential areas. Therefore, bus turnouts, bus shelters or bus stops would not be required for *community collectors.* There may be some potential for bus stops on the *village center collector*, which is shown as a loop on the east side of Russell Ranch Boulevard, and the EDCTA reserves the option to require bus stop locations at the entrances to the "single family attached" locations, the "tennis club" location, the "community park" location and the "small lot single family" locations.

13-2 CONT.

2) Second, the statement is made that "The project applicant's fair share cost shall be determined by the El Dorado County DOT. Construction of these improvements should occur when transit service is extended to the project." Currently, there is no in-lieu fee structure for transit related improvements by developers that has been adopted by the EDCTA or DOT, and therefore this option is not available to the project applicant. It is also impractical (and results in higher construction costs for the applicant) to construct bus turnouts and bus shelter areas at some unknown future time. Therefore, the statement that improvements be constructed "when transit service is extended to the project" is unacceptable to the EDCTA, and the project applicant shall be required to construct the transit related improvements at the time of roadway construction for Russell Ranch Boulevard.

13-3

If you have any questions or comments regarding this response, please contact the EDCTA at your convenience.

Sincerely,

Mindy Jackson

Mindy Jackson
Transit Director

dpsp9403.

13. MINDY JACKSON, TRANSIT DIRECTOR, EL DORADO TRANSIT

Response 13-1 Mitigation Measure 4.5.9 will be modified to reflect the input of El Dorado Transit regarding specific locations for transit improvements.

- Page 2-18 (Mitigation Measure 4.5.9) and page 4.5-36 (Mitigation Measure 4.5.9), Mitigation Measure 4.5.9 is revised to read:

  "4.5.9 The project applicant shall be responsible for their fair-share cost of bus turnouts and transit shelters located within the project site. Bus turnouts and transit shelters will be placed along the proposed Russell Ranch Boulevard, community and village center collectors, as well as the village center. The specific location of these facilities shall be determined jointly by the El Dorado County DOT and El Dorado Transit Authority. The project applicant's fair-share cost shall be determined by the El Dorado County DOT. Construction of these improvements should occur when transit service is extended to the project."

Response 13-2 The project description in the Draft EIR does not mention the use of gated controls. Nevertheless, Mitigation Measure 4.5.9 will be modified to reflect that gated streets, if constructed, do not require transit facilities.

Response 13-3 See Response to Comment 12-11.

14

EL DORADO HILLS TOWNHOUSES ASSOCIATION
3941 PARK DRIVE, SUITE 20-110
EL DORADO HILLS, CA 95762

97 JUL 23 AM 10:40
RECEIVED
PLANNING DEPARTMENT

July 22, 1997

El Dorado County Planning Department
Roger Trout, Senior Planner
2850 Fairlane Court
Placerville, CA 95667

Subject: Draft Environmental Impact Report
The Promontory Specific Plan

Dear Mr. Trout:

The Board of Directors for El Dorado Hills Townhouses Association represents 25 unit owners of the townhouses located in Park Village. The Draft Environmental Impact Report (Draft EIR) is based on false and misleading statements, especially in the "Transportation and Circulation" section. We adamantly demand corrections, especially where there is dependence upon false statements for mitigation purposes.

It is inaccurate to state that the "The El Dorado County General Plan proposed circulation system for the year 2015 contains the planned widening of existing roads or the construction of new roads listed below and also shown in Figure 4.5-1. " (Pg. 4.5-16) 14-1

- "Reconstructing the El Dorado Hills Boulevard interchange with U.S. Highway 50 to include a new two-lane westbound loop off- ramp, a new two-lane eastbound diagonal off-ramp, and one additional lane on the existing eastbound loop off-ramp, eastbound diagonal on-ramp, and westbound diagonal on-ramp. Reconstruction would also require the realignment of Saratoga Way and the elimination of the existing westbound diagonal off-ramp." (Pg 4.5-19)

El Dorado County Department of Transportation (DOT), as well as contracted traffic consultants, are well aware of the fact that the final design of the El Dorado Hills Boulevard / U.S. Highway 50 interchange has not been decided. Due to public outcry against the design alternative shown in figure 4.5-1, the Board of Supervisors did not approve the project negative declaration for the interchange project. DOT staff has indicated in a community meeting that they will recommend an EIR on the interchange project.

If it is true that "access to the project site will be provided from existing and new roads as shown in Figure 4.5-1," we are appalled by the blatant lack of discussion of the significant impact of noise, traffic and safety on the townhouse residents as well as on Park Village and Crescent Ridge residents. Specifically, a significant amount of Sacramento bound commute traffic will travel southward in an attempt to access highway 50 via Wilson Way as it is connected to Silberhorn/ Saratoga Way or via Russell Ranch Road. There are some figures in the Draft EIR 14-2

which specifically show the southern most portion of the Promontory actually crossing Silberhorn/ Saratoga Way (see figure 4.5-1 in the Draft EIR). 14-2 CONT.

If Saratoga Way is "realigned " on the east side of the townhomes in the manner shown on figure 4.5-1, the county experts (i.e. El Dorado County also contracts with Fehr & Peers) indicate that 15,000 cars per day will utilize Saratoga Way. Since the Promontory Draft EIR refers to the realignment as if it were a fact, the project must be required to address the traffic impacts as a result of cars traveling within 20 to 30 feet of the back doors of our townhomes. Saratoga Way will be a collector road which deserves the same emphasis of study and mitigation as any other of the collector roads discussed in the Draft EIR. 14-3

In the noise section, it is stated that "no feasible mitigation has been identified for significant impacts to the following residential roadways." At least six residential streets are listed, but Saratoga Way is not even addressed. There is concern for the proposed Russell Ranch Road passing within 100 feet from residents of the Shadowfax subdivision. What about 15,000 cars per day passing within 20 to 30 feet of our back doors on Saratoga Way? 14-4

The Promontory traffic will utilize Saratoga Way to access the U.S. Highway 50 Interchange at El Dorado Hills Boulevard which will cause a significant impact in terms of traffic, noise, air pollution, safety, and on human beings. We are well aware of the fact that the Promontory traffic will significantly impact residents near Saratoga Way. The Draft EIR shows total disregard for the oldest village in El Dorado Hills, Park Village. It should therefore be rejected and a simple explanation for the treatment should not be accepted. 14-5

The Promontory should not be allowed until after the Russell Ranch/ U.S. Highway 50 Interchange is constructed in order to avoid or mitigate significant environmental impacts. It will probably be stated that the project has no influence over the City of Folsom. We do not consider the lack of influence on the City of Folsom as justification for creating safety hazards on current roadways. If the project cannot wait for an appropriate roadway system, it should be redesigned to include only low density residential and twice as much open space area. 14-6

Sincerely,

Joni Royal,
President

Hilary Krogh,
Vice President

Bobbie James,
Treasurer

El Dorado Hills Townhouses Association

14. JONI ROYAL, HILARY KROGH, AND BOBBIE JAMES, EL DORADO HILLS TOWNHOUSES ASSOCIATION

Response 14-1 See Response to Comment 11-1.

Response 14-2 See Response to Comment 11-1.

Response 14-3 See Response to Comment 11-1.

Response 14-4 See Response to Comment 11-1.

Response 14-5 See Response to Comment 11-1.

Response 14-6 See Response to Comment 11-1. Pursuant to CEQA Guidelines section 15091(a)(2) and (3), a project may be approved notwithstanding its potentially significant environmental impacts where the proposed mitigation measures are either: 1) infeasible; or 2) within the responsibility and jurisdiction of another public agency.

15

Citizens Against Roadway Encroachment
C.A.R.E.

97 JUL 23 AM 10:16
PLANNING DEPARTMENT

July 22, 1997

El Dorado County Planning Department
Roger Trout, Senior Planner
2850 Fairlane Court
Placerville, CA 95667

RE: Draft Environmental Impact Report
Promontory Specific Plan

The increased traffic volumes through existing neighborhoods produce significant safety, noise, and air quality impacts which cannot be mitigated. The report needs to address these impacts specifically upon residential areas. The analysis is flawed since it specifically addresses mitigation for certain roadways while ignoring the significant safety, noise, air quality, and traffic circulation impacts on residents nearby Saratoga Way. 15-1

C.A.R.E. challenges the assertion that contribution to Road Impact fees (RIF) is adequate to alleviate significant impacts on adjacent neighborhood roadways. The description of the El Dorado Hills Boulevard/U.S. Highway 50 Interchange design does not mitigate traffic impacts for residents living nearby Saratoga Way. In fact, the design causes traffic circulation, noise, air quality, and safety concerns for nearby residents. 15-2

The interchange design which is described in the Draft EIR on page 4.5-19 is not an acceptable design. Over 300 people signed a petition opposing the type of design described in the Draft EIR and as shown in figure 4.5-1; and in support of another interchange design which improves traffic circulation without harming local residents. The statement (on page 4.5-1.6) that "The El Dorado County General Plan proposed circulation system for the year 2015 contains ... the construction of new roads listed below and also shown in Figure 4.5-1" is inaccurate since it describes (and shows in Figure 4.5-1) a specific interchange design which would "require the realignment of Saratoga Way and the elimination of the existing westbound diagonal off-ramp." The El Dorado County Board of Supervisors did not approve the negative declaration on this design. The implication is that Figure 4.5-1 is the General Plan Circulation map, but it is not. 15-3

Traffic generated by the project is to the extent that it presents a serious safety concern for existing neighborhoods. Until Russell Ranch Road connects to a new interchange, there 15-4

will be cars tracking through neighborhoods. The traffic studies on local street should occur during the current Draft EIR phase and not "during the review of tentative maps for each phase of Promontory Specific Plan" (page 4.5-28). The project should not be allowed until the Russell Ranch/U.S. Highway 50 Interchange is constructed. The Draft EIR states that " All project traffic was assigned to local residential streets in El Dorado Hills ...because new roadways in the City of Folsom are not yet constructed." El Dorado County should not approve the project until the appropriate roadways are constructed.

15-4
CONT.

Please mail all correspondence to: 725 30th Street, Sacramento, CA 95816

Sincerely,

Kim Ryan

Robert L. Beegle

Representatives for C.A.R.E.

15. KIM RYAN AND ROBERT L. BEEGLE, C.A.R.E.

Response 15-1 See Response to Comment 7-1 and 11-1.

Response 15-2 See Response to Comment 11-1.

Response 15-3 See Response to Comment 11-1.

Response 15-4 See Response to Comment 7-1, 11-1 and 14-6.

16

July 22, 1997

Mr. Doug Noble, Chairman
El Dorado County Planning Commission
2850 Fairlane Court
Placerville, CA 95667

RE: Promontory EIR, Public Comment

Dear Mr. Noble:

The development know as the Promontory is under reviewed by the planning committee. The EIR is open for public comment until July 31, 1997. I would like to express my concern as well as the concern of my neighbors and asked that the EIR consultants respond to our suggestions for traffic mitigation and safety. A similar request is being sent to the Department of Transportation for them to review the existing traffic conditions as it relates to safety.

The current plan proposes to use Gillette Drive as a primary traffic route to access Area 6 of the subdivision. Once in the subdivision traffic could access Folsom creating an access route form Folsom to El Dorado Hills. The EIR study shows the volume of traffic on Ridgeview Drive being increased by approximately 300%. It was projected that up to 20% of the estimated traffic volume could be through traffic.

The concern of the residents on Ridgeview Drive stems primarily from a safety concern of the children as well as all the people & pets residing in the area. Ridgeview Drive is already an unsafe street. Traffic speeds on the street routinely exceeds 40 MPH and would not be an exaggeration to say it exceeds 50 MPH at times. The section of Ridgeview Drive between Gillette Drive and Burnett contains a gradient of 15% on a sharp corner with very limited visibility, estimated under 100'. There has already been one traffic accident involving a vehicle speeding which failed to negotiate the corner and the vehicle rolled. It came to a stop partially on the driveway of a resident who has three small children. Numerous complaints have been made to the office of the Department of Transportation and no actions has been taken. The speed limit in a residential neighborhood is 25 MPH and there is not any traffic enforcement anywhere in the area. 16-1

The volume of traffic which is being proposed is going to aggravate an already dangerous condition. Ridgeview Drive is a bus route for school children. The EIR shows the traffic increase will primarily be during commuter hours which is the same time school children are in the street. It is unacceptable to the residents to have the traffic volume triple partially when there are children present.

The residents would like to propose some suggestions that would mitigate some of the traffic problem and alleviate much of the concern. We would like to find a way to encourage the traffic flow down Gillette as opposed to Ridgeview. Ridgeview Drive is a heavily populated street while there are no homes fronting Gillette Drive. It makes sense from a safety standpoint to use Gillette as the main traffic corridor because Gillette Drive has a much milder gradient than Ridgeview Drive, no visibility problems and no residents. 16-2

The answer is quite simple. Stop signs need to be installed at the three cross streets to Ridgeview at Moonstone, Saffire Way and Burnett. There is very poor visibility from Moonstone when looking up Ridgeview Drive when attempting to exit onto Ridgeview Drive. A stop is very much needed here because of the visibility and current speeds regardless of the proposed traffic volume or speeds. Additional stop signs at Saffire Way and Burnett would reduce the speeds of the traffic and also create enough of an inconvenience to move the traffic flow to Gillette Drive.

We have been told by the Department of transportation that stop signs are not intended to be used as speed control. Our concern is safety and stop signs are intended to provide for safe streets. Stop signs have been used very effectively in Briggs Ranch in Folsom and various parts of Sacramento county to control traffic speeds and improve safety.

Alternatives to installing stop signs would be installing speed humps or undulations. Sacramento also uses speed humps effectively particularly in neighborhoods where there are schools or numerous children and school bus routes. Another alternative would be to block traffic from going down Ridgeview at Gillette by installing a barrier to be used by emergency vehicles only. We would like to have all three of these suggestion addressed by the EIR consultants.

The neighbors can not stress enough that the safety of the residents and children is already questionable. The increase traffic flow will be a detriment to all the residents. The owners of the Promontory have suggested to us at neighborhood meetings that they would be willing to create a gated community with their project by installing a gate at the entrance to their project at Gillette Drive and another at a point in which it exits the area in Folsom. We applaud this idea because this will also help reduce that 20% of the traffic which would be through traffic only. 16-3

Sincerely,

Tim Crane
2981 Ridgeview Drive
El Dorado Hills, CA 95762

16. TIM CRANE, RESIDENT

Response 16-1 See Response to Comment 7-1 and 7-3 through 7-13.

Response 16-2 See Response to Comment 7-1 and 7-3 through 7-13.

Response 16-3 See Response to Comment 7-1 and 7-3 through 7-13. The project description in the Draft EIR does not mention the use of gated controls. If gated controls are subsequently proposed for a particular phase or tentative map, then the traffic impacts associated with the use of a gate would be addressed in the subsequent traffic studies that will be required for each tentative map submitted for the Promontory project pursuant to Mitigation Measure 4.5.1a of the Draft EIR.

17

97 JUL 25 PM 12:03

EL DORADO COUNTY
PLANNING DEPARTMENT

July 22, 1997

Mr. Doug Noble, Chairman
El Dorado County Planning Commission
2850 Fairlane Court
Placerville, CA 95667

RE: Promontory EIR, Public Comment

Dear Mr. Noble:

Mr. Crane has sent a letter to you outlining some of the concerns we have regarding the current traffic conditions that exist on Ridgeview Drive. These conditions also exist on some of the other streets such as Burnett and Governors. 17-1

Attached is a copy of the letter he sent to you. I am in support of his opinion.

Sincerely,

Richard Dahmen
Victoria K. Dahmen
3039 Ridgeview Dr
E.D.H 95762
933-5517

17. RICHARD AND VICTORIA SALMERI, RESIDENTS

Response 17-1 See Response to Comment 7-1 and 7-3 through 7-13.

18

97 JUL 23 P 12:07
RECEIVED
PLANNING DEPARTMENT

July 22, 1997

Mr. Doug Noble, Chairman
El Dorado County Planning Commission
2850 Fairlane Court
Placerville, CA 95667

RE: Promontory EIR, Public Comment

Dear Mr. Noble:

Mr. Crane has sent a letter to you outlining some of the concerns we have regarding the current traffic conditions that exist on Ridgeview Drive. These conditions also exist on some of the other streets such as Burnett and Governors. 18-1

Attached is a copy of the letter he sent to you. I am in support of his opinion.

Sincerely,

James A. and Patty J. Mason • 1125 Turquoise Way
El Dorado Hills, CA • 95762

18. JAMES MILLER AND PATTY J. MASON, RESIDENTS

Response 18-1 See Response to Comment 7-1 and 7-3 through 7-13.

19

97 JUL 24 PM 12:02

RECEIVED
PLANNING DEPARTMENT

July 22, 1997

Mr. Doug Noble, Chairman
El Dorado County Planning Commission
2850 Fairlane Court
Placerville, CA 95667

RE: Promontory EIR, Public Comment

Dear Mr. Noble:

Mr. Crane has sent a letter to you outlining some of the concerns we have regarding the current traffic conditions that exist on Ridgeview Drive. These conditions also exist on some of the other streets such as Burnett and Governors. 19-1

Attached is a copy of the letter he sent to you. I am in support of his opinion.

Sincerely, Nora Bertotti

Nora Bertotti
1005 Cypriene Ct.
El Dorado Hills, CA
95762
916 933-4304

19. NORA BERTOTTI, RESIDENT

Response 19-1 See Response to Comment 7-1 and 7-3 through 7-13.

20

97 JUL 25 PM 12:05
RECEIVED
PLANNING DEPARTMENT

July 22, 1997

Mr. Doug Noble, Chairman
El Dorado County Planning Commission
2850 Fairlane Court
Placerville, CA 95667

RE: Promontory EIR, Public Comment

Dear Mr. Noble:

Mr. Crane has sent a letter to you outlining some of the concerns we have regarding the current traffic conditions that exist on Ridgeview Drive. These conditions also exist on some of the other streets such as Burnett and Governors. 20-1

Attached is a copy of the letter he sent to you. I am in support of his opinion.

Sincerely,

(UNREADABLE)

20. ALICE AND WILLIAM NORBERG, RESIDENTS

Response 20-1 See Response to Comment 7-1 and 7-3 through 7-13.

21

97 JUL 29 AM 10:52
RECEIVED
PLANNING DEPARTMENT

July 22, 1997

Mr. Doug Noble, Chairman
El Dorado County Planning Commission
2850 Fairlane Court
Placerville, CA 95667

RE: Promontory EIR, Public Comment

Dear Mr. Noble:

Mr. Crane has sent a letter to you outlining some of the concerns we have regarding the current traffic conditions that exist on Ridgeview Drive. These conditions also exist on some of the other streets such as Burnett and Governors. 21-1

Attached is a copy of the letter he sent to you. I am in support of his opinion.

Sincerely,

Nancy Springer Murray

Richard Plourde

2939 RIDGEVIEW DR.
EL DORADO HILLS CA 95762

21. JOANNE SPRINGER MURRAY , RESIDENT

Response 21-1 See Response to Comment 7-1 and 7-3 through 7-13.

22

97 JUL 23 PM 12:06
RECEIVED
PLANNING DEPARTMENT

July 22, 1997

Mr. Doug Noble, Chairman
El Dorado County Planning Commission
2850 Fairlane Court
Placerville, CA 95667

RE: Promontory EIR, Public Comment

Dear Mr. Noble:

Mr. Crane has sent a letter to you outlining some of the concerns we have regarding the current traffic conditions that exist on Ridgeview Drive. These conditions also exist on some of the other streets such as Burnett and Governors. 22-1

Attached is a copy of the letter he sent to you. I am in support of his opinion.

Sincerely,

Bradley P. Nystrom
Cindy Deloach Nystrom

3091 Ridgeview Dr. El Dorado Hills.
(916) 939-1503

22. JENNIFER NYSTROM, RESIDENT

Response 22-1 See Response to Comment 7-1 and 7-3 through 7-13.

23

July 22, 1997

Mr. Doug Noble, Chairman
El Dorado County Planning Commission
2850 Fairlane Court
Placerville, CA 95667

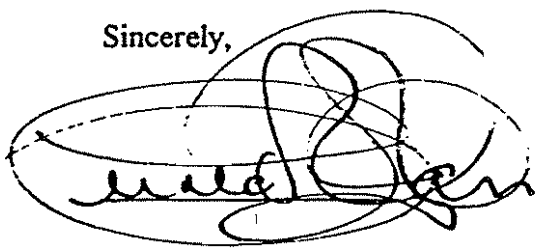
RE: Promontory EIR, Public Comment

Dear Mr. Noble:

Mr. Crane has sent a letter to you outlining some of the concerns we have regarding the current traffic conditions that exist on Ridgeview Drive. These conditions also exist on some of the other streets such as Burnett and Governors. 23-1

Attached is a copy of the letter he sent to you. I am in partial support of his opinion.

Sincerely,



Ph.D

_____

_____

_____

23. GERALD R. OGDEN, PH.D., RESIDENT

Response 23-1 See Response to Comment 7-1 and 7-3 through 7-13.

24

July 23, 199-

Doug Noble
El Dorado Planning Commission
2850 Fairlane
Placerville, Ct 95667

91- 8:12:07
PLANNING DEPARTMENT

Re: Promontory EIR, Public Comment

Sir;

The enclosed letter submitted by Jim Keane and endorsed in part by myself addresses concerns by residents living on lower Ridgeview Dr, but tends to ignore potential problems and the consequences associated with any propose To divert traffic from Ridgeview Dr onto a route through Olson and Gillette streets. Thus into Promontory subdivision

As a resident on upper Ridgeview Dr., at a point where Gillette intersects with Ridgeview Dr, and as a driver using the Olson/Gillette route to enter Ridgeview I can identify serious problems associated with any propose to using Olson/Gillette to enter Promontory. Permit me to list a few.

(1)

1) Danger to children will be increased on Ridgeview, but will be magnified several times over if traffic is increased on Olson. The street is narrow, the incline is not insignificant and there are curves. On-street parking is permitted where the street becomes more narrow. School buses travel the Gillette/Olson Route as well, and because the housing on Olson is of greater density more children seem to be present than along Ridgeview. 24-1

2) The intersection at Olson/Gillette is hazardous due to the rise as Olson passes Gillette which obstructs the view of on-coming traffic. On-coming traffic on Gillette is also obscured at this intersection due to the terrain. 24-2

3) The grade on Gillette may not appear to equal that of Ridgeview but is virtually the same which results in problems associated with Ridgeview Rd. 24-3

4). Mr. Crane is remiss in not presuming development will not take place in Gillette - which will compound traffic problems and create dangerous traffic problems. 24-4

5) Gillette is a Street and not an Avenue with all that implies. 24-5

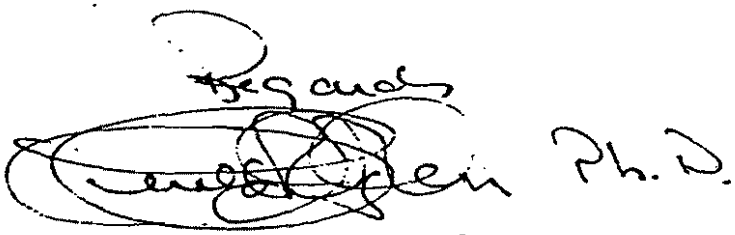
6) It is my understanding that No one has adequately addressed the possibility that the proposed gate where Gillette enters Promontory will NOT create a considerable back-up on Gillette which might extend into Ridgeview Dr, thus impacting traffic and causing dangerous situations — especially when drivers come roaring up the steep incline on Ridgeview Dr. 24-6

Idling vehicles will also cause a decline in air quality in the immediate vicinity. 24-7

7) A final consideration are the noise levels. Autos shift or are shifted into lower gears (second gear) as drivers ascend Ridgeview and Gillette. Noise is a Real problem as engines rev. Truck Noise is significant. This is a nuisance that if it cannot be prevented can at least be controlled through intelligent planning. 24-8

Thank you for considering my comments.

Regards



Ph.D.

GERALD R. OGDEN
3102 Ridgeview Dr
El Dorado Hills, CA
95762-4342
(916) 939-0808

24. GERALD R. OGDEN, PH.D., RESIDENT

Response 24-1 See Response to Comment 7-1 and 7-3 through 7-13.

Response 24-2 See Response to Comment 7-1 and 7-3 through 7-13.

Response 24-3 See Response to Comment 7-1 and 7-3 through 7-13.

Response 24-4 See Response to Comment 7-1 and 7-3 through 7-13.

Response 24-5 See Response to Comment 7-1 and 7-3 through 7-13.

Response 24-6 The project description in the Draft EIR does not mention the use of gated controls. If gated controls are subsequently proposed for a particular phase or tentative map, then the traffic impacts associated with the use of a gate would be addressed in the subsequent traffic studies that will be required for each tentative map submitted for the Promontory project pursuant to Mitigation Measure 4.5.1a of the Draft EIR.

Response 24-7 As discussed in Response to Comment 24-6, the proposed project does not incorporate gated controls to the project site. However, even if it did, vehicles waiting for a project access gate to open would not create a carbon monoxide "hot spot" because of the relatively low traffic volumes and because vehicles likely would not be idling for a extended period of time.

Response 24-8 The commentor is correct that the noise generated by some vehicles "shifting" into lower gears along Ridgeview Drive and Gillett Drive may occasionally exceed estimated noise levels identified on page 4.7-20 of the Draft EIR, depending on the vehicle type. Since no noise monitoring of Ridgeview Drive and Gillett Drive has been performed, the extent of such occasional noise is currently unknown. As discussed in Impact 4.7.4, implementation of Mitigation Measure 4.5.1a (4,000 average daily trip restriction) would reduce significant traffic noise impacts on Ridgeview Drive. (See also Mitigation Measure 4.5.1a, as set forth in Response to Comment 7-1.) However, noise impacts to Gillett Drive are considered significant and unavoidable.

25

PARKVIEW HEIGHTS COALITION

3031 Ridgeview Drive · El Dorado Hills, California 95762 · (916) 933-6426

97 JUL 29 AM 10:26

RECEIVED
PLANNING DEPARTMENT

Date: July 24, 1997

To: Mr. Roger Trout, Project Manager
El Dorado County Planning Department
2850 Fairlane Court
Placerville, CA 95667

Subject: **Comments on the Promontory Specific Plan Draft EIR (SCH #94112056)**

The following comments for the subject project are submitted on behalf of the Parkview Heights Coalition to supplement our earlier general comments presented to the El Dorado County Planning Commission on July 10, 1997, which generally expressed concerns over additional traffic volumes at Gillett Drive and Ridgeview Drive.

SPECIFIC COMMENTS

INTRODUCTION

Page 1-1 (Type of EIR): The DEIR states that the EIR is prepared as a Program EIR. If the DEIR is truly a programmatic document, does El Dorado County intend to circulate a Project EIR for public comment for the Promontory Specific Plan and for what aspects of the Promontory Specific Plan? Have any tentative maps for Promontory already been submitted to El Dorado County? 25-1

Page 1-3 (Mitigation Monitoring and Reporting Program): The DEIR states that the lead agency must adopt a specific "reporting and monitoring" program in order to mitigate or avoid significant impacts. The DEIR is correct by stating that "reporting and monitoring" program is not required in the EIR, but including the mitigation measures is a common practice to facilitate the development of a monitoring and reporting program to be adopted by the County. The mitigation measures identified in the EIR requiring a "reporting and monitoring" program is inadequate in regards to local residential street traffic. Does the County only intend to conduct mitigation monitoring when a tentative map is being submitted by the developer for the Promontory Project? What is the County proposing as mitigation monitoring program for the Promontory Development to protect local residential streets from excessive daily average traffic volumes? 25-2

EXECUTIVE SUMMARY

Page 2-4 (Transportation and Circulation Controversy): The DEIR identifies the areas of controversy regarding transportation and circulation by the California Department of 25-3

Transportation (Caltrans). Several private citizens and the El Dorado Hills Community Services District (EDHCSD) responded to the Notice of Preparation (NOP) and expressed concerns over traffic impact on streets through existing neighborhoods. EDHCSD requested that a comprehensive traffic impact be conducted to ensure adequate traffic protection to current residents. Controversies and issues raised regarding local traffic impacts to streets through existing neighborhoods should be identified and added in the DEIR. 25-3 CONT

Page 2-14 (Transportation and Circulation Mitigation): The DEIR identifies that Olson Lane and Ridgeview Drive will exceed the 4,000 ADT and states that traffic circulation measures will be implemented if any local streets experience a total daily volume in excess of 4,000 ADT. The DEIR gives a general description of possible traffic mitigation measures ranging from additional connections to other local residential streets to new roads through Crown Valley, Ridgeview Village Unit 3, and or Ridgeview Village Unit 9. These traffic circulation measures in the DEIR are inadequate and represent additional potential impacts to existing local residential streets not identified in the DEIR. Refer to the Environmental Analysis Section comments for a complete description of the transportation mitigation concerns. 25-4

PROJECT DESCRIPTION

Page 3-5 (Project Objectives): The DEIR states a proposed project objective to develop and maintain safe and efficient transportation and circulation facilities to sufficiently serve the project site. The DEIR should state that "the transportation and circulation facilities to sufficiently serve the project site while minimizing to the extent possible traffic impacts on local residential streets." 25-5

ENVIRONMENTAL ANALYSIS

Page 4.5-13 (Roadway Significance Criteria): The local residential street roadway significance criteria is 4,000 ADT for local residential streets with direct driveway access to homes based on Policy 3.5.1.1 of the El Dorado County General Plan.

The DEIR also states that the roadway system significance criteria is based on the Design and Improvement Standards Manual, County of El Dorado, Revised May 18, 1990. However, Paragraph five (5) on Page 21 in the Design and Improvement Standards Manual states "Collector streets shall be designed to carry a maximum of the access traffic to, and through traffic within, the subdivision and traffic from local streets to arterial streets and highways. Lot frontage shall be avoided on these streets when the design traffic volume exceeds 400 vehicles per hour. Collector street spacing should be from 1/4 mile to one (1) mile." A 400 vehicles per hour traffic volume represents about 2,666 ADT traffic volumes assuming a Transportation Engineering "Rule of Thumb" that the peak hour traffic volumes is 15% of the Average Daily traffic (ADT) volume. 25-6

The Design and Improvement Standards Manual goes on to state in Paragraph 9 on Page 24 that the gradient of any street shall not exceed 10% for Minor Collector streets and 12% (may be increased 15% for lengths not exceeding 600 feet) for local, short loops, dead ends, and cul-de-sacs streets. Many existing local residential streets proposed in the DEIR to accommodate the 25-7

Promontory traffic volumes have street grades above 10%. Does El Dorado County have a maximum ADT criteria for local residential streets and is the ADT criteria adjusted for street gradients, no sidewalks, and street widths? 25-7 CONT

Finally, the significance criteria for local residential streets should not be based on the maximum ADT volumes allowed. While the County General Plan used a 4,000 ADT significance criteria for local residential streets, CEQA does not prohibit El Dorado County from utilizing a different significance criteria for local residential streets on a Project EIR. A 4,000 ADT significance criteria for local residential streets can be very deceptive. For example, the DEIR reflects a traffic volume increase at Ridgeview and Gillett Drive from 1,130 ADT under existing conditions to 3,600 ADT under Existing plus Project, which represents three times more traffic and is viewed as less than significant? El Dorado County should develop and incorporate into the DEIR a more appropriate significance criteria for local residential streets based on several factors, such as relative increases in traffic volumes, street grades, street widths, and sidewalk considerations. 25-8

Page 4.5-14 (Trip Generation): The DEIR should include a summary description of all the major assumptions used in the "Traffix System Version 6.8" traffic model, including assumptions on vehicle trips through the project area resulting from the new El Dorado Hills street connections with the City of Folsom and U.S. Highway 50. 25-9

With level D through F conditions occurring at Green Valley Road/El Dorado Hills Blvd. intersection and U.S. Highway 50/El Dorado Hill Blvd. interchange in every Project scenario, several local residential streets will become the preferred traffic pattern for existing and future vehicle traffic. This condition is not discussed or reflected in the EIR and could represents a significant potential traffic impact on several local residential streets above estimates in the EIR, including Gillett Drive. What type of traffic circulation measure does El Dorado County intend to utilize to prevent or limit additional traffic volumes due to through traffic on local residential streets? Does El Dorado County intend to gate access into Residential Village V6 in an effort to reduce traffic volumes on existing local residential streets? 25-10

Figures 4.5-2,7,9,12 (Average Daily Traffic Volume Results): The traffic analysis results for average daily traffic (ADT) volumes are depicted on several figures for the four project scenarios (Existing Condition, Project Existing Plus Project, Cumulative Condition, Cumulative Plus Project). The Figures for the ADT volumes should illustrate and identify the ADT volumes for every local residential street with additional traffic volumes resulting from the Promontory project. 25-11

For example, the DEIR does not address or consider any increase traffic volumes on Ridgeview Drive between Gillett Drive and Governors Drive resulting from the proposed project connection at Gillett Drive. The existing condition traffic study in the DEIR clearly reflects that 50% of the current traffic at the Gillett Drive/Ridgeview Drive intersection utilize Ridgeview Drive over Gillett Drive. However, the Existing with Project and Cumulative with Project scenarios appear to reflect all the additional traffic volume on Gillett Drive? The DEIR needs to depict and explain all aspects of traffic circulation for the Promontory project utilizing existing residential streets, especially Ridgeview Drive between Gillett Drive and Governors Drive.

Other concerns regarding transportation and circulation which need to be discussed in the DEIR include:

(a) Physical Road Limitations.

The DEIR does not consider the physical characteristics of existing local residential street to support significant increase in traffic volume, such as existing widths, road grades and stopping sight distances of existing streets. Many streets are not suitable for large volumes of traffic at 4,000 ADT due to physical limitations of the streets. The DEIR should address the physical road characteristics and limitations of existing local residential streets which are to accommodate the additional traffic volumes for the Promontory Project.

For example, Ridgeview Drive between Gillett Drive and Moonstone Circle already represents a health and safety risk to area residents due to excessive vehicle speeds generated by extreme street grades (15%), which is the maximum grade for a boat launch ramp with concrete "V" grooves and originally required County Engineer approval to construct according to "Design and Improvement Standards Manual" on Standard Plan 101B. Does El Dorado County DOT endorse using Ridgeview Drive between Gillett Drive and Moonstone Circle with a 15% grade for traffic volumes generated by the Promontory project and is Ridgeview Drive between Gillett Drive and Governor Drive classified as a minor collector street by El Dorado County? Standard Plan 101B also notes that a 36-foot wide street has a maximum traffic volume of 2000 ADT, which is half the maximum ADT volumes being used in the DEIR? 25-12

Sight distance from existing road horizontal and vertical curves, intersections and driveways need be evaluated in the DEIR to determine the appropriate traffic volumes for specific local residential streets. For instance, the Moonstone Circle/Ridgeview Drive intersection and neighborhood driveways located along or near a horizontal curve with a 250 ft. radius and a 15% grade already appear to exceed the "Design and Improvement Standards Manual" for minimum sight distance requirements according to Standard Plan 103A-1 and 103D. Does El County DOT have any concerns with the existing safety risks for local residents due to poor street sight distances? Does the additional traffic volumes generated by the Promontory project represent even greater health and safety risks to the residents along Ridgeview Drive with poor sight distances from driveways? What are some of the possible mitigation measures which could be implemented by El Dorado County DOT to protect private citizens in the neighborhood? 25-13

Page 4.5-28 (Mitigation Measure 4.5.1): The DEIR identifies that Olson Lane and Ridgeview Drive will exceed the 4,000 ADT and states that traffic circulation measures will be implemented if any local streets experience a total daily volume in excess of 4,000 ADT. The DEIR gives only a general description of possible traffic possible mitigation measures ranging for additional connections to other local residential streets to new roads through Crown Valley, Ridgeview Village Unit 3, and or Ridgeview Village Unit 9. These traffic circulation measures in the DEIR are inadequate and represent additional potential impacts to existing local residential streets not identified in the DEIR. It is absurd for the DEIR to claim that a general description of traffic circulation measures represent a "reporting and monitoring" program in order to mitigate or avoid significant impacts? CEQA case law indicates that, for projects for which EIRs are prepared, 25-14

agencies should not rely on mitigation measures of unknown efficacy in concluding that significant impacts will be substantially lessened or avoided. 25-14 CON'T

The DEIR should be revised to include a mitigation monitoring and reporting program for local residential street impacts. Although CEQA does not mandate public review of such program (PRC Section 21081.6), it would be a good idea to allow the affected communities an opportunity to review and comment on the program to ensure that the best possible program is devised.

The mitigation monitoring and reporting program should include a monitoring time schedule and specific traffic volume triggers for every local residential street impacted with corresponding and predetermined mitigation measures. For example, does an Olson Lane traffic circulation measure based on a 4,000 ADT trigger include the directing of additional traffic volumes by some means through Ridgeview Drive between Gillett Drive and Governors Drive in an effort to move traffic volumes away from Olson Lane? 25-15

ANALYSIS OF ALTERNATIVES

Page 5.7, 5.12, 5.15, (Transportation and Circulation): Section 15126(d) of the CEQA Guidelines requires consideration of alternative that could reduce to less that significant level or eliminate an significant adverse environmental effect of the proposed project, including alternatives that may be more costly or could otherwise impede the project's objectives. The DEIR provides only very general alternative analysis for a Reduced Intensity, Clustered Development and Off-Site Alternative and provides no additional transportation and circulation alternatives which include different methods for connecting the proposed project to existing streets or improvements to existing streets. 25-16

For example, the DEIR should consider connecting Gillett Drive to El Dorado Hills Blvd either directly or to existing streets without residential lots fronting the street which access El Dorado Hills Blvd. and limit access through Ridgeview Drive between Gillett Drive and Governors Drive with a traffic barrier at the Gillett Drive/Ridgeview Drive intersection. This will eliminate the significant impacts on Olson Lane and probably the surrounding local residential streets.

CONCLUSION

Due to the numerous inadequacies of the Draft EIR, the report must be revised and recirculated. CEQA mandates that an EIR fulfill the function of providing *adequate* and *complete* information regarding the potential impacts of a proposed project. The current draft report fails to do so. 25-17

Thank you for this opportunity to comment on the Draft EIR.

Sincerely,

Gary B. Bardini, P.E (FOR)
Civil Engineer

cc: Honorable Sam Bradley
Parkview Heights Coalition Members

25. GARY B. BARDINI, PARKVIEW HEIGHTS COALITION

Response 25-1 As described in Chapter 2.0, Executive Summary, the Draft EIR for the proposed project (the Promontory Specific Plan) is a Program EIR pursuant to CEQA Guidelines section 15168(a). Additional environmental review and documentation of subsequent projects (e.g., tentative subdivision maps) will be performed by the County as required by CEQA. If subsequent projects propose modifications to the approved Specific Plan, a Negative Declaration or subsequent/supplemental/addendum EIR may be required pursuant to CEQA. A tentative subdivision map application has been formally submitted to the County for Village 6 of the Promontory Specific Plan.

Response 25-2 See Response to Comment 7-1, 7-3 through 7-13 and 8-1. In addition, as described on page 4.5-28 of the Draft EIR, implementation of Mitigation Measure 4.5.1a (i.e., submittal of a traffic study analyzing impacts to residential roadways) will occur with each tentative subdivision map submittal, prior to map approval. The traffic study would be reviewed by the El Dorado County Department of Transportation for technical accuracy. If residential roadways exceed the 4,000 average daily trip standard, the project applicant would be required to develop mitigation measures to reduce traffic volumes to the 4,000 standard. Implementation of identified mitigation measures would required for tentative and final map approval from the County.

As described in Chapter 2.0, Executive Summary, of the Draft EIR, the mitigation monitoring and reporting program for the project will be adopted by the County as part of the certification of the Final EIR. The mitigation monitoring and reporting program will be available, along with the Final EIR, for public review.

Response 25-3 The "Areas of Controversy" discussed in Chapter 2.0, Executive Summary, represents an overview of the comments received on the Notice of Preparation. Residential traffic concerns are addressed in Section 4.5, Transportation and Circulation, of the Draft EIR and are further addressed in Response to Comment 7-1.

Response 25-4 See Response to Comment 7-1, 7-3 through 7-13 and 8-1.

Response 25-5 The following changes are made to the text of the Draft EIR:

- Page 2-1 (second bulleted item) and page 3-5 (second bulleted item) are revised to read:

"Develop and maintain safe and efficient transportation and circulation facilities to sufficiently serve the project site, while minimizing to the extent possible traffic impacts to existing residential roadways."

Response 25-6 The El Dorado County Department of Transportation uses a peak hour factor of 10 percent, which is based on existing traffic counts conducted in the study area. Using this factor, the El Dorado County Department of Transportation has determined that the daily traffic volume threshold for residential streets should be 4,000 (i.e., 400 ÷ 0.10 = 4,000).

Response 25-7 See Response to Comment 7-1.

Response 25-8 See Response to Comment 7-1 and 12-7.

Response 25-9 The Traffix System Version 6.8 software program is an analysis tool used to assign project trips to a roadway network. The major assumptions made in the use of this tool include the distribution of project traffic, which is shown in Figure 4.5-6 of the Draft EIR, and the selection of specific roadways that will be used by project traffic. Since the Traffix program also calculates intersection level of service (LOS), other important assumptions are also made regarding saturation flow rates, peak hour factors, and truck percentages. All of these assumptions were reviewed and approved by the El Dorado County Department of Transportation staff prior to their use in the Draft EIR. Also see Response to Comment 7-11.

Response 25-10 See Response to Comment 7-11, 7-12, 8-1 and 24-6.

Response 25-11 The residential streets that were selected for analysis in the Draft EIR represent those streets that are most likely to be used by project traffic. The determination of which streets will be used by project traffic was based on the shortest travel time to access major roadways. Please see Response to Comment 7-1 and 7-3 through 7-13.

Response 25-12 See Response to Comment 7-1 and 7-3 through 7-13.

Response 25-13 See Response to Comment 7-1 and 7-3 through 7-13.

Response 25-14 See Response to Comment 7-1, 7-3 through 7-13 and 8-1.

Response 25-15 See Response to Comment 7-1. The County has an informal mitigation monitoring program that relies on resident input for reporting of conditions with a review by the Department of Transportation (DOT) of the issues. The new Mitigation Measure 4.5.1b (phasing of the project), review of the

tentative maps and their associated traffic studies will not allow the traffic volumes to exceed the 4,000 threshold on residential streets with driveways.

Response 25-16 Trip generation information is provided for each of the alternatives considered in the Draft EIR. This information is used to determine whether significant impacts identified for the proposed project would be reduced. This analysis meets the requirements of CEQA Guidelines section 15126(d) and is similar to the level of detail provided in previous environmental documents for other specific plans in El Dorado County such as Carson Creek and Marble Valley. The extent to which project alternatives must be considered is governed by a rule of reason. Save Our Residential Environment v. City of West Hollywood (1992) 9 Cal.App.4th 1745, 1751. The discussion need not be exhaustive, and the alternatives need only relate to the project as a whole -- not to its various parts. Residents Ad Hoc Stadium Committee v. Board of Trustees (1979) 89 Cal.App.3d 274, 286; Big Rock Mesas Property Owners Association v. Board of Supervisors (1977) 73 Cal.App.3d 218, 227.

Response 25-17 The commentor's concerns regarding the project's traffic impacts to existing residential roadways have been addressed in Response to Comments 25-1 through 25-16. None of the above responses are considered "significant new information" that would require recirculation of the Draft EIR pursuant to CEQA Guidelines Section 15088.5. The Draft EIR is considered adequate and provides complete information regarding the potential traffic impacts of the proposed project.

26

7-24-97
106 Silver Creek Ln.
Folsom, Ca. 95630
Jane Whitnack
(owner of lot on Shelby Circle)

El Dorado County
Planning Department
2850 Fairlane Court
placerville, Ca.

Dear Planning Department of El Dorado County; Roger Tr

After receiving literature from your department from Palisades Properties & I spoke to Mike, one of their engineers and to Roger Trout. Thank you for your time, Mr. Trout.

I am very concerned about drainage and erosion when the property for development is excavated and regraded.

Due to the present Terrain there is already considerable run off onto the street of Shelby Circle from lots on the "up side" (west side) of the street. 26-1

I certainly hope El Dorado County engineers are reviewing all plans to be certain drainage is taken care of — away from the lots on Shelby Circle (as well as other properties). 26-2

Sincerely,
Jane L. Whitnack

RECEIVED
PLANNING DEPARTMENT
97 JUL 25 AM 10:19

26. JANE WHITNACK, RESIDENT

Response 26-1 See Response to Comment 3-2.

Response 26-2 See Response to Comment 3-2.

27

July 28, 1997

Melinda Burns
3203 Ridgeview Drive
El Dorado Hills, CA 95762

El Dorado County Planning Department
2850 Fairlane Court
Placerville, CA 95667

Subject: Promontory Point EIR

Dear Sirs:

There are numerous problems with the cultural resources section of the draft EIR. I will point out some the problems, but time is short as I received no formal notification of the availability of the document even though I have requested a notice, and a complete review is not possible.

1. You have misled all readers of the cultural resource section. The last physical survey within the project area is **1980,** not 1990. There is no such report as Derr 1990. Derr 1990 implies a more recent field review of the property. Derr's report is **seventeen** years old, not a mere seven. This appears to be an intentional distortion, designed to imply that recent work has been done on the property. Nothing could be further from the truth. Or do you believe this to be a simple typographical error? 27-1

2. The last records search on the property is nine years old. Why wasn't a new records search undertaken? Records searches are normally updated after a year--they are not valid indefinitely. If you have questions about this, Marianne Russo of the North Central Information Center will be happy to discuss this issue with you. 27-2

3. Surveys done in 1980 followed a much less stringent standard than what is employed today by cultural resource professionals. Many more hours are spent in the field identifying sites and attempting to determine boundaries. In 1980, many historic sites were not even recorded. Don't you believe that a more complete survey would be of benefit? 27-3

4. The property contains many more than the four sites found in 1980, both historic and prehistoric. There have been no re-visits to these resources to even determine if the four sites are accurately recorded. Why wasn't this done? 27-4

5. If you don't know how many sites are present, the extent of those resources, etc., how can you responsibly plan this project? Surveys should be completed in the early stages of planning to help maximize options for preservation and protection. If the resources aren't discovered until late in the process, it may cause the unnecessary loss of the resource that could otherwise have been avoided. 27-5

6. Why is site CA-ELD-455/H omitted from the study? This site appears to lie within the project area and is reported on in the Derr 1980 volume. 27-6

7. How can you even begin to write impacts and mitigation measures without knowing the resource base? This is not a good practice. Where is the good faith effort to identify resources that actually could be impacted by the project? 27-7

8. A survey conducted by a professional archeologist is long overdue for this project. This is not a high cost item, and could result in the preservation of more resources. Why the hesitancy in undertaking this step? 27-8

9. How can sites be protected from inadvertent construction impacts, especially if you don't know where they are? As we all know, construction activities routinely stray beyond the boundaries of a particular village and could impact undiscovered sites. Wouldn't it be better to now in advance and actively protect the resources. 27-9

10. Sites in greenbelts are not protected from vandalism. Without the details of the plan proposed for the protection of the site, it is difficult to gauge the adequacy of this as a protective measure. How will active protection take place? 27-10

11. Will this project be subject to Section 106 review? How will you coordinate the cultural work? Won't the Corps of Engineers require complete identification and evaluation of resources? 27-11

12. Without testing, how do you know that there isn't a subsurface deposit present at CA-ELD-452, -453 and -454? Maybe you need to protect a much larger area than just the bedrock mortar station. 27-12

There are a number of problems with this project, but cultural resources are a major issue. Please address these concerns in your final document.

Sincerely,

Melinda Burns

Melinda Burns

27. MELINDA BURNS, RESIDENT

Response 27-1 As identified by the commentor, the reference for the Derr report in Section 4.11, Cultural Resources, should be 1980 and not 1990. However, the commentor's statements that the Draft EIR intentionally distorted the age of the archaeological survey performed by Eleanor Derr in October 1980 are incorrect. This was a typographical error and will be corrected with the following text changes to the Draft EIR:

- Page 4.11-1, last paragraph, the second and fifth sentences are revised to read:

  "The survey conducted in 1980 indicated that the resource consisted of a midden mound of undetermined depth that included a habitation mound with apparent burials or cremations (Derr, 19~~90~~80). The resource was considered to be significant because it had the potential to yield important information on the native peoples of the area and their contact with Euro-Americans, especially since it is the only known Native American habitation site in this general area south of the American River (Derr, 19~~90~~80)."

- Page 4.11-2, first paragraph, the first sentence is revised to read:

  "On the basis of recommendations that resulted from the information obtained from the survey, a stabilization plan was proposed to protect the significance of this resource (Derr, 19~~90~~80)."

- Page 4.11-2, second paragraph, the last sentence is revised to read:

  "However, since these resources have been recorded, measured, and mapped; no further information is likely to be obtained from these resources (Derr, 19~~90~~80)."

- Page 4.11-4, Impact 4.11.1, second paragraph, the third sentence is revised to read:

  "The three other resources (CA-ELD-452, CA-ELD-453, and CA-ELD-454) are bedrock mortars and are considered durable and resist most adverse impacts (Derr, 19~~90~~80)."

- Page 4.11-6 (References) and page 7-4, the Derr reference is revised to read:

"Derr, 19~~80~~90. Derr, Eleanor H. Archaeological Study Center. An Archaeological Survey of the El Dorado Hills Project, El Dorado County, California. October, 19~~80~~90."

Response 27-2 With the exception of the 1994 investigation discussed in Response to Comment 27-3 (and included as Appendix A to this Final EIR), the project site has not been subject to any cultural resource surveys since 1980. Thus, a new record search would not yield any new information regarding the project site.

Response 27-3 The 1980 archaeological survey report prepared by Derr identified and recorded a total of six archaeological and historical sites on the project site (CA-ELD-451, CA-ELD-452, CA-ELD-453, CA-ELD-454, CA-ELD-455/H, and CA-ELD-456/H). As described in the Draft EIR, CA-ELD-452, CA-ELD-453, and CA-ELD-454 consist of bedrock mortars, while CA-ELD-455/H and CA-ELD-456/H consist of stone walls and enclosures. These resources were recorded, measured, and mapped, but were not determined to be significant resources that warranted further evaluation (Derr, 1980). However, CA-ELD-451 was identified as a sensitive cultural resource site which should be further evaluated. The identification of CA-ELD-451 has resulted in further cultural resource investigations described further below.

In 1994, the Archaeological Conservancy, Sacramento Archaeological Society, and the Native American Commission performed salvage and stabilization work on CA-ELD-451 after illegal excavations of the site were reported by the project applicant (see Appendix A of this FEIR). Representatives from the above groups performed a detailed survey of the site and excavated the site under the supervision of George Brown, Native American Heritage Commissioner and most likely Native American descendant of the area. Excavated materials were removed from the site for documentation analysis. Upon direction of Mr. Brown, the excavated materials were returned to the site and the site was capped and remediated to protect the site from further illegal excavations. A stabilization report was prepared by the Sacramento Archaeological Society for the Native American Heritage Commission and stabilization and restoration efforts are considered complete (Sacramento Archaeological Society, no date). CA-ELD-451 is located within the proposed project's public open space area and will be dedicated to the Archaeological Conservancy for further management of the site.

Response 27-4 The commentor states that there are more cultural resource sites than were identified in the 1980 Derr report, but provides no evidence of these additional sites. As described in Response to Comment 27-3, six sites (not four) were

identified in 1980 and were recorded, measured, and mapped. See Response to Comment 27-3 and Appendix A to this Final EIR for a description of additional cultural resources work performed on CA-ELD-451.

Although the project site has been adequately evaluated for potential impacts to cultural resources, Mitigation Measure 4.11.2 will be modified to require that additional cultural resource surveys be conducted in connection with subsequent applications for tentative subdivision maps within the Promontory Specific Plan area.

- Page 2-36 (Mitigation Measure 4.11.2), page 4.11-4 (Mitigation Measure 4.11.2), and page 6-23 (Mitigation Measure 4.11.2), Mitigation Measure 4.11.2 is revised to read:

"4.11.2 The project applicant shall implement the following measures to minimize potential impacts to undiscovered cultural resources:

A. Prior to the approval of subsequent tentative subdivision maps for project development, the project applicant shall retain a qualified archaeologists to perform an archaeological survey for the tentative subdivision map area. The archaeological survey shall employ current field survey and record search methods and standards. Significant archaeological resources discovered shall be recorded and avoided and/or mitigated, pursuant to state and federal standards. The findings of the archaeological survey shall summarized in a report and submitted to the County prior to tentative subdivision map approval.

B. In the event that any prehistoric or historic subsurface cultural resources are discovered during construction-related earthmoving activities, all work within 20 meters of the resources shall be halted and the project applicant shall consult with a qualified archaeologist to assess the significance of the find. If any find were determined to be significant by the qualified archaeologist, then representatives of the project applicant, El Dorado County, and the qualified archaeologist would meet to determine the appropriate course of action. If the discovery includes human remains, Section VIII of CEQA Guidelines

> Appendix K would be followed, requiring coordination with the Native American Heritage Commission if the human remains are of Native American origin. All significant cultural materials recovered would be subject to scientific analysis, professional museum curation, and a report prepared by the qualified archaeologist according to current professional standards."

The following text changes are made to the Draft EIR to include identified historic resources that were inadvertently omitted from the Draft EIR.

- Page 4.11-2, the third paragraph is revised to read:

> "Two historical sites (CA-ELD-455/H and CA-ELD-456/H) were identified and recorded on the project site (Derr, 1980). These sites generally consisted of stone walls and fire areas of recent origin. No cultural materials were found around any of them and it is unclear what these areas were used for (Derr, 1980). These sites are not considered significant cultural resources, but have been recorded, measured, and mapped in order to document their existence. There are no buildings or structures at the project site are currently listed on the National Register of Historic Places or the California Register of Historic Resources. ~~No historical resources were identified as part of the record search (Russo, 1988). Thus, no buildings or structures at the project site are currently listed on the National Register of Historic Places or the California Register of Historic Resources.~~"

Response 27-5 As discussed in Response to Comment 27-3 and 27-4, an archaeological survey has been performed for the project site, cultural resources on the project site have been recorded, and additional measures have been implemented to protect CA-ELD-451. Implementation of revised Mitigation Measure 4.11.2 will require subsequent archaeological surveys prior to development of the project site.

Response 27-6 See Response to Comment 27-4.

Response 27-7 See Response to Comment 27-5.

Response 27-8 See Response to Comment 27-5.

Response 27-9 See Response to Comment 27-5.

Response 27-10 As described in Section 4.11 (Cultural Resources) of the Draft EIR, CA-ELD-452, CA-ELD-453 and CA-ELD-454 have recorded, measured, and mapped; no further information is likely to be obtained from these resources. In addition, these resources are bedrock mortars and are considered durable and can resist most severe impacts.

As identified in Response to Comment 27-3, CA-ELD-451 has been capped and stabilized. CA-ELD-451 will be dedicated to the Archaeological Conservancy for further management of the site. Management of the site by the Archaeological Conservancy will consist of regular review and photographing of the conditions of the site and coordination with the El Dorado County Sheriff's Department for regular patrols of the site.

Response 27-11 The project applicant has already been through the Section 106 process as part of receiving an Individual 404 permit for the project site from the U.S. Army Corps of Engineers. No further federal involvement is anticipated to be required for the proposed project.

Response 27-12 See Response to Comment 27-5.

28

John Gladish
137 Poplar
Kentfield, CA 94904

97 JUL 10 PM 3:37
RECEIVED
PLANNING DEPARTMENT

July 28, 1997

Mr. Roger Trout
2850 Fairlane Court
Placerville, CA 95667

Dear Roger:

In reviewing the Draft E.I.R. for the Promontory Volume I, June 16, 1997, I found a few items that do not work in light of Ridgeview West's present plans.

On page 3-8 of the Draft, Figure 3-3 depicts two project access points -- one coming off of Beatty Drive and the other access point coming through Westar Lane.

Our plan for Lot A, or the Promontory's Beatty Drive access, is to leave it a remainder lot for the foreseeable future. The other access point is Westar Lane.

As is the case with Beatty Drive, we have no plans in the foreseeable future to develop Lots 32 through 44. This decision was made following a feasibility study and discussions with our neighbors. With Ridgeview West having no plans to develop Lots 32 through 44, it makes little sense to show it as an access point to the Promontory. 28-1

Another item of concern on their map (Figure 4.5-1) is the road connecting to Westar; it crosses our property boundaries twice. We have not given permission nor made any agreements to that effect. 28-2

There were times when all the above items were discussed and our Engineer, Mr. David Crosariol, spent many hours working on solutions. As of this date, nothing has been agreed to between Ridgeview West and the Promontory. We have decided that with the market in its present condition we will concentrate solely on our 72-lot subdivision and leave the southern 13 lots for a much later time. 28-3

I feel it important to point these errors out because on page 3-21, Phase I includes Villages 6, 7 and 8 which are the ~~same~~ villages most affected by our situation. 28-4

I hope this gives you a clear picture of Ridgeview West's present situation and of course, if you should have any questions concerning the foregoing, please do not hesitate to contact the undersigned. 28-4 CONT

Respectfully submitted,

John Gladish

JG/kan

cc: Planning Commissioners
Board of Supervisors
Eldorado County

28. JOHN GLADISH, RESIDENT

Response 28-1 The Ridgeview West tentative subdivision map was approved in August, 1996. The Beatty Drive access was approved with that map. Therefore, regardless of when the Ridgeview West lots are developed, the Beatty Drive access will remain in place absent a new discretionary action (which would be subject to CEQA review) on the part of the County to eliminate it.

Response 28-2 The project applicant and the developers of the Ridgeview West subdivision have discussed the possibility of coordinating their sewer infrastructure improvements to serve both developments. The roadways for the proposed project were designed so as to be located above the sewer lines. The Draft EIR thus reflects a coordinated sewer system that would result in project roadways crossing project boundaries. However, the precise location of the project roadways is conceptual only; if the parties cannot reach agreement regarding the coordinated sewer infrastructure improvements, the location of those roadways will be altered.

Response 28-3 See Response to Comment 28-2.

Response 28-4 The commentor's observations regarding the Draft EIR are not errors in the Draft EIR. Rather, the Draft EIR accurately reflects the conditions of the proposed project and its interface with surrounding developments. Please see Response to Comment 28-1 regarding Beatty Drive access and Response to Comment 28-2 regarding sewer improvements.

29

July 28, 1997

John F. Burns
3203 Ridgeview Drive
El Dorado Hills, CA 95762

El Dorado County Planning Department
2850 Fairlane Court
Placerville, CA 95667

Subject: Promontory Point EIR

Dear Sirs:

This letter is meant to express my concerns about this proposed development and ask that these concerns be addressed in the Final EIR.

First are traffic and transportation issues. Projections issued by the developer all show a dramatic increase on roads surrounding this project, in some cases as much as 416%. All of this impact is on narrow roads that are designed to accommodate only the existing residential traffic. These roads have no sidewalks and have garages close to the street, allowing no easy transit into the roadways for motorists. These roads were not designed to act as thoroughfares. Yet they will do so for the convenience and economic enhancement of this developer. There are a number of children in this neighborhood who use these streets. Some of the narrow streets without sidewalks are the only route to Silva Valley School, such as Gillette and Olsen. Some of the same streets are school bus routes and pick-up stops. Even the existing level of traffic is fairly high, but the use is by the people who live in the neighborhoods, not just individuals zapping through to other areas. Who will accept liability for the likely accidents that will occur or the possible harm to children? 29-1

The Promontory is preparing to put a gate on its project so it is walled off from the rest of the community. People who live there can race through our neighborhoods, but will have no connection to the rest of the community. This inspires neighborhood division and enmity. Where is the community benefit? Gates destroy the neighborhood ambiance that is part of the village community. They also impede emergency access. They should not be allowed, especially in an area where crime is not a problem. 29-2

The very obvious solution to much of the traffic difficulty is to make the project contingent on the completion of Russell Ranch Road and its freeway connection. Traffic would logically migrate in that direction, since most traffic is directed to the Sacramento Valley. The developer claims that the development of this road is out of his hands. But this road had always been considered instrumental to the development of the west slope. Development should not be allowed to proceed to the detriment and actual endangerment of the existing residents. The only acceptable solution is to delay this development until the developer and others who will 29-3

economically benefit from the project construct Russell Ranch Road. The only other acceptable solution would be to markedly lower the density of this project to a much lower level to make the traffic input acceptable. 29-3 CON'T

The impact on cultural resources in the project area represents another major concern. The developer indicated at a public meeting that nothing would be done to protect important Native American and historical sites. The reason he gave is that the county general plan found an inevitable adverse impact on such sites by virtue of any development. This county is the center of the great California Gold Rush. It is where gold was originally discovered. Does this approach mean that the County has decided to abandon all historic sites to destruction? What legacy are we to leave our children? Another L.A.? This is outrageous. Various state and federal laws require the protection of cultural resources on these types of projects. The County plan does not abrogate that responsibility, unless the County wants to take the position that, on the eve of the 150th anniversary of the Gold Rush, the County wants to see its history destroyed. 29-4

This project reflects poor planning, designed to allow the developer to make maximum profit off high-priced lots by damaging the resources of the surrounding community without putting anything back in. The major roadways must come first--witness the excellent example of Serrano. No one is fooled by the developer's approach--only with the profits made by impacting the surrounding area will he be able to develop the necessary roadways. If the developer can't afford to make the necessary infrastructure improvements, perhaps he should rethink the project, sell it to responsible other firms, or bring in partners who can afford to do a planned community in a modern, thoughtful manner. 29-5

I would appreciate your response to these comments. Thank you.

Sincerely,

John F. Burns

29. JOHN F. BURNS, RESIDENT

Response 29-1 See Response to Comment 7-1 and 7-3 through 7-13.

Response 29-2 The project, as described in Chapter 3.0, Project Description, in the Draft EIR, does not propose gated controls to the project site. See also Response to Comment 24-6.

Response 29-3 See Response to Comment 7-1, 7-3 through 7-13, and 12-7.

Response 29-4 The commentor is incorrect in stating that important cultural resources on the project site will not be protected. Please refer to Response to Comment 27-3, 27-4, and 27-10. The El Dorado County General Plan EIR did identify that implementation of the General Plan would result in disturbance or destruction of significant cultural resources. The General Plan EIR also identified mitigation measures, consisting of revisions to General Plan policies, which were adopted by the County and incorporated into the General Plan. However, the impact to cultural resources after implementation of such mitigation measures was still considered to be significant and unavoidable because there is no way to prevent completely the loss of important cultural resources (El Dorado County, 1996).

The commentor is correct that there are state and federal requirements for the consideration and protection of cultural resources. Development projects in El Dorado County are subject to County staff review and environmental review pursuant to CEQA, and in some cases, the National Environmental Policy Act. This review typically includes an evaluation of potential impacts to known and unknown cultural resources, pursuant to the requirements of state and federal law.

Response 29-5 The commentor's opinion regarding the planning design of the project site is noted. The commentor states that the project will damage resources of the surrounding community, but does not identify what the resources are. Therefore, it is not possible to respond. With respect to roadway improvements, please see Response to Comment 7-1, 7-3 through 7-13, 11-1 and 12-7.

PETE WILSON
GOVERNOR

State of California

GOVERNOR'S OFFICE OF PLANNING AND RESEARCH
1400 TENTH STREET
SACRAMENTO 95814

LEE GRISSOM
DIRECTOR

30

97 JUL 29 10:50
PLANNING DEPARTMENT

July 28, 1997

ROGER TROUT
EL DORADO COUNTY
2850 FAIRLANE COURT
PLACERVILLE, CA 95667

Subject: ADOPTION OF THE PROMONTORY SPECIFIC PLAN SCH #: 94112056

Dear ROGER TROUT:

The State Clearinghouse submitted the above named environmental document to selected state agencies for review. The review period is closed and none of the state agencies have comments. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. 30-1

Please call Kristen Derscheid at (916) 445-0613 if you have any questions regarding the environmental review process. When contacting the Clearinghouse in this matter, please use the eight-digit State Clearinghouse number so that we may respond promptly.

Sincerely,

Antero A. Rivasplata

ANTERO A. RIVASPLATA
Chief, State Clearinghouse

NOTICE OF COMPLETION

Appendix C

See NOTE below

SCH# 94112056

Mail to: State Clearinghouse, 1400 Tenth Street, Sacramento, CA 95814 916/445-0613

Project Title: The Promontory

Lead Agency: El Dorado County Planning Department Contact Person: Roger Trout

Mailing Address: 2850 Fairlane Court Phone: (916) 621-5355

City: Placerville, CA Zip: 95667 County: El Dorado

Project Location

County: El Dorado City/Nearest Community: El Dorado Hills

Cross Streets: Green Valley Road/El Dorado Hills Boulevard Total Acres: 999

Assessor's Parcel No.: 067-040-07; 111-020-04; 108-020-03 Section: 27, 28, 33, 34/3, 4, 10 Twp: 10N/9N Range: 8E/8E Base: MDM

Within 2 Miles: State Hwy #: 50 Waterways: Folsom Lake

Airports: Railways: Schools:

Document Type

CEQA: ___ NOP ___ Supplement/subsequent ___ Early Cons ___ EIR (Prior SCH No.) ___ Neg Dec ___ Other ___ X Draft EIR

NEPA: ___ NOI ___ EA ___ Draft EIS ___ FONSI

Other: ___ Joint Document ___ Final Document ___ Other ___

Local Action Type

___ General Plan Update ___ General Plan Amendment ___ General Plan Element ___ Community Plan

X Specific Plan ___ Master Plan ___ Planned Unit Development ___ Site Plan

X Rezone ___ Prezone ___ Use Permit ___ Land Division (Subdivision, Parcel Map, Tract Map, etc.)

___ Annexation ___ Redevelopment ___ Coastal Permit ___ Other ___

Development Type

X Residential: Units 1387 Acres 999

X Office: Sq.Ft. ___ Acres 7 Employees ___

X Commercial: Sq.Ft. ___ Acres 7 Employees ___

___ Industrial: Sq.Ft. ___ Acres ___ Employees ___

X Educational: Elementary School Site, 10 acres

X Recreational: Parkland 13.6 acres

X Water Facilities: Type Water Tank MGD ?

___ Transportation: Type ___

___ Mining: Mineral ___

___ Power: Type ___ Watts ___

___ Waste Treatment: Type ___

___ Hazardous Waste: Type ___

X Other: Open Space, 99.8 acres

Project Issues Discussed in Document

X Aesthetic/Visual
X Agricultural Land
X Air Quality
X Archeological/Historical
___ Coastal Zone
X Drainage/Absorption
___ Economic/Jobs
___ Fiscal
___ Flood Plain/Flooding
___ Forest Land/Fire Hazard
X Geologic/Seismic
___ Minerals
X Noise
X Population/Housing Balance
X Public Services/Facilities
X Recreation/Parks
X Schools/Universities
___ Septic Systems
X Sewer Capacity
X Soil Erosion/Compaction/Grading
X Solid Waste
X Toxic/Hazardous
X Traffic/Circulation
X Vegetation
X Water Quality
___ Water Supply/Groundwater
X Wetland/Riparian
X Wildlife
X Growth Inducing
X Land Use
X Cumulative Effects
___ Other ___

Land Use/Zoning/General Plan Use

Zoning: Residential Agricultural 40-Acre

General Plan: Low Density Residential (5 - 10 acre) with Planned Community Overlay for 1387 dwelling units

Present Use: Undeveloped

Project Description

Specific Plan for 1387 dwelling units with park sites, open space, and a village center which includes commercial land uses and multi-family units.

FILED
JUN 13 1997
STATE CLEARINGHOUSE

94112056

State Clearinghouse Contact: Ms. Angel Howell (916) 445-0613

State Review Began: 6-13-97

Dept. Review to Agency 7-21

Agency Rev to SCH 7-25

SCH COMPLIANCE 7-28

Please note SCH Number on all Comments

94112056

Please forward late comments directly to the Lead Agency

AQMD/APCD___ (Resources: 7-14)

94112056

Project Sent to the following State Agencies

X Resources
___ Boating
___ Coastal Comm
___ Coastal Consv
___ Colorado Rvr Bd
X Conservation
X Fish & Game # 2
___ Delta Protection Commission
___ Forestry
___ Parks & Rec/OHP
___ Reclamation
___ BCDC
X DWR
___ OES
___ Bus Transp Hous
___ Aeronautics
___ CHP
X Caltrans # 3
___ Trans Planning
X Housing & Devel
___ Health & Welfare
___ Dept. of Health
___ Medical Waste

___ State/Consumer Svcs
___ General Services
___ Cal/EPA
___ ARB
___ CA Waste Mgmt Bd
___ SWRCB: Grants
___ SWRCB: Delta
X SWRCB: Wtr Quality
___ SWRCB: Wtr Rights
X Reg. WQCB # 5 Sac.
___ DTSC/CTC

___ Yth/Adlt Corrections
___ Corrections
___ Independent Comm
___ Energy Comm
X NAHC
___ PUC
___ Santa Mn Mtns
X State Lands Comm
___ Tahoe Rgl Plan
___ Other:

30. ANTERO A. RIVASPLATA, CHIEF, STATE CLEARINGHOUSE

Response 30-1 It should be noted that Caltrans did submit comments on the Draft EIR directly to the County rather than through the State Clearinghouse.

31

July 29, 1997

97 JUL 30 AM 11:02

RECEIVED
PLANNING DEPARTMENT

Mr. Roger Trout
Senior Planner
El Dorado County Planning Department
2850 Fairlane Court
Placerville, California 95667

Dear Mr. Trout:

Comments on the Draft Environmental Impact Report (EIR) for the Promontory Project

The above-referenced project will eventually be developed on land behind our residence in Governor's Village West (see attached reference map, Figure 3-3). Our major concerns with the proposed project are: 1) the location of the collector road currently proposed to be constructed directly behind our property line (approximately 37 feet to its centerline from our property line, see attached Figure 3-6); 2) if the road is ultimately constructed at that location, the traffic noise, air quality, visual and aesthetic impacts from the road will affect our property; and, 3) the access provided from the Promontory Project through our village via Suffolk Street and its volume of traffic. We feel that these impacts would negatively affect the quality of life at our residence and potentially impact the future resale value of our property. While these impacts can be addressed and mitigated in a broad-based manner in the EIR for the project in total, the direct effect of the road as currently proposed and its environmental impacts to our property will not be able to be mitigated effectively. Thus, many significant environmental impacts from the project as a whole will be directly borne by the seven (7) properties that abut this portion of the Promontory Project unless this collector road is relocated. 31-1

A series of three (3) community meetings were held by the developer of the Promontory Project during April and May, 1997 (see attached letter). Many issues were raised by the community in regards to this project and then discussed by the developer, one of which was the location of the collector road. While these meetings were generally positive and left many in the audience with the impression that the issues raised would be addressed by modifying the plans for the development, the developer said that nothing could be modified at this time because the Draft EIR was being prepared by the County and was too far along to incorporate the changes discussed at the meetings. The developer said that he would be sending a letter to the County during the Draft EIR comment period to formally make the changes to the Promontory Project's plans. One of the changes the developer said was able to be made and that he was supportive of was to relocate the collector road system so that the road would not be directly behind the property lines of the residences in Governor's Village West near Village 5 of the Promontory Project. The collector road would be relocated so that a buffer of one property lot would be between it and the property line with Governor's Village West (i.e. - the backyard of a property in the Promontory Project would abut the backyards of the existing properties) similar to the plans for the rest of the proposed development. In addition the developer mentioned that a collector road could be built on property he had purchased that is northerly of the Crown village. He said that a collector road here would not effect the existing Crown Village but residential lots were planned for a portion of the area and for that reason the "County" was reluctant to approve this collector road. If these undeveloped lots were converted to a different zoning than the quality of life within Governor's Village would be preserved 31-2 31-3

because it would then not experience the 400% increase in traffic that is projected by the EIR. 31-3 CONT.

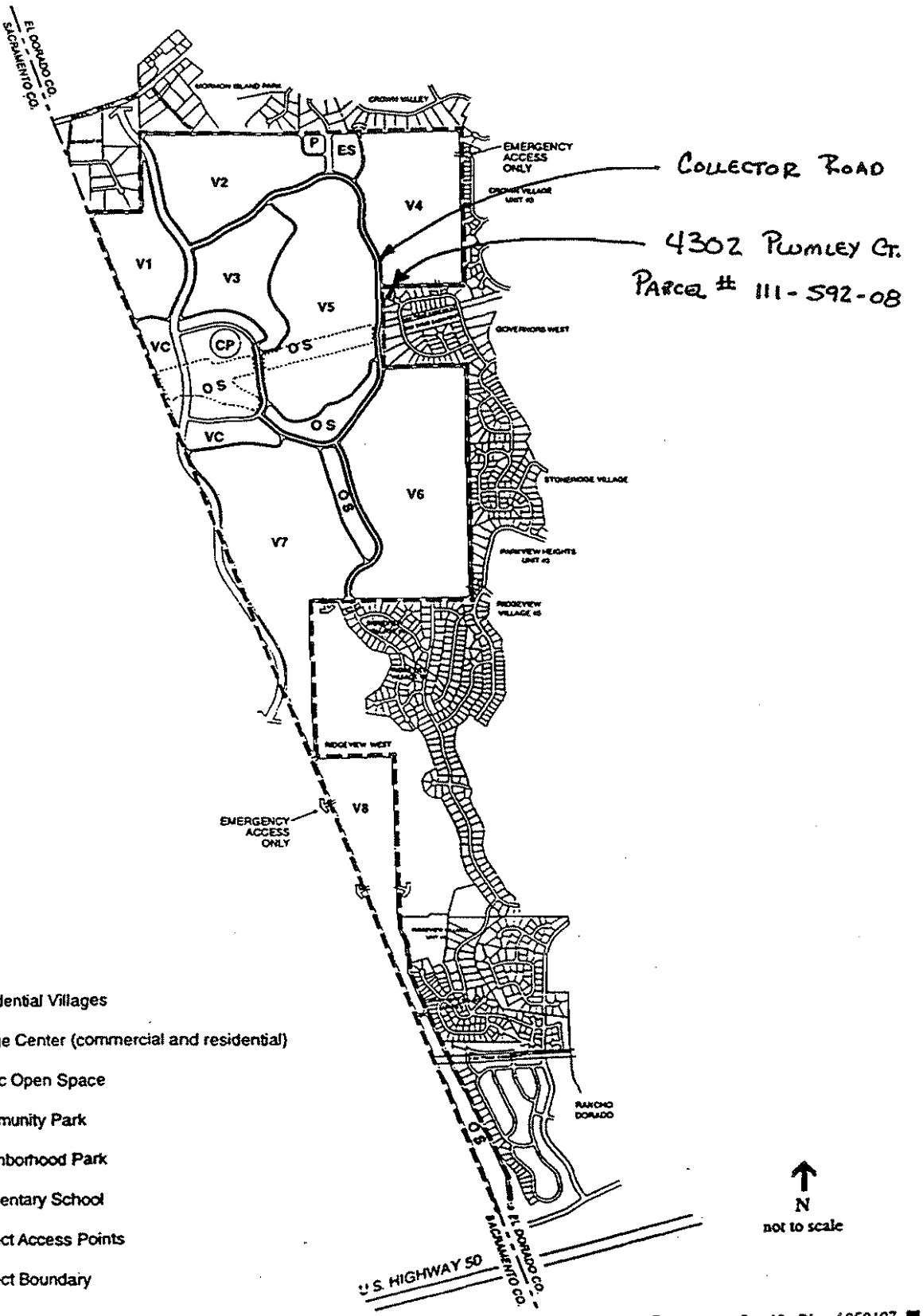
If the collector roads are not relocated as mentioned above, many issues of concern are generated with the Draft EIR. Some of these are: 1) the traffic circulation plan - it does not realistically or adequately address the impact of the proposed development to our property or to the community as a whole; 2) the "lotting plan" (Figure 3-9) and Grading Plan discuss the virtues of contouring the proposed homes to the "natural topography of the site in order to retain the natural features of the project site", plus reduced grading will be accomplished by placing houses on the downhill side of the roads to be built - this would not be the case at this specific portion of the development; 3) width of the collector road - this seems excessive considering that the typical Covenants, Codes and Restrictions (CC&R's) for the various other villages in El Dorado Hills do not allow on-street parking except under unusual circumstances (parking areas are proposed for both directions of travel on the collector road). In addition, if the collector roads are not relocated, some discussion and details in the Draft EIR are needed to indicate how the traffic noise, vehicle headlights, visual and other aesthetic impacts from the road will be mitigated to not significantly affect our property. These details are not provided in the Draft EIR and if not covered, even though they might seem more appropriate for the Specific Plan that will be developed for Village 5 "sometime in the future", the concern is that they will not be incorporated in the future because the "environmental blueprint" for the Promontory Project (the EIR) was mute on these details, thus implying that they are not needed. 31-4 31-5

Thank you for addressing our concerns during the Draft EIR review process and we look forward to working with the County and the developer to relocate the collector road to a more acceptable location that does not adversely impact our residence or anyone else in the community. 31-6

Sincerely,

Kevin and Mary Beth Herritt

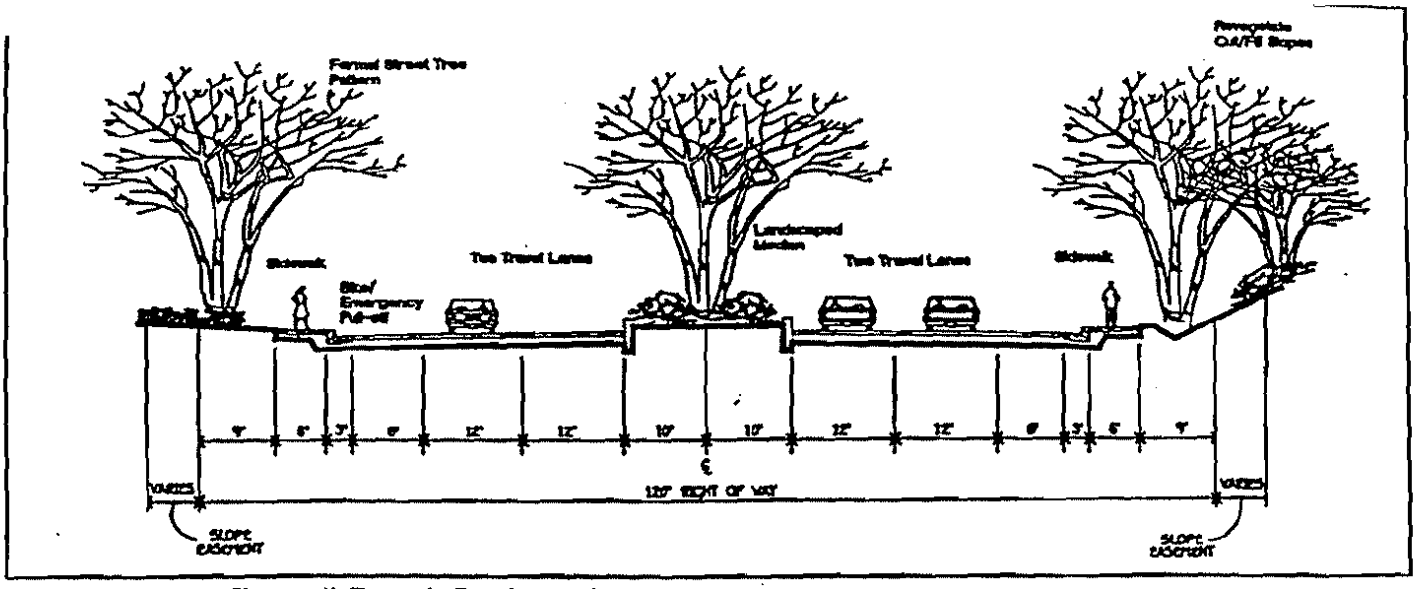
4302 Plumley Court
El Dorado Hills, California 95762
Phone Number: (916) 939-0508



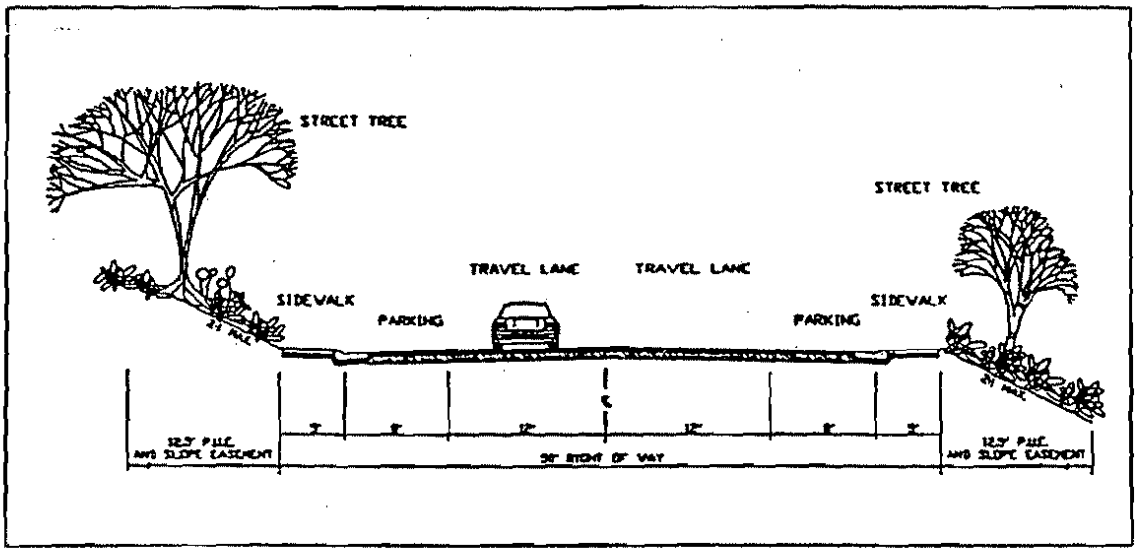
SOURCE: Palisades, 1996

Promontory Specific Plan / 950107 ■

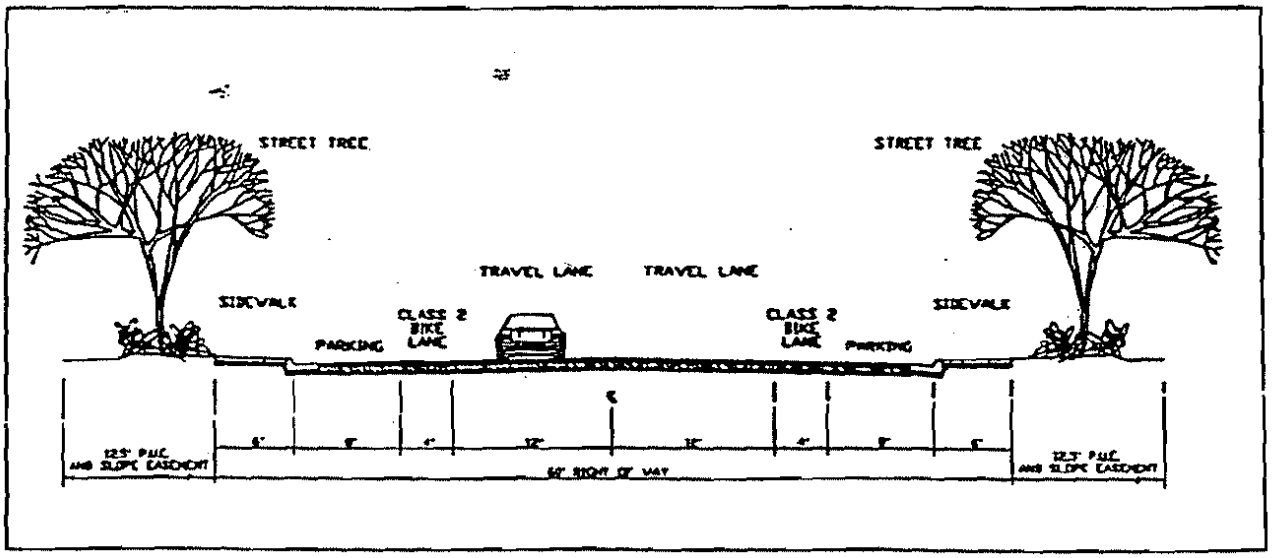
Figure 3-3
Proposed Land Use Plan



Russell Ranch Boulevard



TYPICAL SECTION
COMMUNITY COLLECTOR
NTS



TYPICAL SECTION
VILLAGE CENTER COLLECTOR
NTS

Figure 3-6

Russell Ranch Boulevard, Village Center Collector, and

PALISADES
PROPERTIES, INC.

147 IRON POINT ROAD, STE. A
FOLSOM, CA 95630
(916) 353-1900
FAX (916) 353-0268

April 14, 1997

Dear Neighbors:

During the past ten years Palisades Properties, Inc. has worked with its own planners, environmental consultants and engineers to create a comprehensive plan for the 1,000-acre parcel called The Promontory. Beginning in 1989 we also sought input from El Dorado Hills Area Plan Advisory Committee (APAC), county Supervisors and other agencies to incorporate their project suggestions into the plan.

Neighborhood Meetings

The time to implement the project is drawing near, and we'd like to offer you the opportunity to ask questions and provide input at a series of informational meetings being held at the Community Services District Pavilion on **April 21, May 7 and May 23.** The CSD Pavilion is located at 1021 Harvard Way at El Dorado Hills Boulevard. All meetings will start at 5:30 p.m. in the meeting room (the smaller of the two buildings).

We've described below some highlights of The Promontory and provided attachments relating to density and traffic circulation plans in the hope that it will answer your preliminary questions.

The Promontory Concept

The Promontory is a planned mixed-use community of approximately 1,000 acres, including residential and commercial areas plus open space and park lands. The Promontory will have a distinctive upscale rural character, preserving thousands of oak trees and creating approximately 285 acres of open space.

Average One-Acre Lot Size

While Villages 1 through 3 will have one-third acre lots available for semi-custom homes, the villages bordering existing neighborhoods (Villages 4 - 8) are designed for custom-home builders. The average lot size for these homes is one acre, with many lots exceeding two acres (see attached density and land use plan). It is estimated the price of a lot in Villages 4 through 8 will range from $100,000 to $400,000, with home prices ranging from $375,000 to over $1 million.

Preserving Views

Nearly 30% of the community will remain natural open space. A "Custom Lot Design Notebook" will be created to set forth precise locations of the homes within the lot boundaries. It will offer requirements for positioning and suggestions for designing the homes to preserve as much of the natural landscape and views as possible. To further minimize the impact to existing homes, lot lines will be staggered and special care will be given to the placement of a home's footprint within the lots.

Minimizing Traffic

The major access into and out of The Promontory will be Russell Ranch Road, which will feed commuter traffic to U.S. Hwy. 50 (see attached circulation plan). The community will be serviced by a "community collector" road, which will direct residents in all villages to Russell Ranch Road. Minor access roads will be created to existing neighborhoods. These access points will provide necessary passage for local safety services, as well as a means for existing residents to utilize The Promontory's Village Center.

Consistency with Newly Adopted General Plan

The Promontory has been modified over the years in response to community input, as well as to maintain consistency with all aspects of El Dorado County's newly adopted General Plan.

We look forward to seeing you at the informational sessions. In the meantime, please feel free to call our office if you have any questions which were not addressed in this letter.

Sincerely,

Stefan L. Manolakas
President

31. KEVIN AND MARY BETH HERRITT, RESIDENTS

Response 31-1 The Draft EIR is a Program EIR which evaluates the environmental effects of adoption and implementation of the Promontory Specific Plan. The Draft EIR identifies and evaluates aesthetic, traffic and noise impacts to the Governor's West subdivision. Relocation of the Community Collector road, as requested by the commentors and as suggested by the project applicant (see Comment Letter 45), would appear to improve conditions for residents within the Governor's West subdivision. Moreover, the proposed changes to the Community Collector road would not be expected to result in additional traffic impacts.

The commentors' concern regarding the potential of the project to decrease the value of their property involves a potential economic effect of the project. Pursuant to CEQA Guidelines section 15131(a), the economic or social effects of a project are not treated as significant effects on the environment and are not subject to CEQA.

Response 31-2 The developer's comments on the Draft EIR regarding the proposed modification to the Community Collector road are set forth in Comment 45-9.

Response 31-3 The developer's comments on the Draft EIR regarding the proposed connection through Crown Valley are set forth in Comment 45-9.

Response 31-4 The Draft EIR contains a complete analysis of the project's traffic impacts, including impacts to local and regional roadways. (See Chapter 4.5 of the Draft EIR and Response to Comment 7-1 through 7-13 and 11-1.) The roadway cross sections shown in Figures 3-6 and 3-7 of the Draft EIR are conceptual and will need to be approved by the County. Changes to the project's Community Collector road system are not expected to adversely affect the results of the traffic impact analysis. El Dorado County should review the proposed circulation changes as part of the review of the project applicant's tentative maps and their specific impacts.

Response 31-5 The project applicant has proposed that the Community Collector be realigned as shown in Comment 45-9. However, if the County were to reject this proposal, Mitigation Measure 4.7.5 would still require the project applicant to demonstrate compliance with the noise policies in the General Plan prior to the approval of a tentative subdivision map for Village 5. In addition, the project applicant is proposing to develop a 30-foot landscape corridor between the Community Collector and the existing lots to address visual and aesthetic impacts from the road. This corridor would be heavily landscaped with non-deciduous, fast growing trees and shrubs, with the intent to shield the existing residents from vehicular headlights and daytime glare. Mitigation Measure

4.3.7c of the Draft EIR would further require the use of native landscaping to shield motor vehicle lights and street lights from adjacent areas.

Response 31-6 See Response to Comment 31-4.

32

DOVER CONSTRUCTION, INC.

97 JUL 30 PM 2:03
RECEIVED
PLANNING DEPARTMENT

July 29, 1997

El Dorado County Planning Department
2850 Fairlane Court
Placerville, CA 95667

Att: Roger Trout

Re: Promontory Specific Plan

Dear Roger,

After careful review of the project circulation plan we must object to the proposed collector street adjacent to the Governors West neighborhood. This location disregards the privacy of existing homes and due to the steep terrain will require massive grading and filling of the natural drainage swales. 32-1

The proposed location will result in headlights shining directly into the rear yards and family rooms of the adjacent properties. For a project which has made substantial effort to minimize the projects impact on existing views at other neighborhoods, this particular section of road alignment is unacceptable to the property owners of Governors West.

In our view, the alternate road alignment proposed at the neighborhood meeting held May 6, 1997 would be acceptable. We would support the CSD approval necessary for the required emergency vehicle access and hiking trail. 32-2

With regard to the need for a project north south collector street it appears that with respect to terrain it could be accommodated on the western half of Village 5. 32-3

In addition, the estimated traffic count for Hensley Circle and Warren Lane are unacceptable. Additional east west access points need to be considered for this quadrant of the project. 32-4

Please address these issues in the final EIR.

Dover Construction, Inc

Jerome W Dover

701 Platt Circle El Dorado Hills, Ca. 95762 (916)933-5220

32. JEROME DOVER, DOVER CONSTRUCTION, INC.

Response 32-1 See Response to Comment 31-1 and 31-5. The precise location and design of the Community Collector has not yet been determined. However, the location shown in Figure 3-5 of the Draft EIR would minimize tree removal, grading and drainage impacts. Section 4.9, Geology and Soils, and Section 4.10, Hydrology and Water Quality, discuss grading and drainage impacts from development of the project site (including the Community Collector) and set forth mitigation measures to reduce these impacts to a less-than-significant level. Potential impacts associated with vehicle headlights are discussed on page 4.3-20 of the Draft EIR. Implementation of Mitigation Measure 4.3.7c would require the use of landscaping along project roadways to shield vehicle headlights and street lights from adjacent areas.

Response 32-2 See Response to Comment 31-1 and 31-5. Although the project applicant has obtained preliminary approval of the proposed alignment from the El Dorado Hills Fire Department (prior to presenting the alternative to the residents who attended the community meetings), formal approval would be required at the time the Specific Plan or tentative maps are approved for the affected villages. The El Dorado Hills Fire Department must approve the length of the cul-de-sac and the emergency access proposed from Village 5 to Hensley Circle. Furthermore, the El Dorado Hills Community Services District (CSD) must grant an emergency access easement from the project site to Hensley Circle in the area where the power lines cross the CSD's property. The land under the power line easements, extending westerly from Hensley Circle to the project site property line, is owned by the CSD. This is the only area where the existing grade will permit a 12-foot-wide paved access road for emergency vehicles only (hiking and biking would be permitted).

Response 32-3 The commentor suggests that a north/south community collector could be accommodated on the western portion of Village 5. The purpose of the community collector, as proposed in the Specific Plan, is to convey traffic from Villages 4, 5, and 6 to Russell Ranch Boulevard. Relocating the community collector to the western portion of Village 5 would not serve that purpose since it would not directly serve the above mentioned villages. The alternative proposed by the project applicant (see Comment 45-9) would convey traffic to Russell Ranch Boulevard, and thus achieve the original purpose of the community collector. The precise alignment of the collector would be subject to approval by the County Planning Department and Department of Transportation staff as part of the implementation of Mitigation Measure 4.5.1a.

Response 32-4 The only other feasible east/west access point is the east/west collector proposed to connect Russell Ranch Boulevard to the Crown Valley project

(see Response to Comment 33-1 and 45-9). Because existing subdivisions are built in this quadrant of the project, no other east/west access points are feasible. Please see Response to Comment 7-1 regarding traffic volumes on residential roadways.

33

July 29, 1997

El Dorado County
Planning Department
Attn: Roger Trout
2850 Fairlane Court
Placerville, CA 95667

Re: Promentory Specific Plan Draft EIR

Dear Mr Trout,

Some thoughts about the Draft EIR follow. Some referenced items are discussed in other places in the document.

1. 4.5.2, P. 2-15, Mitigation Measure. "; construction of new roads to serve the project site". The road in Crown Valley (Brittany Way) will be an easy access to EDH Blvd. as well as a connection between an elementary school and EDH Blvd. Consequently, the traffic load on the road will be significantly more than originally planned for the road.
A redo of the tentative map between the school location and EDH Blvd. is appropriate to enhance safe access/egress from individual lots along this road segment. Primary roads to local school sites tend to become speed strips and be less safe for local residents. The needed map redo is more, I believe, than the contemplated redo involved with the recently approved phasing for the Crown Valley project. 33-1

2. Mitigation 4.5.2a "Widen Green Valley Road *from two lanes to four lanes* from El Dorado Hills Boulevard in El Dorado County *to the East Natoma Street/Blue Ravine Road/Green Valley Road intersection* in the City of Folsom." (Italics mine)
From what I understand, Green Valley Road, west of Russell Ranch Blvd (ED County) (or the Sacramento/El Dorado County line) will not be more than two lanes in the future. Furthermore, I question the reality of a mitigation measure if it proposes improvement of a Sacramento County Road. 33-2

3. Mitigation 4.5.9, last sentence, p. 2-18. It is more cost efficient for bus turnouts to be constructed when the road is constructed. Other projects have turnouts constructed in appropriate locations before the actual transit service commenced. 33-3

4. Mitigation 4.7.3, "bullet' #1, p. 2-23. A 30 mph appears euphemistic for a mitigation. After the incorporation of the needed access points on Russell Ranch Blvd. from both Amy's Lane and Shadowfax Lane areas, this speed limit may become more realistic. 33-4

5. Mitigation 4.8.1, middle of first 'bullet' paragraph, pages 2-24, 2 -25. "Canopy cover retention within oak woodlands shall meet the requirements of General Plan Policy 7.4.4.4 *wherever possible.*" (Italics mine) "wherever possible" is inappropriate wording to be used in a reference to a General Plan Policy, which is required of each project. 33-5

6. Section title 4.9 is 'Geology'- not 'Geoogy' and Soils. 33-6

7. Figure 3-7, p. 315, bottom of 3 illustrations. The use of sidewalks on both sides of the road is excessive for a local road in the El Dorado Hills area. The only road segment, for which two sidewalks may be appropriate, is the one linking the new elementary school in Crown Valley and EDH Blvd. 33-7

8. Figure 4.5-4, p. 4.5-10. The transit bus actually goes to the north parking lot of the Community Park (via St. Andrews Dr.). It does not end at the Harvard Way/EDH Blvd. intersection. 33-8

9. Last paragraph (RUSD), p. 4.12-5. line 3. The fourth elementary school's name is Lake Forest.
Second paragraph (BUSD), p. 4.12-7, line 2. The second elementary school's name is Wm. Brooks - not 'Brooks'. 33-9

10. Noise, 4.7.4, p. 6-29. Some currently non-constructed roads, such as Brittany Way, should also be added to the list as a SUI. 33-10

Sincerely,

Harriett B. Segel

Harriett B. Segel

cc: File

33. HARRIET B. SEGEL, RESIDENT

Response 33-1 The Crown Valley project, which is located immediately north of The Promontory, was approved for 68 lots on September 8, 1988. The approved Crown Valley tentative map did not provide an access road to The Promontory. In early 1997, the project applicant acquired the Crown Valley project for the primary purpose of providing a direct access to The Promontory. Currently, the project applicant is working with the County to determine the street design requirements to provide the access proposed in Comment 45-9.

Response 33-2 Green Valley Road in the City of Folsom between the El Dorado County line and East Natoma Street will be widened to four lanes by the year 2015 according the City of Folsom staff. As described on page 4.5-30 of the Draft EIR, the City of Folsom's East Area Facilities Plan Final EIR identified Mitigation Measure 4.2.3a which consisted of widening of Green Valley Road to four lanes between East Natoma Street and El Dorado Hills Boulevard (City of Folsom, 1991). As indicated in the Statement of Findings for the East Area Facilities Plan EIR, the City of Folsom City Council adopted Mitigation Measure 4.2.3a, but stated that implementation of this measure was under the jurisdiction of another public agency (El Dorado County) and that the City did not have the authority to adopt measures that would be implemented by El Dorado County. Since the findings for the East Area Facilities Plan includes improvements to Green Valley Road in the City of Folsom, these measures are considered to be potentially implementable. El Dorado County will ultimately determine whether the project applicant will contribute to the cost of any widening in the City of Folsom.

Response 33-3 See Response to Comment 12-11.

Response 33-4 No access to Russell Ranch Boulevard from the Shadowfax and Amy's Lane areas are currently proposed as part of this project. However, potential future accesses from Shadowfax and Amy's Lane may be developed by the County. Mitigation Measure 4.7.3 requires the posting of speeds at 30 mph (drivers exceed posted speed limits by an average 5 mph) along the segments of Russell Ranch Boulevard in the Shadowfax and Amy's Lane areas along with the construction of an earthen berm along the western side of Russell Ranch Boulevard. Implementation of the mitigation measure reduces significant impacts to less than significant in reference to the significance criteria presented in Section 4.7, Noise, and is considered feasible mitigation.

Response 33-5 The following changes are hereby made to the text of the Draft EIR:

- Page 2-25, Table 2-1, first paragraph, the first sentence has been revised to read:

  "...Plan Policy 7.4.4.4 ~~wherever possible~~."

- Page 4.8-27, first bulleted paragraph, third sentence, Mitigation Measure 4.8.1, has been revised to read:

  "Canopy cover retention within oak woodlands shall meet the requirements of General Plan Policy 7.4.4.4 ~~wherever possible~~."

- Page 6-18, last bulleted paragraph, third sentence, Mitigation Measure 4.8.1 has been revised to read:

  "Canopy cover retention within oak woodlands shall meet the requirements of General Plan Policy 7.4.4.4 ~~wherever possible~~."

Response 33-6 The following changes are hereby made to the text of the Draft EIR:

- Table 2-1, page 2-29 has been revised to read:

  "4.9 Geology and Soils"

Response 33-7 The roadway cross sections shown in figures 3-6 and 3-7 are conceptual; the final design of project roadways has yet to occur. However, the Village Center collector is anticipated to have sidewalks on both sides of the roadway because of the anticipated heavy pedestrian use of the Village Center.

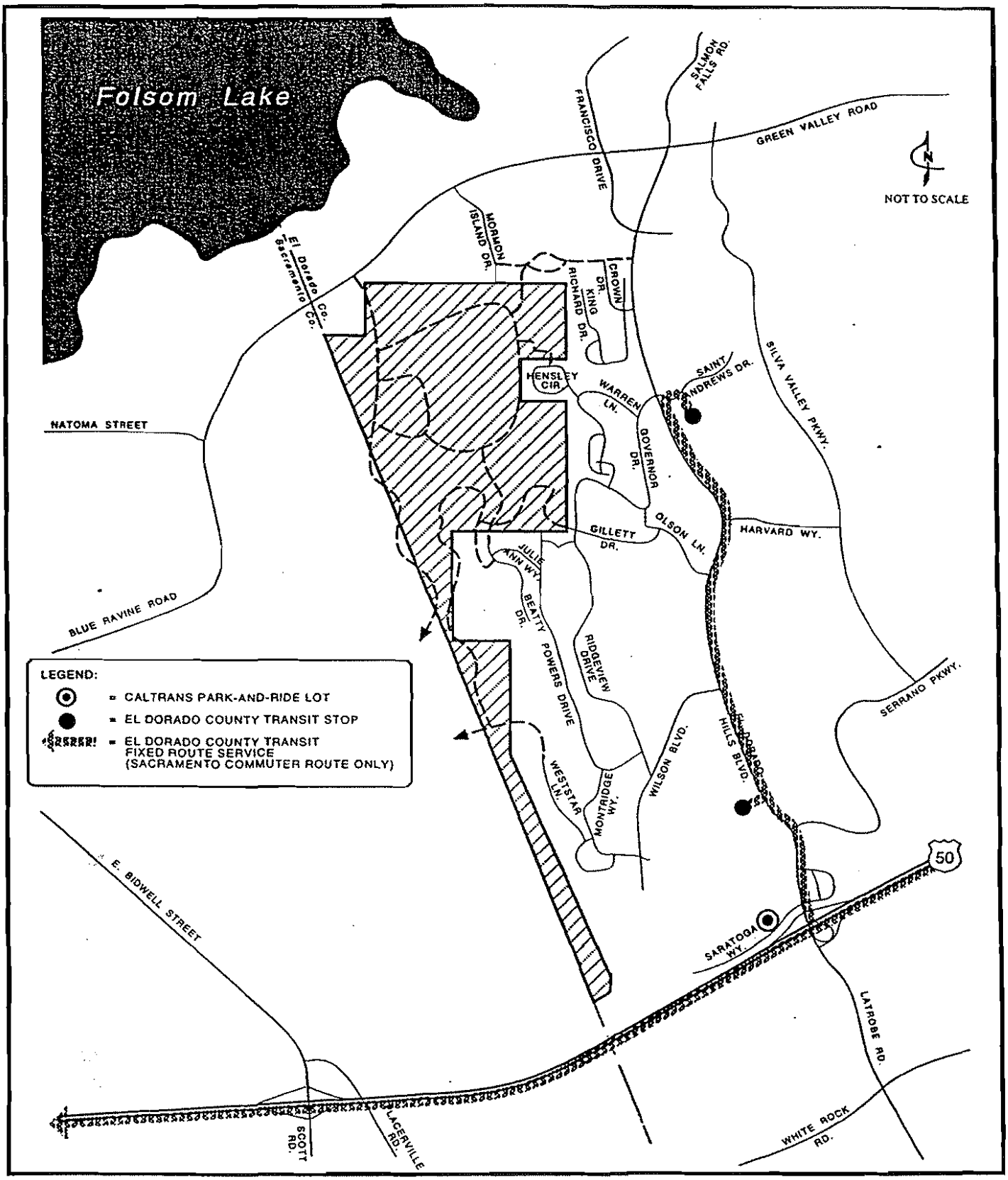
Response 33-8 Figure 4.5-4 of the Draft EIR is hereby revised in accordance with the attached exhibit to show the correct transit stop at the north parking lot of the Community Park.

Response 33-9 The following changes are hereby made to the text of the Draft EIR.

- Page 4.12-5, last paragraph, third sentence is revised to read:

  "The District includes four elementary schools (Rescue, Green Valley, Jackson, and Lake Forest) and one middle school (Marina Village)."

- Page 4.12-7, first paragraph under Buckeye School District, the second sentence is revised to read:



SOURCE: Fehr & Peers Associates, Inc., 1997

Figure 4.5-4
Existing Transit Routes and Facilities

"The District consists of four elementary schools (Buckeye, William Brooks, Blue Oaks, Silva Valley) and two middle schools (Camerado Springs and Rolling Hills)."

Response 33-10 The noise analysis in the Draft EIR was limited to those roadways identified in Table 4.7-8 on page 4.7-13, Table 4.7-10 on page 4.7-16, and Table 4.7-12 on page 4.7-20. There is no evidence that implementation of the proposed project would result in a significant noise impact on Brittany Way or any other non-constructed roadway.

STATE OF CALIFORNIA-BUSINESS, TRANSPORTATION AND HOUSING AGENCY PETE WILSON, Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 3, SACRAMENTO AREA OFFICE - MS 41
P.O. BOX 942874
SACRAMENTO, CA 94274-0001
TDD Telephone (916) 741-4509
FAX (916) 323-7669
Telephone (916) 324-6642

34

July 29, 1997

IELD033
03-ELD-50 P.M. 0.857
The Promontory
Village Development Proposal
Draft EIR

Mr. Roger Trout
El Dorado County Planning Department
2850 Fair Lane Court
Placerville, CA 95667

Dear Mr. Trout:

Thank you for the opportunity to review and comment on the above referenced document.

COMMENTS:

- Level of Service (LOS) F conditions currently exist during peak periods at the El Dorado Hills Interchange. This project will increase traffic volumes on Highway 50 west of the interchange and on the interchange ramps, thereby exacerbating this problem.

34-1

- To address these impacts (while fair share funds accrue to make future improvements), various options are available:

  1.- Defer the project until the LOS F traffic conditions are eliminated

  2.- Construct the El Dorado Hills Interchange improvement project at the time the Promontory Village project is initiated.

Please provide our office with copies of the Final EIR and any further action regarding this project. If you have any questions regarding these comments, please contact Ken Champion at (916) 324-6642.

Sincerely,

Betty Sanchez
for JEFFREY PULVERMAN, Chief
Office of Transportation
Planning - Metropolitan

34. JEFFREY PULVERMAN, CHIEF, CALTRANS, DISTRICT 3 OFFICE

Response 34-1 El Dorado County is working closely with Caltrans and residents in El Dorado Hills to develop a first phase interchange improvement project by the year 2000. This time frame is also consistent with initial development estimates for the Promontory project. However, El Dorado County will probably not defer project development until interchange improvements are completed because impact fees from the Promontory are needed to fund the interchange and other improvements contained within the El Dorado Hills Road Improvement Fund (RIF) program. Payment of fees under the RIF, under Mitigation Measure 4.5.8 is mitigation for the project's impacts to the interchange. See also Response to Comment 11-1.

EL DORADO LOCAL AGENCY FORMATION COMMISSION

2850 FAIRLANE COURT
PLACERVILLE, CA 95667

TELEPHONE:(916)621-5322
FAX:(916)642-0508

July 29, 1997

Roger Trout, Senior Planner
El Dorado County Planning Department
2850 Fairlane Court
Placerville, CA 95667

Subject: Draft Environmental Impact Report for Promontory (Russell Ranch)

Dear Mr. Trout:

Thank you for the opportunity to comment on the draft Environmental Impact Report for Promontory (Russell Ranch). I have also reviewed the Specific Plan and Fiscal Impact Study. An Application was filed with LAFCO in 1992 to annex APN 067-040-05, 111-020-04 and 108-030-01 (approximately 999 acres) into the boundaries of the El Dorado Irrigation District and the El Dorado Hills County Water District. The following comments are provided by LAFCO staff to address the Commission's role as responsible agency:

1. Water from El Dorado Irrigation District will be provided through AD No. 3 and the proposed AD No. 12. Formation of AD No. 12 is being studied by El Dorado Irrigation District and will be subject to discretionary approval by that agency. When LAFCO reviews this project for annexation, a primary concern will be the District's ability to provide service without negative impacts on property already within the District. Additional water rights are being pursued by El Dorado Irrigation District to serve this project as well as other development projects. The timing and availability of new water sources, the additional discretionary approvals necessary to secure the water and the fiscal impacts of these water sources are not discussed in the Environmental Impact Report nor in the Fiscal Impact Study. 35-1

2. Sewer capacity and infrastructure are likewise to be provided through the existing AD No. 3 for a portion of the service. The proposed AD No. 12 will allow for the provision of the majority of the service needed by the project. Adequate treatment 35-2

COMMISSIONERS: Kenneth Bush, Walt Shultz, Wayne H. Haug, Aldon Hamard, J.Mark Nielsen Margo Osti, W. Trent Saxton
ALTERNATE COMMISSIONERS: Harriett Segel,, Kathi Lishman ,Robert Flynn, Raymond J. Nutting
STAFF: Roseanne Chamberlain, Executive Officer, Julie Hansen, Commission Clerk, Tom Parker, LAFCO Counsel

capacity will depend on the formation of the proposed AD No. 12, and will be subject to any requirements and limitations of the proposed assessment district. The timing, feasibility and cost analysis of expansion of wastewater service capacity created by the project is not discussed in the draft EIR. 35-2 CONT.

Should you have any questions regarding these comments, do not hesitate to contact me.

Sincerely,

Roseanne Chamberlain
Executive Officer

35. ROSEANNE CHAMBERLAIN, EXECUTIVE OFFICER, EL DORADO LOCAL AGENCY FORMATION COMMISSION

Response 35-1 The timing and availability of EID's new water sources, along with the additional discretionary approvals needed to secure the water, are discussed on pages 4.13-1 through 4.13-4 of the Draft EIR. Applicable General Plan and EID policies are discussed on pages 4.13-8 through 4.13-12 of the Draft EIR. Finally, project impacts and mitigation measures associated with the provision of water to the project are discussed on pages 4.13-14 through 4.13-19 of the Draft EIR. See also Response to Comment 41-8 through 41-19 and the Addendum to the Final EIR for the Carson Creek Specific Plan, which is referenced on page 4.13-14 of The Promontory Draft EIR. The requested information about the fiscal impacts of these water sources constitutes an economic, rather than environmental issue. As such, it is beyond the purview of an EIR under CEQA. CEQA Guidelines section 15131 provides: "economic or social effects of a project shall not be treated as significant effects on the environment."

Response 35-2 EID's wastewater treatment facilities and the timing and feasibility of EID's expansion of those facilities are discussed on pages 4.13-4 through 4.13-5 of the Draft EIR. Applicable General Plan policies are discussed on pages 4.13-9 through 4.13-10 of the Draft EIR. Finally, project impacts and mitigation measures associated with generation of wastewater by the project are discussed on pages 4.13-19 through 4.13-20 of the Draft EIR. See also Response to Comment 38-4 and 41-20 through 41-32. A cost analysis of this expansion is not required by CEQA (see CEQA Guidelines section 15131 regarding economic impacts).

36

July 30, 1997

Mr. Roger Trout, Senior Planner
El Dorado County Planning Department
2850 Fairlane Court
Placerville, CA 95667

VIA FAX: 642-0508

SUBJECT: THE PROMONTORY, DRAFT ENVIRONMENTAL IMPACT REPORT
SCH #94112056

Dear Mr. Trout:

Parker Development Company is a general partner in The Parkway which is located in Folsom and is immediately downstream from the Russell Ranch and receives drainage flows from The Promontory through the Russell Ranch. The Parkway is traversed by Humbug and Willow Creek and is the transition from steep topography to flat, valley like topography for both creeks. The development of The Parkway is guided by a Development Agreement and a Specific Plan which includes a Resource and Mitigation Plan and a U.S. Army Corps Permit. All of these documents recognize the importance, complexity and sensitivity of Humbug and Willow Creek. Collectively these documents provide for the development and enhancement of over 200 acres of open space and a seven mile trail system, 42 acres of riparian habitat, 43 acres of wetland habitat and also provides flood control for the city of Folsom. All of these amenities and requirements could be negatively impacted by upstream drainage. For example, 13.5 acres of preserved and created wetlands along Willow Creek could be negatively impacted by unmitigated runoff loaded with sediment resulting from extensive construction activity.

As a result of the complexity and extent of these interrelationships, Section 2.18 (h) of the Development Agreement for The Parkway provides that "prior to authorizing any off-site activity with a reasonably foreseeable potential of negatively impacting water levels or hydrologic flows from upstream properties, the City shall require that the party undertaking such activity undertake appropriate environmental and hydrologic analysis to examine the ongoing viability of the wetland hydrology and habitat."

We have reviewed the above referenced document and have the following comments:

1. Section 4.10 Hydrology and Water Quality. There are no specific mitigation measures mentioned in the document. The implementation of specific mitigation measures could have a significant impact on land use. The identification and sizing of proposed drainage

36-1

PARKER
DEVELOPMENT COMPANY

8144 Pocket Road
Sacramento, CA 95831
(916) 427-2936
FAX (916) 427-3842

facilities should be provided in this document. A comprehensive and thorough understanding of the size and location of these facilities should be included in this document. The lack of a specific understanding could impact the land uses in the Russell Ranch. Since it is not possible to determine the timing of development of either the Russell Ranch or The Promontory, a clear understanding now of facilities required should minimize future coordination problems between the two projects. 36-1 CONT.

2. The draft EIR improperly characterizes Willow Creek as ephemeral. Although the creek is ephemeral at its headwater of the Promontory project site, Willow Creek is perennial downstream of The Parkway. This document also fails to mention the Blue Ravine groundwater basin. Failure to properly characterize the receiving waters may underestimate the beneficial uses of the receiving waters and the values of the associated aquatic, wetland, and riparian habitats. Consequently, best management practices (BMPs) may be inappropriately selected to protect water quality. (Jones & Stokes comment) 36-2

3. Regional flooding is not accurately described in the draft EIR. This document relies on the Humbug/Willow Creek Master Plan (Harlan Bartholomew and Associates, 1991), which does not include existing channel modifications related to implementation of The Parkway. The project commits to attenuating post-project 100-year flood flows to pre-project levels. However, the lack of updated channel data in the hydrologic and hydraulic analyses may lead to improper sizing of detention basins, channels, and other stormwater infrastructure, which may have adverse effects on The Parkway. (Jones & Stokes comment) 36-3

4. The draft EIR does not describe the best available water quality data for the region. Although, regular surface water quality monitoring data is not available for Willow or Humbug Creeks, surface water samples were collected during 1992 and the winter of 1993 from Willow Creek near the East Bidwell Street crossing as part of the Sacramento Stormwater Management Program. Ambient water quality information is needed to evaluate the rate of pollutant accumulation in detention basins, so that cleaning schedules can be developed to protect wildlife resources. (Jones & Stokes comment) 36-4

5. Page 4.10-1, third paragraph: the "north Willow Creek tributary" is actually a tributary to Humbug Creek and flows under the Natomas Ditch. (Spink Corporation comment) 36-5

6. Page 4.10-1, fourth paragraph: the last sentence does not mention flows into Humbug Creek. Please indicate flow rates for both Humbug and Willow Creeks. (Spink Corporation comment) 36-6

7. Page 4.10-4, first paragraph: the Parkway project has no flooding. Reconstruction of Humbug Creek has been completed. (Spink Corporation comment) 36-7

8. Page 4.10-11, next to last paragraph: this paragraph indicates an agreement between Promontory and Russell Ranch has been concluded for the construction of "retention/detention facilities". My question is whether this agreement is in place and whether the timing for the construction of the shared basin will coincide with the construction of The Promontory. (Spink Corporation comment) 36-8

9. Page 4.10-4, last paragraph: drainage as indicated in this paragraph flows not only into Willow Creek but also into Humbug Creek. Please indicate the division of these flows. (Spink Corporation comment) 36-9

We are currently attempting to work with the city of Folsom to complete the review allowed in our development agreement and referred to above for the Russell Ranch (Folsom) and The Promontory (El Dorado County). It's not clear whether the information provided by the city in response to our request includes the flows from The Promontory. 36-10

Comments included in this letter were developed from comments, written and verbal, from Jones and Stokes Associates (items 2-4) and The Spink Corporation (items 5-10). The consultants for these companies are Greg Sutter at Jones and Stokes Associates (916/737-3000) and James Barnts at The Spink Corporation (916/925-5550). We are available at your convenience to discuss these comments.

Best regards,

THE PARKWAY

Kirk Bone

Kirk Bone
Project Manager

cc: Mike Cook, Hefner Stark & Marois
Steve Rudolph, Asst. City Attorney, City of Folsom
David Storer, PIP Director, City of Folsom
Stefan Manolakas, Palisades Properties
Greg Sutter, Jones & Stokes Associates
Jim Barnts, The Spink Corporation

36. KIRK BONE, PROJECT MANAGER, PARKER DEVELOPMENT COMPANY

Response 36-1 See Response to Comment 9-1 and the drainage report included as Appendix B to this Final EIR. Locations and assumptions for proposed detention basins on the project site and in the City of Folsom are identified in Appendix B.

Response 36-2 See Response to Comment 9-1 and the drainage report included as Appendix B to this Final EIR. The commentor is correct that Willow Creek is perennial within the City of Folsom.

The following text changes are made to the Draft EIR.

- Page 4.10-1, first paragraph, the fourth sentence is revised to read:

"Willow Creek within the City of Folsom is generally perennial, while some of its ~~and its~~ tributaries are intermittent, flowing only during and immediately after the rainy season."

As described on pages 4.10-4 and 4.10-5 and Response to Comment 41-46, groundwater resources on the project are considered minimal because of topography and the geology of the project site.

Response 36-3 See Response to Comment 9-1 and the drainage report included as Appendix B to this Final EIR.

Response 36-4 The State Water Resources Control Board, Central Valley Regional Water Quality Control Board, and the Resource Conservation District monitor erosion control measures and water quality for development projects. Neither of these agencies require water quality testing prior to project approval.

Response 36-5 The following changes are made to the text of the Draft EIR.

- Page 4.10-1, third paragraph, the third sentence is deleted:

"~~The natural channel of a north Willow Creek tributary appears to have been replaced by the Natomas Ditch, upstream of its confluence with the main channel of Willow Creek.~~"

Response 36-6 See Response to Comment 9-1 and the drainage report included as Appendix B to this Final EIR.

Response 36-7 See Response to Comment 47-15.

Response 36-8 See Response to Comment 9-1 and the drainage report included as Appendix B to this Final EIR.

Response 36-9 See Response to Comment 9-1 and the drainage report included as Appendix B to this Final EIR.

Response 36-10 See Response to Comment 9-1 and the drainage report included as Appendix B to this Final EIR.

37

EL DORADO HILLS
COMMUNITY SERVICES DISTRICT

July 29, 1997

Roger Trout, Senior Planner
El Dorado County Planning Department
2850 Fairlane Court
Placerville, CA 956667

RE: Draft Environmental Impact Report/Promontory Specific Plan

Dear Mr. Trout:

The El Dorado Hills Community Services District (EDH CSD) submits the following comments regarding the "The Promontory Draft Environmental Impact Report, SCH #94112056".

Impact Number 4.12.6 states that "the 13.6 acres of parkland included in the project and existing parkland in the El Dorado Hills Community Service District would provide an adequate amount of parkland for project residents"; and that "since no significant impact was identified, no mitigation is required." 37-1

The El Dorado Hills Community Services District Board of Directors disagrees that the proposed 13.6 acres of parkland is adequate and desires an offer of dedication for the required 22.9 acres of "active" parkland in order to insure adequate parkland to serve the residents of "The Promontory" and to mitigate the impact on existing parkland in the community. The Board of Directors desires that three active parks be designated in the project as follows:

- A 16.9 acre community park located in the Village Center.
- A three (3) acre neighborhood park located in the northern portion of the project, possibly on the former elementary school site.
- A three (3) acre neighborhood park located in the southern portion of the project, possibly at the entrance to Village 6.

Park sites are to comply with the District's Parkland Dedication and Development Standards, Policy #6110, i.e., slope requirements, etc., (copy of which is attached), and are subject to approval by EDH CSD. 37-2

1021 HARVARD WAY . EL DORADO HILLS . CALIFORNIA 95762-4353 . TELEPHONE 916-933-6624 . FAX 916-933-6368

4.3 AESTHETICS: The Project Design Guidelines and/or the Design Notebook and the CC&R's for the entire project, not just the highly visible areas, should be submitted to the El Dorado Hills Community Services District for review and approval to insure consistency with community standards regarding landscaping, lighting, fencing, signage, grading, architectural design, and other related issues. 37-3

Extensive landscaping should be required along roadways to reduce visual (and noise) impacts and to enhance pedestrian and bicycle facilities. An on-going funding mechanism for the maintenance of landscaping must be provided to reduce the financial impact on public agencies. 37-4

Thank you for the opportunity to provide input on this project. For your information, the services currently provided by EDH CSD include: parks; recreation facilities; design review control; enforcement of conditions, covenants, and restrictions; street lights; solid waste collection; cable television; and the formation and administration of landscaping and lighting assessment districts. If you wish to discuss any of these issues in greater detail please contact us.

Sincerely,

WAYNE A. LOWERY
General Manager

Velma Gambles
Director of Special Projects

Enclosure: EDH CSD Parkland Dedication and Development Standards

c: Supervisor Sam Bradley
Palisades Development
APAC

Source: Parkland Dedication Policy, Revised, Amended, & Adopted in entirety June 13, 1996

K. A "Phase I Environmental Clearance" will be performed at property owner or developer's expense prior to the acceptance of a park or recreation facility, park site or land by the El Dorado Hills Community Services District Board of Directors.

> A "Phase I Environmental Clearance" means an environmental audit or assessment of the subject land, area, or property which disclosed no presence or likely presence of a release or a threat of release of a hazardous substance has occurred or may occur at, on, to, from or beneath the subject property. The property owner will agree to warrant the findings of the "Phase I Environmental Clearance."

6110.70 The District requires a conceptual, park site capability design, demonstrative of the improvements proposed and their footprint within the proposed park site. Trail sites or other public ROW connections to the park site shall be shown and coordinated between existing and other proposed park sites both internal and external to the subdivision. A proposed site not contiguous to a public street must be accessible through appropriate easements.

6110.80 Proposed land dedications for park site(s) shall be grant deeded to the District upon filing of the first phase of the final map regardless of the phase in which the park site(s) are located. Where payment of in-lieu fees is approved, they shall be due, in full, upon filing of the first phase final map for the subdivision.

6110.90 Fee title to the property shall be free and clear of liens, leases, easements, encumbrances and use restrictions including any unrecorded encumbrances such as per acre assessment fees against the land for the availability of roads, bridges, water and sewer services. Said offer shall be in a form that can be accepted for transfer of fee title at any time by the District.

6110.100 Archeological, geological, and historical features may be included within a park site when provision is made for their preservation by the subdivider.

6110.110 Credit may be given for private park land development as provided for by County Ordinance. Credit is calculated on an acre by acre basis, not on its financial worth/value or number of improvements.

6110.120 Prior to the acquisition or acceptance of new recreation facilities, park sites, or land, the District requires the property owner or developer to provide a funding mechanism, such as the formation of a Landscaping and Lighting Assessment District, to cover the cost of development, maintenance, and operation of said park site, facility, or land.

20% of the site, may be acceptable where it has utility for picnicking or other passive recreation activities and when it complements usable park area (2% slope) or when it appears consistent with uses proposed for a special purpose park site. All parks improved for active recreation purposes (i.e., ball fields, hard courts, etc.) shall be graded to a maximum 2% slope within areas proposed for such uses.

D. Site shall be free and clear of surface and overhead utility line easements which contain design, maintenance or operation constraints or place the public at unreasonable risk. Where easements unavoidably occur, only those compatible to the intended active recreation development, will be allowed for consideration as an acceptable dedication.

E. In exceptional cases, land containing outstanding natural resources or scenic features with obvious potential for enjoyment by local residents or for recreation pursuits appropriate thereto are allowable.

F. The presence of trees shall be evaluated on a case by case basis. However, field sport play areas must be clear or cleared of trees by the subdivider, according to District specification, in advance of dedication.

G. A neighborhood park, to the extent practicable, shall be centrally located within its residential service area and easily accessed by pedestrian or light vehicular traffic. Typical amenities include children's play apparatus, hard court, a multi-purpose turfed area and suitable landscaping.

H. Village/area parks shall generally provide recreation facilities needful by a larger community segment. These may be located on more significant transportation routes and shall furnish adequate parking. Ample hard courts, including tennis, larger field areas, group picnic facilities and a larger, more complex play apparatus for children, is customary.

I. Delivery to the proposed park site of an adequate supply of potable water and sewer and/or electrical service, where applicable, shall be guaranteed by subdivider/developer and stubbed out. Alternate domestic water sources must be adequate to satisfy supply and demand for the proposed land use.

J. Drainage courses, or dedications near or adjacent to hazardous or noxious material's sites are not acceptable. Flood plains are generally not accepted, unless the site's potential risk's are fully mitigated at the subdivider's risk and expense.

EL DORADO HILLS COMMUNITY SERVICES DISTRICT

POLICY HANDBOOK SERIES 6000-FACILITY DEVELOPMENT

POLICY TITLE: PARKLAND DEDICATION AND DEVELOPMENT STANDARDS
POLICY NUMBER: 6110

6110.10 All subdividers of land within the District's jurisdiction shall dedicate park land suitable for active recreation use, or pay fees in-lieu thereof, or by EDHCSD Board authorization, follow a combination of these alternatives. Dedication amounts shall be determined as a result of calculation based on the legislated rate of 5 acres per 1000 population project yield. Population is calculated at the rate of 3.3 persons for single family subdivisions and 2.8 for multi-family subdivisions on a per parcel basis.

6110.20 Where fees are paid in-lieu of land dedication, the sum owed shall be determined by District staff by consulting with the County Assessors' Office, County Planning Department and/or an approved private appraiser, as authorized by ordinance.

6110.30 The amount of park land to be dedicated shall be calculated on the basis of the subdivision's dwelling unit yield as determined from the approved tentative map or the final map should the yield increase.

6110.40 Staff shall inspect and evaluate all proposed park land dedications to determine suitability of the subdivider's offering. The District will confer jointly with the County to determine the amount of park land to be dedicated within the subdivision and its most suitable location.

6110.50 Park land dedication is generally intended for active recreation development, except in special cases where conditions warrant passive recreation development.

6110.60 Land suitable for dedication as an active recreation site (park land) shall provide the following:

A. Minimum desirable park site size is normally two (2) acres for purposes of economical maintenance.

B. Sites are preferably consolidated parcels that are independently developable. In unusual circumstances, linear configurations or oddly shaped parcels are allowed to accommodate trail connections or provide uniquely valuable wooded open space additions and/or views.

C. Active recreational pursuits, such as team field sports, game courts, and activity buildings require predominantly level land, 2% slope. Land with a greater slope, up to

37. VELMA GAMBLES, DIRECTOR OF SPECIAL PROJECTS, EL DORADO HILLS COMMUNITY SERVICES DISTRICT

Response 37-1 In accordance with the request of the El Dorado Hills Community Service District (EDHCSD), the project applicant has agreed to offer to satisfy its Quimby Act parkland exactions requirements exclusively through parkland dedications, rather than through a combination of in-lieu fees and parkland dedications as otherwise authorized under County Ordinance 16.12.090. However, the "offer to dedicate" parkland by the project applicant does not necessarily mean that the EDHCSD will accept the offer. Rather, the EDHCSD may instead elect to accept land and in-lieu fees, or a combination thereof, consistent with County Ordinance 16.12.090.

Further, it is clarified that The Promontory will comply with the County General Plan/EDHCSD parkland exaction standards. Those standards require the provision of five acres of developed/active parkland for every 1,000 people generated by the new development. Population generation is estimated to average 3.3 persons per single family unit and 2.8 persons per multifamily unit. Based on 1,387 single family units for the proposed Specific Plan, the estimated Quimby Act parkland dedication requirement for The Promontory would be as follows:

1,387 units x .005 x 3.3 persons per household = 22.9 acres*

* Note: The Specific Plan allows for single family and/or multifamily units in the Village Center. Thus, the final determination of Quimby Act exactions for The Promontory will be based upon the actual number of units subsequently approved in the subdivision maps and/or planned development permits for the Village Center and other portions of the Specific Plan. If multifamily units are approved, then the above formula would be modified to reflect 2.8 persons per unit, rather than 3.3 persons per unit.

Since the EIR was prepared, the EDHCSD Board of Directors and the County Board of Supervisors adopted a Park Development Impact Fee ($1,686/unit) to fund the construction of park improvements within the EDHCSD boundaries. Payment of the Fee is required prior to building permit issuance.

Response 37-2 Comment noted.

Response 37-3 In accordance with EDHCSD guidelines, the project CC&R's and/or design notebooks will be submitted to the EDHCSD for approval.

Response 37-4 Mitigation Measures 4.3.1b, 4.3.7c, and 4.7.3 identified in the Draft EIR would require the development of landscaping along project roadways, consistent with El Dorado Hills Community Service District standards. As identified in the Draft EIR (Chapter 3.0, Project Description), financing mechanism(s) will be established to fund project landscaping improvements.

El Dorado Irrigation District

38

27 JUL 30 PM 4:20
RECEIVED
PLANNING DEPARTMENT

In Reply Refer To: E0797-341

July 30, 1997

Roger Trout, Senior Planner
El Dorado County Planning Department
2850 Fair Lane Court
Placerville, CA 95667

Subject: Draft EIR for the Promontory Project
EID File No. 201-1403.26

Dear Mr. Trout:

Thank you for the opportunity to comment on the Promontory Project. We have the following comments on this document:

1. Page 4.13-16 through 19

The EIR indicates that extensions of the existing water distribution and wastewater infrastructure to the project site are considered to have a less than significant impact. Please note that the proposed water and sewer plans contained in the EIR have not been approved by the El Dorado Irrigation District. Any changes in these plans which are not within the scope of this EIR and not exempt, may require a supplemental environmental document. This supplemental document would be prepared by a consultant. It could require several months to prepare and the developer would be responsible for its cost. 38-1

2. Page 4.13.-1

Second paragraph:

The reference to 60,000 people being served by EID should be replaced with 30,000 customers. 38-2

3. Page 4.13-3

First paragraph:

The reference to the 7,550 af as a "contract yield" is not correct. The primary water supply for the El Dorado Hills water service zone is Folsom Reservoir. EID's contract with the 38-3

2890 MOSQUITO ROAD • PLACERVILLE • CA 95667 • PHONE (916) 622-4534 • FAX (916) 622-8597

Bureau of Reclamation allows EID to pump 7,550 af from the reservoir. However, the contract stipulates, and historically has been enforced, that a 25% reduction of contract water will be implemented when dry years occur. For this reason, the District limits the available water supply from Folsom Reservoir to approximately 5600 afa.

38-3 CONT.

The statement that 4,900 af is available for the El Dorado Hills Service Area is not correct. The 4,900 af is the availability of water from all the District's water sources for all of the District's 12 service zones, including El Dorado Hills.

Page 4.13-5

Third paragraph:

The El Dorado Hills Wastewater Treatment Plant treats wastewater from approximately 4,300 (rather than 3,620) sewer connections in the El Dorado Hills area. The El Dorado Hills Wastewater Treatment Plant has a capacity of 1.6 million gallons per day (mgd) (6,667 EDUs) rather than 7,200 EDUs.

38-4

Fourth paragraph:

The third sentence should be replaced with the following:

An upgrade of the existing Marina Lift Station and force main would be required to serve the project.

Sincerely,

EL DORADO IRRIGATION DISTRICT

Lewis W. Archuletta
Support Services Planner

LWA:ref

38. LEWIS ARCHULETTA, SUPPORT SERVICES PLANNER, EL DORADO IRRIGATION DISTRICT

Response 38-1 The comment is noted.

Response 38-2 The following changes are made to the text of the Draft EIR:

- Page 4.13-1, second paragraph, the first sentence is revised to read:

"El Dorado Irrigation District (EID) is the primary purveyor and supplier of domestic, agricultural, and industrial water to western El Dorado County, serving approximately 30,00060,000 customerspeople."

Response 38-3 The following changes are made to the text of the Draft EIR.

- Page 4.13-3, the first paragraph is revised to read:

"The EID has contracts with the United States Bureau of Reclamation (USBR) to receive 7,550 acre-feet of water per year from Folsom Lake to service the El Dorado Hills Service Area. However, EID's contract with USBR stipulates that a 25 percent reduction of contract water will be implemented during dry years. Based on this stipulation, EID limits the available water supply from Folsom Lake to 5,600 acre-feet per year.The 7,550 acre-feet is a contract yield, not a hydrological firm yield. At the beginning of 1996, the EID had a total of 4,900 acre-feet (8,166 EDUs) available for the El Dorado Hills Service Area. Currently there is approximately 4,700 acre-feet (7,845 EDUs) of water still available for use in EID's 12 service zones, including the El Dorado Hills Service Areathe service area (Fraser, 1996). There are several other pending or approved projects in the El Dorado Hills Service Area (see **Figure 3-1** and **Table 3-1**). These projects, if fully built out, would place an additional 12,000 to 15,000 residential units in the service area. These units would increase demand in the El Dorado Hills Service Area by 7,000 to 9,000 acre-feet per year. The amount of demand created by buildout of these projects could vary depending on the final number of units constructed at each project."

- Page 4.13-14, second paragraph, the fourth sentence is revised to read:

"The El Dorado Irrigation District currently has 7,845 EDUs of water available for use in the El Dorado Hills Service Area."

- Page 6-25, the first sentence is revised to read:

  "The El Dorado Irrigation District currently has 7,845 EDUs of water available for use ~~in the El Dorado Hills Service Area~~."

Response 38-4 The following changes are made to the text of the Draft EIR:

- Page 4.13-5, the third and fourth paragraphs are revised to read:

  "The EDHWTP treats wastewater from approximately 4,300~~3,620~~ sewer connections in the El Dorado Hills area. The EDHWTP has a capacity of 1.6 million gallons per day (mgd) (6,667~~7,200~~ EDUs) average dry weather flow (ADWF) and is currently being upgraded. The expansion, scheduled to be complete by December 1998, will increase the EDHWTP capacity to 3.0 mgd (14,500 EDUs)."

  "Two existing sewage lift stations are located to the north of the project site: the Marina lift station approximately 3,800 feet to the north; and Amy's Lane lift station, approximately 500 feet to the northwest. According to EID, these lift stations do not have adequate capacity to serve the project site. A new lift station, identified as Lift Station A of the Phase 1 wastewater improvements in the El Dorado Hills Master Facilities Plan, would be required south of the Marina lift station along Green Valley Road. However, based on a recent facility report (August 1997) for the Crown Valley subdivision identified that the project site could be served by upgrading the Marina lift station. Upgrading of the Marina lift station would be funded by Assessment District No. 3 and is included in the 1997 Capital Improvement Program. In addition, the Amy's Lane lift station as well as the Marina lift station force main must be upgraded if it is used to serve the project site."

EL DORADO COUNTY GENERAL SERVICES DEPARTMENT

39

SPECIAL DISTRICTS
360 FAIR LANE
PLACERVILLE, CA 95667
Physical Location: 345 FAIR LANE
Phone: (916) 621-7402 Fax: (916) 621-5837

97 JUL 30 PM 2:58
EL DORADO
PLANNING DEPARTMENT

July 30, 1997

El Dorado County Planning Department
360 Fair Lane
Placerville, CA 95667

Subject: SP94-03 (the Promontory)

In conditioning the above referenced map, we request that any condition for formation of a zone of benefit or landscaping and lighting district include a requirement to put in place the funding mechanism prior to approval of the final map. With current legal requirements, formation of the zone or district does not guarantee funding for the services delineated. 39-1

Drainage: Drainage services refer to the unrestricted natural flow of water and it is not considered to be in the best interest of the County or the public in general for drainage maintenance to include ponds, waterways, or wetlands in the services provided.

Landscape: Landscape services refer to mowing, weed abatement, and irrigation while park construction or maintenance are beyond the scope of such services.

Cemetery: If the presents of any burial grounds or cemeteries is identified, mitigation to provide for the protection, preservation, and safety should be included. Such sites must remain open and accessible to the general public. * 39-2

Sincerely,

Bobbie North
Senior Administrative Analyst

* The Mormon Island Cemetery consists of 5 acres and abuts the proposed golf course. Mitigation might include additional fencing, a tree barrier, and any other such measures as needed to provided for the ongoing protection of the cemetery. 39-3

39. BOBBIE NORTH, SENIOR ADMINISTRATIVE ANALYST, EL DORADO COUNTY GENERAL SERVICES DEPARTMENT

Response 39-1 The project applicant will create a lighting and landscaping district, homeowners association or some other maintenance funding mechanism to provide funding for common area landscaping, project entries, detention facilities and wetland mitigation areas.

Response 39-2 See Response to Comment 4-1.

Response 39-3 See Response to Comment 4-2.

40

July 30, 1997

Mr. Roger Trout, Senior Planner
El Dorado County Planning Department
2850 Fairlane Court
Placerville, CA 95667
Fax (916) 642-0508

97 JUL 30 AM 11:05
PLANNING DEPARTMENT

Dear Mr. Trout:

I have called twice and my calls have not been returned. I have been unable to review the Draft Environmental Impact Report at the El Dorado Hills Library where I understood copies were going to be made available to the public. These copies have been removed.

My question concerns the drainage from the new development called the PROMONTORY PROJECT and the Draft Environmental Impact Report currently under review and comment. This development will direct water drainage onto our lot and home at the address of 4050 Albert Circle and also our neighbors lots below us. I have been unable to verify if any drainage facilities are currently being planned for this development between the existing homes along Albert Circle and the new development. 40-1

A significant volume of water is moving across this boundary of which the new development will concentrate and direct this flow of water onto our lot. If no drainage facilities are planned, then I think this is a significant oversight that needs to be addressed. We have already spent $5,000 in drainage facilities to address a similar oversight from previous developments that was approved for homes above us located along Tabari Court. We are currently receiving water from four lots that surround our lot. The Promontory Project will add another 6-10 lots of draining onto our subdivision and specifically our lot without any control of the flow of water.

Please be sure that adequate drainage facilities are placed along the property line between the existing homes off Albert Circle and the new Promontory Project. I would be willing to show you the pictures I have of the run off during the recent storms of last winter. This will better acquaint you with the impact this project will have to us and our neighbors that will be excacerbated by the new development. A site visit will permit you to better survey how this water flow should be redirected. Thank you for your assistance. I may be reached at (916) 327-8886.

Sincerely,

Tad Thomas
4050 Albert Circle
El Dorado Hills, CA 95762

c: Supervisor Sam Bradley

40. TAD THOMAS, RESIDENT

Response 40-1 See Response to Comment 3-2.

41

EL DORADO COUNTY TAXPAYERS FOR

Quality Growth

P.O. Box 141, Rescue, California 95672 (916) 823-1503

EL DORADO TAXPAYERS FOR QUALITY GROWTH
Comments on The Promontory Draft EIR

Land Use

Land use impacts of The Promontory project, while substantial, do not appear to achieve significance in the DEIR, due to their compliance with the El Dorado County General Plan. The El Dorado County's objectives for the project were listed on page 3-5 of the DEIR. There are several glaring inconsistencies between the project and those objectives, which include the following: 41-1

*Create new balanced communities in County areas suitable for urban levels of development due to the accessibility of adequate infrastructure and general public services.
*Insure that adequate public services and utilities (water supply, wastewater service, solid waste disposal, storm water drainage, schools, fire protection, and law enforcement) are provided concurrent to each phase of project development.
*Provide for the retention and conservation of distinct topographical features and native vegetation.
*Provide a visual and physical separation of the project site from existing communities.
*Conserve wetlands, riparian areas, natural drainages, and other wildlife habitat of significant biological, scenic, and recreational values.

The inconsistencies between the objectives and the project have been allowed to occur because in the El Dorado County General Plan, thresholds of significance for public services, community separation, aesthetic and biological impacts are abysmally low or absent; so that substantial impacts may occur without triggering any mitigation requirements.

For instance, General Plan Goal 2.1 would seem to encourage the ". . . creation of new sustainable communities; (and) curtailment of urban/suburban sprawl . . . ." As described in the DEIR, pg. 4.3-12:

"Impact 4.3.1 As viewed from the City of Folsom, the implementation of the proposed project would substantially alter the existing landscape characteristics of the project site from rural land to a developed urban/suburban uses. This would be a significant impact." 41-2

Page 4.3-17 states that after mitigation, ". . .the impact to views from the City of Folsom will remain significant and unavoidable." On page 4.3-21, it states:

41-2 CONT.

> **" Impact 4.3.8 Implementation of the proposed project would be generally consistent with visual resource and aesthetic goals, objectives, and policies of the El Dorado County General Plan. This would be a less than significant impact."**

[Question # 1. How can the project have a significant and unavoidable impact to views from the City of Folsom and still be generally consistent with visual and aesthetic goals of the El Dorado County General Plan? Specifically, what are the visual and aesthetic goals of the El Dorado County General Plan that the project is "generally" consistent with?]

On page 4.2-21, the DEIR states:

> **" Impact 4.2.2 Development of the proposed Specific Plan would generally be consistent with existing and future adjacent urban development in the El Dorado Hills area and the City of Folsom."**

41-3

[Question #2. How can the project "Provide a visual and physical separation of the project site from existing communities.", if it will appear as a ". . . developed urban/suburban use. . .", and be ". . . consistent with existing and future adjacent urban development in the El Dorado Hills area and the City of Folsom."? Even with slightly lower densities, this project appears to be the definition of urban/suburban sprawl. How can it be consistent with the El Dorado County objectives for the project? Explain precisely how the project will: "Provide a visual and physical separation of the project site from existing communities." What is (are) the threshold(s)of significance for "visual and physical separation . . . from existing commonties." in the El Dorado County General Plan, and how is this project consistent with them?]

[Question #3. Please explain how the project is consistent with the objective to "Ensure that adequate public services and utilities . . . are provided concurrent to each phase of project development."? Please see attached comments on public services and utilities. There is substantial evidence in the DEIR that would indicate that the <u>current</u> level of public services will decline upon project buildout. Is it true that if the thresholds of significance of nearby cities and counties were used instead of the thresholds of significance of the El Dorado County General Plan, that many of the projects' impacts would be considered significant? (For example the LOS C road standard for the City of Folsom.)]

41-4

General Plan Policy 2.2.2.6 defines the purpose of the Planned Community overlay. This policy includes (F.), "Provide for public benefit." Implementation of this policy is found in Policy 2.1.4.4, "Specific plans for planned communities include negotiable design features for public benefit. Examples of these features are:", followed by examples A through U. What is unclear is how these design features are to be negotiated into the project. The DEIR considers the project to be consistent with Policy 2.1.4.4, (Table 4.2-2), because "The proposed project includes several of the identified design features . . ."

41-5

[Question #4. Who "negotiates" with the project proponent for the ". . . negotiable design features for public benefit."? Did the Planning Director negotiate? Will the Planning Commission or Board of Supervisors negotiate? What specific standard(s) is/are used to determine whether the design features actually provide public benefit, counter-weighting the impacts of the project to the public? If these standards are not met, who insures that the project will provide public benefit?]

41-5 CONT.

General Plan Policy 2.1.4.5 states that target acreage percentages shall be incorporated into the specific plan, as follows:

41-6

Residential	40-50%
Commercial/Office	1-15%
Research & Development/Industrial	0-15%
Public Facilities/Parks/Open Space	20+%

Table 4.2-2 finds "The proposed project would generally meet the target percentages because Policy 2.1.4.5 allows the actual mixture of uses to be refined through the Specific Plan process. The proposed project is substantially consistent with the target percentages." There is 99.8 acres of public open space proposed for the project. This is equivalent to approximately 10% of the site in open space. There is also 184 acres of "private open space" designated for villages 4,5,6,7 and 8, covered by a conservation easement. The actual location of the "private open space" has not been designated, but will actually consist of portions of lots greater than 1 acre outside the house envelope. This "private open space" will consist of strips of land with hundreds of different owners, no public access and fragmented by roads, property lines and utility easements. These lands have little biological value and marginal aesthetic values. They should not be considered as part of the "Public Facilities/Parks/Open Space" category included in Policy 2.1.4.5.

[Question #5. How can the proposed project be considered consistent with Policy 2.1.4.5 when such a small amount of open space is included? General Plan Policy 7.6.1.1 outlines the primary purposes of open space. Explain specifically how the "private open space" on the proposed project meets those purposes, and, if not, how the project could be considered consistent with Policy 2.1.4.5?]

As listed previously, El Dorado Counties' objectives for the project include: "Provide for the retention and conservation of distinct topographical features and native vegetation.", and, "Conserve wetland, riparian areas, natural drainages, and other wildlife habitat of significant biological, scenic and recreational values." The project proposes to fill 2.5 acres of seasonal wetland and 4.85 acres of intermittent stream. In addition, DEIR Impact 4.8.3, pg. 4.8-29, states:

41-7

> **"The project has potential to significantly affect federally and state listed and other special status species. This would be a cumulatively significant and unavoidable impact."**

In addition, up to 314 acres of oak woodland may be impacted, which, according to Impact 4.8.7,

> **"The proposed development would contribute incrementally to the cumulative loss**

and alteration of oak woodlands on a local and regional basis and habitat for sensitive and common plant and animal species. This would be a cumulatively significant impact."

41-7
CONT.

[Question #6. How can the project be considered consistent with El Dorado Counties' objectives in light of the almost complete obliteration of native vegetation, natural drainages and wildlife habitat? What specific criteria were used to determine the projects' consistency with the goals and policies of the El Dorado County General Plan? Why was there not a table, (like Table 4.2-2) to determine consistency with the General Plan? How can the project be considered consistent with:
Policy 7.3.3.2, to avoid wetland disturbance through "all feasible project modification"? Policy 7.3.4.1, to integrate natural watercourses into new development? Policy 7.4.1.6, to include habitat restoration or mitigation plan where substantial modification of natural communities or habitats are anticipated? Policy 7.4.2.2 Identification of corridors and clustering of housing to protect them? Policies 7.4.4.2, 7.4.4.3, 7.4.4.4, 7.4.4.5, 7.4.5.1; clustering of housing to retain largest contiguous areas in undeveloped status, retention of tree canopy, retention of oak tree corridors, preservation and replacement plan, etc..]

WATER SUPPLY

As is the case for the discussion under Solid Waste, that under Water Supply (pp. 3-20, where infrastructure is discussed; and 4.13-1 to 4.13-4, and 4.13-12, 4.13-14 to 4.13-19, where supply is discussed) is seriously deficient in not reflecting the enormous uncertainties currently surrounding both additional and current water supplies.

According to the DEIR, 89 equivalent-dwelling units supply is allotted to the project from the El Dorado Irrigation District's Assessment District No. 3. The project anticipates need for 1387 EDUs to serve residences, excluding the planned parks, school, town green, and office-commercial facilities. 41-8

All sources of piped water are at present uncertain in some degree. Those from the U.S. Bureau of Reclamation include present contract water from Folsom Lake; water from Sly Park, a USBR facility operated by EID, and the so-called "Fazio" water that is being made available under the Central Valley Project Improvement Act. Under the Endangered Species Act, the USBR is obligated to consider the effects of its supplying water that will support growth in the county on rare species listed under the ESA. That now includes the gabbro-soil plants and the red-legged frog. No plans to ensure their survival are yet in place.

Also uncertain are both the contract water from Sierran Lakes sold by PG&E to EID and the recently awarded water rights to an additional 17,000 acre-feet. Both of these sources depend upon PG&E's hydropower Project 184, the sale of which to EID was still under negotiation when it was severely damaged in the New Year's Day floods of 1997. The flume delivering the water was badly damaged, the diversion dam was destroyed, and the powerhouse was flooded. Since then, the situation has deteriorated and PG&E recently withdrew from further negotiations and announced that it intended to abandon its license and decommission the powerhouse.

The State Water Resources Control Board's award of the new water rights depended upon continued operation of Project 184 according to "historical" parameters. In addition, challengers of the award of the water rights contended that PG&E had never had rights for consumptive use of the water it had long been selling to EID. The SWRCB agreed with this claim, but no one has since filed to legitimize them. Moreover, just before these comments were to be turned in, the court ruling was issued upholding the challenge of the FEIR and SFEIR on which these rights were based. This negates the 17,000 acre-feet of new water rights.

Numerous unresolved lawsuits continue to swirl around the many aspects of the entire situation.

At present it is unclear what all this means for west slope piped water supplies. If it should end up that all water supplies except for groundwater are taken from Folsom Reservoir, there may be substantial need for off-stream storage capacity if view of the fact

that the South Fork is regarded as fully appropriated during much of the dry season. (How this might be affected by PG&E's forgoing its flow-through water is not now known.) It would certainly mean higher costs for pumping water uphill.

41-8 CONT.

Unless EID is prepared to "go-it-alone" with respect to building facilities to bring amounts of water sufficient for both hydropower generation (assuming it can in some way acquire and repair the powerhouse), it will probably end up with capacity for delivery of its present domestic use from this source.

It would be foolish, because of all the uncertainty, to move ahead on *any* large projects that will require significant new supplies of water until what lies ahead is much clearer.

This part of the DEIR must be redone. The identified impacts and proposed mitigation are all irrelevant to the present situation.

WATER SUPPLY ADDENDUM

Is El Dorado County's water rights application with the State Water Resources Control Board for the 17,000 acre feet still valid? This application was based on an Environmental Impact Report/EIR which has been challenged since about 1991. We are requesting a response from the State on this question. 41-9

A recent El Dorado County Superior Court ruling by Judge Winslow Christian was in favor of League to Save Sierra Lakes and other groups including Amador and Alpine counties and the state Department of Fish and Game It was determined the EIR was inadequate. El Dorado County wants the 17,000 acre feet for consumptive use to meet the demands of new development while Amador and Alpine need the water to sustain their economic viability which is based on tourism. (See Attachment 1, Sacramento Bee article dated July 30, 1997).

What impact will this decision have on the processing of: 1) this specific plan ? 2) other specific plans that have been or are being processed? 3) other county projects? or 4) the implementation of the General Plan?

Does this invalidate the General Plan since it was based on the assumption of the availability of the additional 17,000 ac ft? At a minimum, wouldn't this project be inconsistent with: *General Plan Policy 5.2.1.4 Rezoning and subdivision approvals in Community Regions or other areas dependent on public water supply shall be subject to the availability of a permanent and reliable water supply*? 41-10

Another recent court ruling on "Diablo Grande" basically held specific plans, new development approvals, etc. must be reliant on an adequate water supply based on an EIR (incorporated by reference due to length). 41-11

Another example of a ruling is from Court Case No. C93-00235 East Bay Municipal Utility District v. Contra Costa County which states: *The Court Finds that the General Plan requires that an adequate source of water quantity and quality be determined at the "project approval" stage, and "project approval stage means when the General Plan Amendment or the Specific Plan are approved".* It goes on to say; *"The Court Finds that the Respondents' approval of the General Plan Amendment and approval of the Specific Plan, "without assurance of an adequate water source", rendered the General Plan internally inconsistent. The Court orders that Respondents' approval of the General Plan Amendment and their approval of the Specific Plan be set aside.* (See Attachment 2: last 2 pages of court case).

Would expansion or annexation of new lands into EID District Boundaries be in conflict with Government Code Section 56377 (See Attachment 3)? This section is intended to be for planned, orderly, and efficient development of an area. This section effectively states that: *"Development of the existing jurisdiction of a Local Agency* 41-12

should be encouraged before any proposal which would allow for or lead to the development of existing open-space." (Note: Plain language; Keep it inside EID District Boundaries.)

41-12 CONT.

The San Jose City Council recently approved an urban growth boundary (See Attachment 4, San Jose Mercury New dated November 15, 1996). Planners would be draw the boundary based on the general parameters of the city's sewer and water service. What is El Dorado County doing to: 1) identify an Urban Growth Boundary? or 2) comply with Government Code Section 56377?

41-13

In 1996, EID revised their Policy Statement No. 23 - Annexation of Lands to the Irrigation District. The revision stated: *"However, annexation of land to the District does not guarantee that water and/or sewer service will be available when service is requested."* (See Attachment 5). How does the County intend to resolve the conflict with the EID Policy and that of the General Plan Policy 5.2.1.4 which says project approval shall be subject to the availability of a permanent and reliable water supply?

41-14

At a minimum the following questions should be answered prior to any decision to annex additional lands in the EID District Boundaries and before consideration of any project approvals:

41-15

- 1. How many already undeveloped/unserved approved and tentatively approved parcels exist with the EID District Boundaries?
- 2. What is this Demand number and has it exceeded the existing Supply?
- 3. Under the General Plan Scenario which will allow for up-zoning to higher densities of a great amount of additional land within the EID Boundaries, how many more parcels will potentially be created requiring EID Service?
- 4. When the numbers from the above questions 1 & 3 are added together, what is the total number of water meters and additional acre feet of water required to serve just parcels with the EID District Boundaries?
- 5. What are the long term impacts to existing customers for additional infrastructure and operation/ maintenance cost if EID District Boundaries are expanded? Will this create a Negative Impact for existing customers?

NOTE: The threshold of Significance is flawed unless it is tied to the Demand of the number of already approved and tentatively approved parcels and the amount of Supply or water available to serve those numbers. These questions must be answered; and, This information must be present in bottom lines numbers that are easily understood by the public. Do not refer to the General Plan, other EIR information, Water Supply and Demand Reports or charts that have so much information that bottom lines numbers are obscure.

What type of overall Facility Improvement Program for water/sewer is being planned/developed for this area/region? During the time of the El Dorado Hills/Salmon Falls Area Plan, AD3 was to serve a majority of the area (but not this area) with plans and talks of AD5 to address expansion beyond the service area of AD3. Assessment District 3 was formed based on currently "Secured" water rights from Folsom Lake in the amount of apx. 6,500 ac ft to encompass 4,400 acres and apx. 7,200 dwelling units in the El Dorado Hills area plan. At the time the Area Plan stated; *"Additional water supplies will need to be 'secured' form Folsom Lake or other sources to grow above the projected ten year growth level.*

41-16

At the time AD5 was not as far along in the planning stage and would possible be the district involved in the eastern portions of the Plan area between Bass Lake Road and Cameron Park. It was noted the main system and service with regards to water and sewer areas would need infrastructure improvements. EID letter dated March 21, 1996 also address some of these issues that must be address in the document. (See Attachment 6). ----We have yet to get the additional "secured" water rights to address how much area and equivalent dwelling units it will accommodate. (See Attachments 7 on AD3 from the El Dorado Hills/Salmon Falls Area Plan - 1983/84).

41-17

MITIGATION should include the formation of AD5 (now known as AD12 / in more detail and discussion in the EIR) or some other similar expansion/upgrade process to address any addition new secured water right the County may obtain - but until that happens this project is premature. If additional new secured water rights result in more water being pumped from Folsom with additional pumping costs then the MITIGATION should include provisions that new development which will benefit from these new water rights will pay for all of the expense relating to the new water including pumping.

MITIGATION should also include: "No EID Annexation Approval shall occur until new water rights are secured and any legal challenge has been resolved; and funds from that assessment district are sufficiently available to move forward on infrastructure placement and expansion/upgrade."

41-18

Note: See Attached Sacramento Bee articles dtd Nov 5 & 7, 1996. The U.S. Bureau of Reclamation also claim the own the 17,000 acft. Adequately address this in the EIR.

41-19

Judge rules El Dorado's try to tap 3 lakes is unjustified

By Nancy Vogel
Bee Staff Writer

July 30, 97

El Dorado County's effort to take water from three popular Sierra lakes has stalled in court.

An El Dorado County Superior Court judge ruled Friday that the water agency seeking to take water from Silver, Caples and Aloha lakes didn't do a good enough job analyzing the environmental impacts of such a diversion and failed to consider alternatives – such as water conservation.

The decision, by Judge Winslow Christian, "completely vindicated our position," said Stephan Volker, an attorney for the Earthjustice Legal Defense Fund, formerly known as the Sierra Club Legal Defense Fund.

Volker represented more than a dozen environmental groups in the suit against the El Dorado County Water Agency.

Amador and Alpine counties and the state Department of Fish and Game also joined in the suit against El Dorado County.

"What we don't want is them having their hands on the valve so they could take the water on demand," said Norm Rupp, chairman of the League to Save Sierra Lakes.

His group has fought El Dorado County over the lakes since 1991, fearing that the county will drop the water level of the lakes and disrupt the thousands of hikers, boaters, fishermen and swimmers who visit them each year.

El Dorado County Water Agency seeks rights to 17,000 acre-feet of water – enough to supply more than 60,000 people a year – after it has flowed through the three mountain lakes.

Caples and Silver lakes are along Highway 88 near Kirkwood, while Lake Aloha is north of Highway 50.

All three lakes drain to the south fork of the American River. Pacific Gas and Electric Co. has rights to use the water to generate power, but El Dorado County wants the right to consume the water.

The county agency says it would draw the water after it pooled behind Folsom Dam, then pump it to homes in El Dorado Hills.

"We're of course disappointed in the decision," said Merv de Haas, general manager of the El Dorado County Water Agency.

"We think (the judge) should have given us some direction on the inadequacy of the environmental documents. I believe he didn't understand exactly what the project was about. We feel we did include consideration of impacts."

An appeal of the court decision is "high on the list" of options the agency will consider now, he said. Another option is starting all over on the environmental documents.

There's no immediate panic for the water in El Dorado County, de Haas said, but the additional 17,000 acre-feet is needed to serve the thousands more residents expected by 2030.

According to Volker, the court decision undermines the hard-fought progress the El Dorado County Water Agency has made in getting the water.

In October 1996, after several days of hearings, the State Water Resources Control Board granted El Dorado County rights to the 17,000 acre-feet.

But the board's decision was based on the same environmental document that the judge declared flawed.

Jerry Johns, the board's assistant division chief for water rights, said the board hasn't had time to figure out how the ruling may affect El Dorado County's water rights.

Atch 1

Atch 1

Specific Plan. Referring to page 13 of this ruling, the Court reiterates here the evidence Petitioner has previously disclosed in the administrative record: "Petitioner points out that Respondents, have for previous proposals, interpreted this portion of the General Plan as requiring assurance of water upon a change in the land use designation, and that Respondents' present interpretation contradicts its earlier interpretation. Petitioner calls the Court's attention to AR 7: 1584, AR: 18: 4597, AR 1: 124, AR 1: 175, AR 2: 367, and AR 25: 6741 as other examples tending to show that Respondents have characterized project approvals to include approval of a general plan amendment or specific plan." The significance of these apparent inconsistencies is commented upon in Henning v. Industrial Welfare Commission (1988) 46 Cal.3d 1262, 1278 which holds that the court should find that Respondents' present interpretation is not entitled to significant deference. This Court finds that the General Plan requires that an adequate source of water quantity and quality be determined at the "project approval" stage, and "project approval" stage means when either the General Plan Amendment or the Specific Plan are approved.

As previously discussed, there is virtually uncontroverted evidence in the administrative record disclosing no assurance of adequate water source for this project. Despite the General Plans' mandate that assurance of adequate quantity and quality of water be established before a change in land use or other project approval, Respondents approved the General Plan Amendment and the Specific Plan omitting any assurance of adequate water source. This omission contravened the General Plan and created the internal inconsistency which Petitioner have accused Respondents of committing when Respondents approved the General Plan Amendment and the Specific Plan.

The Court finds that the Respondents' approval of the General Plan Amendment and approval of the Specific Plan, without assurance of an adequate water source, rendered the General Plan internally inconsistent. The Court orders that Respondents' approval of the General Plan Amendment and their approval of the Specific Plan be set aside.

(Atch 2)

A conspectus of this Court's findings and rulings on the issues presented before it is summarized as follows:

1. The administrative record lacks substantial evidence supporting Respondents' decision to use a tiered EIR for the purpose of deferring the issue of available water to a subsequent EIR. For this reason its approval of the EIR is set aside.

2 The administrative record lacks substantial evidence supporting a finding that the EIR contains a sufficient analysis concerning an adequate supply of water for the Dougherty Valley Project. For this reason Respondents' approval of the EIR is set aside.

3. The Court finds that the Respondents' approval of the General Plan Amendment and approval of the Specific Plan, without assurance of an adequate water source, rendered the General Plan internally inconsistent. For this reason the Court orders that Respondents' approval of the General Plan Amendment and their approval of the Specific Plan be set aside.

4. All other issues presented to the Court by Petitioners requesting a writ of mandate, with the exception of paragraphs 1, 2, and 3 above, are denied.

Dated: May 25, 1994

David L. Allen

Judge of The Superior Court (Assigned)

In the case of any annexation proposal for which a certificate of completion was not recorded prior to January 1, 1985, a condition imposed thereon which does not comply with the requirements of this section is null and void and shall not affect the validity of, or terminate the annexation proceedings.

(Added by Stats.1985, c. 541, § 3, eff. Sept. 9, 1985, operative Jan. 1, 1986.)

Historical and Statutory Notes

Derivation: Former § 54790.5, added by Stats.1984, c. 1515, § 2.

Former § 35150.3 added by Stats.1984, c. 1515, § 1.

§ 56376.5. Imposition of conditions on local agencies

(a) The commission shall not impose any condition on an annexing local agency with respect to the standards or frequency of maintenance of any existing street or road within the annexed territory.

(b) The commission shall not impose a condition which requires a local agency to improve an existing public facility which is not owned by the agency.

(c) This section shall not be construed as authorizing a commission to impose any conditions which it is not otherwise authorized to impose.

(Added by Stats.1985, c. 1599, § 6.)

Historical and Statutory Notes

1985 Legislation

Section 31 of Stats.1985, c. 1599, provided:

"Section 6 of this act shall become operative only if Assembly Bill 2123 of the 1985–86 Regular Session [Stats. 1985, c. 793] of the Legislature is enacted and becomes effective on or before January 1, 1986. In that case Section 6 of this act shall become operative on January 1, 1986, and Section 54790.6 of the Government Code, as added by Section 3 of the Assembly Bill 2123 shall not become operative."

§ 56377. Conversion of open-space lands to other uses; policies and priorities

In reviewing and approving or disapproving proposals which could reasonably be expected to induce, facilitate, or lead to the conversion of existing open-space lands to uses other than open-space uses, the commission shall consider all of the following policies and priorities:

(a) Development or use of land for other than open-space uses shall be guided away from existing prime agricultural lands in open-space use toward areas containing nonprime agricultural lands, unless that action would not promote the planned, orderly, efficient development of an area.

(b) Development of existing vacant or nonprime agricultural lands for urban uses within the existing jurisdiction of a local agency or within the sphere of influence of a local agency should be encouraged before any proposal is approved which would allow for or lead to the development of existing open-space lands for non-open-space uses which are outside of the existing jurisdiction of the local agency or outside of the existing sphere of influence of the local agency.

(Added by Stats.1985, c. 541, § 3, eff. Sept. 9, 1985, operative Jan. 1, 1986.)

Historical and Statutory Notes

Derivation: Former § 54790.2, added by Stats.1974, c. 531, p. 1224, § 4.

Cross References

Commission proceedings for changes of organization or reorganization, review of proposal, factors considered, see Government Code § 56841.

§ 56377.5. Renumbered § 56375.5 and amended by Stats.1987, c. 1227, § 5

§ 56378. Additional powers; studies of existing governmental agencies; financial assistance and grants-in-aid

In addition to its other powers, the commission shall initiate and make studies of existing governmental agencies. Those studies shall include, but shall not be limited to, inventorying those agencies and determining their maximum service area and service capacities. In conducting those studies, the commission may ask for land use information, studies, and plans of cities, counties, districts, including

Attachment 3

NOV 15, 96

S.J. council OKs urban growth line

Mercury News Staff Report

The San Jose City Council on Thursday unanimously approved an urban growth boundary to protect hillsides, rural areas and some portions of the Almaden and Coyote valleys from development.

"This is a historic evening for the city of San Jose ... (and) really for future generations," Mayor Susan Hammer said before calling for the vote on the so-called "green line" initiative.

Under the plan, a long-term urban growth boundary will be drawn and included in the city's general plan. Planners probably will draw the boundary based on the general parameters of the city's sewer and water service.

The council's action is part of an overall scheme in conjunction with Santa Clara County officials to curb urban sprawl. The board of supervisors is scheduled to adopt the same urban boundary plan at its Tuesday meeting.

In approving the plan 11-0, council members left open the opportunity for affected property owners who seek minor modifications to meet with city officials.

Besides saving the city's scenic views, the green line initiative's residual effect would be to concentrate public and private investment in the downtown area, supporters say.

Attachment 4

4A(1)(b)
5/13/96

EL DORADO IRRIGATION DISTRICT

Agenda Item Summary

nce approval not required ☐

e/Acct approval required ☐

Date Prepared: May 1, 1996

ard meeting date: May 13, 1996

Agenda Title: Consent Calendar/Administration

plicant, Address, Phone Number:

Prepared/Approved By: Jeraldine

Department Head's Approval:

Manager's Approval: Wm. Robert Alcott

Subject: Revision to Policy Statement No. 23 - Annexation of Lands to the Irrigation District

ground Information - (include parcel number, acreage, and other pertinent data)

Counsel is recommending that Policy Statement No. 23 be revised. He recommends that sentence be the policy that says; "However, annexation of land to the District does not guarantee that water and/or r service will be available when service is requested."

ger's Recommendation: Adopt revised Policy No. 23 with the additional verbiage.

ial Sent to Board: Revised Policy Statement No. 23 and April 3, 1996, letter from Noble Sprunger.

action:

ais

Attachment 5

El Dorado Irrigation District

MEMORANDUM **DRAFT**

TO: Rob Alcott EM0396-043
FROM: Sharon Fraser
VIA: David Powell
DATE: March 21, 1996
SUBJECT: 1996 System Firm Yield

The analysis of the system firm yield for 1996 has been completed using the Abraham Model. As the attached table indicates, the modeling parameters have not changed since last year with the following exception. The hydrologic record has been updated through the 1995 water year, which includes October 1994 through September 1995.

The results of the computer modeling confirm the system firm yield to be 41,700 acre feet, which is unchanged from the 1995 update. As previously outlined in the 1995 Firm Yield memo dated May 3, 1995, the following improvements would be necessary in order to meet the maximum day demands for this firm yield. The El Dorado Hills water treatment plant must be expanded to 20 MGD; the Reservoir A water treatment plant must be upgraded and expanded; and the Oakridge pump station must be expanded or some other source for pumping into Cameron Park will be required.

If you have any questions or need additional information please contact me at extension 4112.

Sharon Fraser
Sharon Fraser

SF:alm

Attachment

Attachment 6

The El Dorado Hills Salmon Falls Area Plan

el dorado county
planning department

Attachments 7

C. Public Services (cont.)

Fire Protection (cont.)

The California Department of Forestry (CDF) is responsible for wildland fire protection in the Plan Area. Most of the Plan Area is rated as "high" or "extreme" fire hazard. (See Fire Hazard Zoning map, on file with the Planning Department or CDF office). These ratings are based upon fuel loading, topography and fire weather.

In order to minimize the hazards of locating residences and commercial structures in extreme fire hazard areas, fire safety measures should be incorporated into the project design. These fire safety measures will allow CDF the opportunity to continue to provide an acceptable level of wildland fire protection.

Law Enforcement/Police Protection

The El Dorado County Sheriff's office provides 24 hour-a-day police and emergency patrol to the Plan Area. One patrol officer is normally on beat except during the night hours of 10 p.m. until 3 a.m. The patrol area includes a portion roughly from the Salmon Falls Bridge to Latrobe and easterly plan areas. Response times vary depending upon the nature of the call. Emergency calls take 3 to 8 minutes for an officer to respond, while general calls can take much longer, possibly two hours depending on the work load.

The California Highway Patrol is primarily responsible for State and Federal highways, specifically US 50. The CHP responds to accident reports on County roads and emergencies and will act as a back-up to Sheriff's deputies and other local agencies.

Water and Sewer Service

Public water and sewer service is provided to approximately 65% of the Plan Area by the El Dorado Irrigation District. The District boundaries are indicated on Exhibit 6 , Public Services map. All areas not within the District boundary are within its adopted sphere of influence. Water and sewer are not currently provided to the entire district boundary and is limited by two factors: the existing system is reaching capacity and water sources from Folsom Lake and Jenkinson Lake are limited. The problems have created moratoriums during the past years due to sewage overflows at several pump stations, and limited water availability.

Major water and sewer lines are located along the El Dorado Hills Boulevard corridor and directly south of US Highway 50. A major water trunk line is located between Cameron Park and El Dorado Hills Boulevard, the Bass Lake Intertie. A minor water system called Monte Vista 1 and 2 serve areas along Salmon Falls Road and water service is provided to the Mormon Island area. Sewage is treated at the El Dorado Hills Wastewater Treatment Plant located south of US Highway 50, on Latrobe Road. Sewer

C. Public Services (cont.)

lines run generally south from the northern villages where pumping delivers the wastewater to lines that feed into the treatment plant. The plant has an average design flow of 3.0 million gallons per day with a peak design flow of 5.4 million gallons per day. As mentioned above, large portions of the Plan Area do not have water and sewer service currently available, however, the system has been studied as part of the EID Water and Wastewater Plan. The master plan outlines general requirements for expansion of the system into undeveloped areas. Eventual water needs and sewer system design requirements are described, as well as an implementation schedule and general cost estimate.

One factor that is currently limiting growth in the area is the allocation of 6,550 acre feet annually from Folsom Lake. Other major projects such as the Auburn Dam or South Fork of the American River (SOFAR) may make available additional water sources. The current allocation of 6,550 acre/feet should support a population of approximately 29,300 within the El Dorado Hills service area. The 6,550 acre/feet should supply the water needs during the time frame of the Plan. Additional water supplies will need to be secured from Folsom Lake or other sources to grow above the projected ten year growth level.

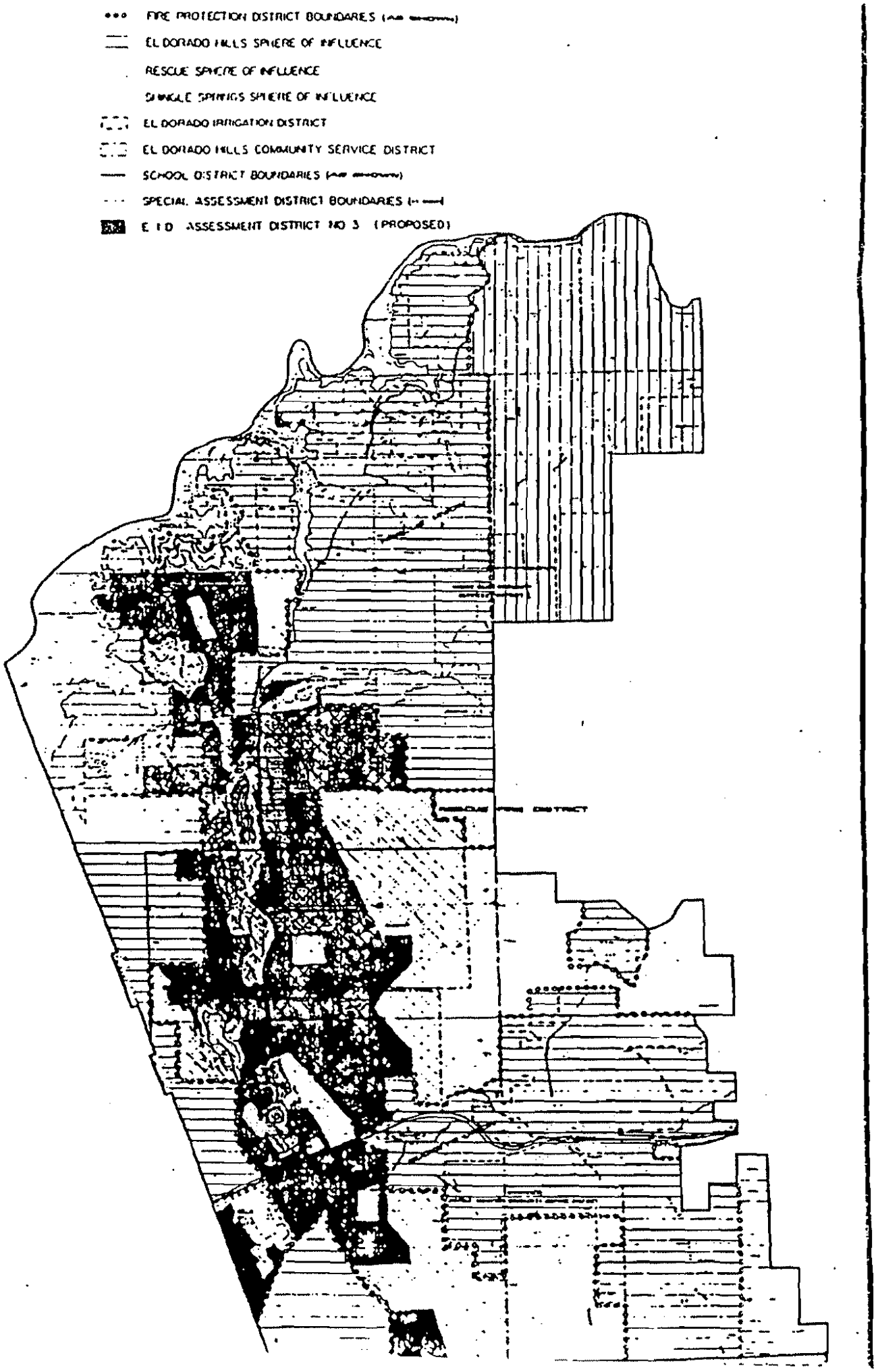
EID Assessment District #3 and #5

EID is currently studying the formulation of two assessment districts. The District's AD No.3 and AD No. 5 are proposed to alleviate deficiency in the existing El Dorado Hills system and expand capacity to handle the 6,550 acre/feet of water allocation and serve eastern areas of the Plan Area.

The proposed boundary of AD No. 3 is shown on Exhibit 6, Public Services map. These properties are expected to have public water and sewer service within the time frame of this Plan if AD No. 3 is implemented. Without such a measure, it is unlikely that urban levels of growth could occur in the Plan Area.

AD No. 3 is to encompass 4,400 acres at this time and could serve approximately 7,200 dwelling units and equivalent users. Previously developed subdivisions provided with public water and/or sewer are not to be included in the district. Commercial, industrial and public facilities such as schools have been assigned water use factors equivalent to dwelling units and are included in the 7,200 dwelling unit figure.

AD No. 5 is not as far along in the planning stage as AD No. 3. The district is expected to cover primarily the Cameron Park watershed. The intent of the district is to expand service from the Diamond Springs main system and service with water and sewer areas needing infrastructure improvements. The eastern portions of the Plan Area between Bass Lake Road and Cameron Park will possibly be involved in the district. A preliminary study is expected to be complete early in 1983.


FIRE PROTECTION DISTRICT BOUNDARIES
EL DORADO HILLS SPHERE OF INFLUENCE
RESCUE SPHERE OF INFLUENCE
SHINGLE SPRINGS SPHERE OF INFLUENCE
EL DORADO IRRIGATION DISTRICT
EL DORADO HILLS COMMUNITY SERVICE DISTRICT
SCHOOL DISTRICT BOUNDARIES
SPECIAL ASSESSMENT DISTRICT BOUNDARIES
E I D ASSESSMENT DISTRICT NO 3 (PROPOSED)

El Dorado water plan has a leak

State said yes, but U.S. says no

By Patrick Hoge
Bee Staff Writer

Nov 5, 1996

El Dorado County is just like the rest of California: lots of people, not enough water.

The county's two main water purveyors thought that situation had been eased last month when the State Water Resources Control Board gave them use of 17,000 acre-feet of water that feeds the south fork of the American River.

But the federal Bureau of Reclamation now says it owns the water – enough for 17,000 households – and El Dorado County can't have it.

"We're very serious about it," said Tom Aiken, the bureau's Central Valley area manager. "They should be fairly clear about us opposing it from the get-go."

The dispute reflects the increasing strains on a limited watershed that is being called upon to serve a rapidly expanding population, and it has enormous implications for Sierra foothill development near Sacramento and for fish in the lower American River.

The dispute also highlights concerns about water

Please see WATER, page A8

Water State ignored U.S. c[illegible]m on river, Interior official says

Continued from page A1

supplies that have featured so prominently in the debate about a growth-limiting measure on today's ballot in El Dorado County.

The bureau is just one of many organizations that for various reasons opposed the applications by the El Dorado County Water Agency and El Dorado Irrigation District to take water released from storage in Aloha, Caples, Echo and Silver lakes. The agencies have been working since about 1989 to get the water.

Other groups had filed or were expected to file petitions for reconsideration, a state water board spokesman said. Those groups were as diverse as the Sierra Club and the Westlands Water District. The state water board has 30 days in which to respond to petitions.

One major issue is whether El Dorado County would have to restrict its consumption when the Bureau of Reclamation was releasing water from the upper lakes to maintain water standards in the Delta.

Otherwise, the bureau might be forced to release extra water to compensate for that taken by El Dorado County, said James Turner, assistant regional solicitor for the Department of the Interior and the bureau's attorney.

"We already have an existing senior water right, an assigned license, which (the state) totally ignored," Turner said.

Officials at the El Dorado County Water Agency and El Dorado Irrigation District said they had not had time to study Turner's petition yet and thus could not comment.

"I feel pretty confident we'll work through this," said Merv de-Haas, director of the El Dorado

> "The bottom line is that we have a lot of salmon and steelhead that use that river."
>
> Jim Jones
> Save the American River Association

State and local officials wondered why the bureau did not make its latest argument during public hearings, at which the bureau did object to the diversions. Nobody knows, however, whether that omission could affect those rights.

"These are important points that need to be addressed," said Jerry Johns, assistant chief for the state water board's division of water rights.

Jim Jones of the Save the American River Association said he was disappointed in the El Dorado County agencies because they went to the state independently.

Both agencies have been participating in the Sacramento Area Water Forum, a diverse group working since 1993 to craft a plan to meet coming demands for water in Sacramento, Placer and El Dorado counties.

If El Dorado County does not abide by standards meant to protect water critical to migrating fish in the lower American River and the Delta, why should other agencies, such as the Placer Coun-

tensive unused water rights, Jones asked.

"The bottom line is that we have a lot of salmon and steelhead that use that river, and the demands on the river are going to be increasing dramatically in the future," Jones said, noting that federal officials are considering listing steelhead as endangered.

"If we don't figure out how to meet those demands while protecting the river, we can kiss those salmon and steelhead goodbye."

Turner's legal arguments also add confusion to the argument over El Dorado County's Measure K on today's ballot.

Proponents and opponents of the measure, which would require reserving water for undeveloped parcels with development rights, have argued over whether the measure could force the county to give up the 17,000 acre-feet of water at some future date.

Cindy Mills, campaign coordinator against Measure K, described the bureau's petition for reconsideration as routine.

"This is just an administrative process that they have decided to use at the last minute," she said. If anything, it highlights the tenuous nature of the supply, she said.

But Janis Mathews, campaign chairwoman in favor of the initiative, said that if the county does not even have the right to that water, then the county's problems are even worse than many imagine.

County water agencies have enough water for only 8,000 more houses, but there are 32,000 parcels approved for development, she said.

"If we lose that 17,000 acre-feet of water we're already in big trou-

Water rights argued

Bureau claim a shock to panel

BY CATHERINE BRIDGE
Neighbors staff writer NOV 7, 96

El Dorado County officials are trying to put the best face on a claim by the U.S. Bureau of Reclamation that clearly stunned and surprised them.

On Friday federal officials asked the state Water Resources Control Board to set aside its Oct. 2 decision granting the county an additional 17,000 acre-feet of water.

The bureau claimed that the government has, since 1958, owned the license entitling it to water released from storage from Pacific Gas & Electric Company's Aloha, Caples, Echo and Silver lakes for use at the Folsom and Nimbus power plants.

The El Dorado Irrigation District plans to release the 17,000 acre-feet from the source lakes it is purchasing from PG&E, run it down the American River to generate power at its newly refurbished El Dorado Power Plant, then draw it from Folsom Lake to treat it for consumption and sale to customers in the rapidly growing west end of El Dorado County.

"We had no expectation that all our opponents would magically disappear," said Tom Cumpston, deputy county counsel, "but the bureau's point was a surprise that, as far as I know, was never raised

SEE WATER, PAGE 7

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...he bureau presented this prior
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...93, he said, but when the hear-

...ter rights from the source lakes, "we didn't reiterate all we'd said the first time."

Hence, he said, "the board's decision came as a shock to us, (indicating) that it had completely ignored our prior claim."

'I don't know why this claim would have surprised the applicants. It's not something we're pulling out of our sleeves.'

— JAMES TURNER
U.S. Bureau of Reclamation

County officials expressed skepticism that the claim was true, and said they will argue that consumptive use should take priority over other uses, as established in California water law.

"If it's accurate," said Cumpston, "it seems highly unlikely that water needed consumptively will be defeated because of a need for power generation. We could always pay the bureau for power foregone."

Meanwhile, a number of other protestors have filed petitions seeking to modify or overturn the board's decision.

Among them are the Sierra Club Legal Defense Fund, the Westlands Water District in the Fresno area and the State Water Contractors, an organization of 27 million state resider... ...th water through the State Wa... ...roject.

They and the bureau want the state's water board to impose "Term 91" on El Dorado County, a measure ensuring that water releases meant to keep the Delta healthy "can't be grabbed by a junior (or lesser) right-holder on the way to the Delta," Cumpston said.

Since water for the health of the Delta is guaranteed, water users further to the south fear that any reduction in the total amount of water from which they draw might ultimately jeopardize their allocation.

But the county has argued, and the state board thus far has agreed, that "Term 91 should only apply to releases from Folsom downstream," said Cumpston. "We're taking water above the dam, so it will never be released out of Folsom anyway."

But Turner argues that the removal of 17,000 acre-feet from the reservoir deprives the bureau of water it needs to send downstream both for power generation and a variety of beneficial uses.

The unexpected nature of the bureau's claim led to sharp questions at the El Dorado Irrigation District's board meeting Monday morning.

"Was there not a duty on the part of PG&E to divulge the true and complete status of water ...gnts to the upper lakes?" asked Bill Bergmeister, formerly on the district's board and now a member of the EID Water Users' Association.

The district has committed itself to $5.8 million in bonds to fund purchase of Project 184 from PG&E. It already has spent a half million dollars on an initial installment payment to PG&E, $5.3 million to renovate the power plant, which it is now running, and will pay an additional $1.5 million to PG&E in 2003.

A PG&E spokesman was unable to return a call requesting comment by press time.

Turner said it was now up to the state board to decide which rule of water law should take precedence: the priority of water rights under California law, which the bureau argues it possesses, or whether water intended for domestic and municipal use should take higher priority. The board has 30 days to respond to the protest petitions.

Although Turner is not authorized to represent federal agencies in litigation, he said that if the state board rejects the bureau's protest, "I will personally recommend to my boss that they send a letter to the Department of Justice requesting it file a lawsuit contesting the (board's) decision."

And for Noble Sprunger, the El Dorado Irrigations District's counsel, that may have been the point behind the ... protest petitions filed by ... Friday's deadline.

"By petitioning and having your petition denied, that gives protestors an extension of time before they go to court," he said, noting, nonetheless, some surprise at the number of protests filed.

WASTEWATER SERVICE

Lack of environmental documentation for the ongoing expansion of the El Dorado Hills Wastewater Treatment Plant means that many questions are outstanding relative to adding to the wastewater load to be processed. We posed these questions in our 1996 scoping comments and, because they were ignored, repeat them here: 41-20

1) Please explain why the CEQA process was not gone through prior to the current expansion of the El Dorado Hills WWTP.

In absence of information that should have been disclosed during the CEQA process, and because expansion of the El Dorado Hills WWTP is necessary for providing service to Promontory and other contemplated development, please address some of the considerations that would otherwise have been addressed in this missing documentation.

2) As quantities of effluent increase, how will dry-season discharges into Carson Creek be avoided? 41-21

3) If Carson Creek is dry in summer, where did the flows originate in August 1996 just downstream of the WWTP? 41-22

4) What discharge standards does the plant now meet? How do these relate to those in the basin plan of the Regional Water Quality Control Board? What discharge standards will the reconstructed and expanded plant be able to meet when its license next comes up for renewal? How do these relate to standards called for in the basin plan? 41-23

5) How will water quality be affected by increased flows as effluent overwhelms natural flow? How will the ecosystem associated with the creek be affected? 41-24

6) Will EID attempt to dispose of additional reclaimed water to new customers? If so, in what quantity and to whom? How soon will new customers for reclaimed water come on line in relation to increasing load to the WWTP? Will this be adequate to prevent the need for illegal discharges into Carson Creek? 41-25

Providing reclaimed water to customers is now done far below actual cost, the difference being subsidized by other EID ratepayers. 41-26

7) If this disposal means is expanded, how might ratepayers be affected? Is increasing charges to users of reclaimed water in the offing so that this activity no longer is subsidized by other customers?

Carson Creek passes through the development proposed in the Carson Creek Specific Plan will be a focus of open-space and recreational use in that plan. 41-27

8) Will Carson Creek be safe for body contact (children playing in it), which requires Title 22 standards be met? 41-27 CONT.

9) How might the wetland area in the southern end of the Carson Creek development be affected by possible increased discharges from the WWTP? Has this area been investigated for the possible presence of the recently-listed red-legged frog? 41-28

10) What burdens might flows augmented by discharges from the sewage plant place upon downstream development so far as County ordinance requirements that post-project runoff not exceed pre-project runoff? How will these problems be addressed? 41-29

11) Identify the contribution of Promontory to the need for expansion of the sewage plant. Then identify its contribution to funding that expansion. 41-30

12) How will present difficulties be solved--discharges not meeting current standards, odor, sludge-disposal problems--with the additional burden of the Promontory project? For each possible approach to a solution, please identify the costs and funding sources, distinguishing between present customers of EID and the new customers in Promontory. 41-31

Impact 4.13.1a: In accordance with EID Policy Statement No. 22, the project applicant shall prepare a Facility Plan Report (FPR) for the proposed project. The FPR shall address the expansion of the water and sewer facilities and the specific fire flow requirements for all phases of the project. 41-32

Impact 4.13.3: Implementation of the proposed project would require the extension of wastewater infrastructure to the project site. Currently there are adequately sized off-site conveyance facilities to handle project wastewater flows. This would be a less than significant impact.

According to the DEIR, new and upgraded lift stations, along with other identified facility improvements, will be funded by the developer.

13) The judgment that the foregoing two impacts would, with the specified mitigation, be reduced to LTS fails to consider site-specific impacts associated with installation of the needed additional infrastructure. One of these, for example, is likely to be loss of oak trees and other native vegetation. Please provide such information to support the LTS conclusion.

HYDROLOGY AND WATER QUALITY

It is curious, in a section titled "Hydrology and Water Quality", that no data are presented about *present* water quality (p. 4.10-4 of the DEIR). We requested this in our 1994 scoping comments. 41-33

Impact 4.10.2: Operation of the project site would result in long-term water quality degradation from urban runoff. This would be a significant impact. (p. 4.10-11) 41-34

Proposed mitigation comprehensively sets forth aspects to be included to conform to the County's grading ordinance and the "El Dorado Resource Conservation District's Erosion and Sediment Control Plan". Best Management Practices are listed for both construction and operation phases. We are particularly gratified to see recognition that vegetation can effectively serve both as an energy dissipator and a filter for some kinds of pollutants. However, Lack of baseline water quality data makes it impossible to judge the effectiveness of mitigation measures as construction proceeds.

1) Omission of baseline water quality data should be corrected in the FEIR. Monitoring of post-project water quality, to ascertain effectiveness of proposed mitigation in removing pollutants connected with urbanization and introduction of automobiles onto the site (Mitigation Measure 4.10.1, Operation, p. 4.10-10) must be included in the monitoring plan (see No. 11, below).

About 87 percent of the overall area is said to drain naturally westerly into the Willow Creek watershed of Sacramento County (and eventually into Lake Natoma). Ca. 13 percent drains northerly into Folsom Lake. We are told that mean annual precipitation is about 26 to 28 inches, with a range from less than 15 inches in critically dry years to over 50 inches in unusually wet ones. A "100-year" event is estimated to produce 4.3 inches in a 24-hour period. 41-35

Impact 4.10.1: Construction of subsequent projects under the Specific Plan would result in temporary degradation of downstream surface water quality of Willow Creek, Humbug Creek, Lake Natoma, and Folsom Lake. This would be a significant impact. (p. 4.10-8). 41-36

Proposed mitigation (pp. 4.10-9 and 4.10-10) to reduce this impact to LTS includes conformance with the County's grading ordinance, the Resource Conservation District's "Erosion and Sediment Control Plan", and an unattributed Erosion and Sediment Best Management Practices for Construction Activity. As we said elsewhere in our Geology and Soils section, the RCD disavows any such publication. No publication of the last-named title is included in the bibliography for this section of the DEIR. Perhaps that listed under the California State Resources Control Board is what is meant. **All these include effective techniques, but again, as we said in our Geology and Soils section, the County's *implementation* has often been woefully deficient. We could cite numerous examples.**

Thus we strongly disagree that this impact will be reduced to LTS status. 41-36 CONT.

2) The FEIR should include data that the County effectively implements the listed mitigation or it should not conclude this impact will be reduced to LTS by the proposed mitigation.

Seasonal wetlands identified in the DEIR include 4.7 acres of freshwater marsh (p. 4.8-7) and 7.1 acres of riparian vegetation along seasonal stream channels (p. 4.8-6). As planned, the project is expected to result in the loss of 2.5 acres of seasonal wetland (53%) and 4.85 acres of "unvegetated intermittent stream". 41-37

Impact 4.8.2: Project development would result in the direct filling and alteration of wetlands and waters of the United States. This would be a less than significant impact. (p. 4.8-29)

3) Section 15.14.610 (D) of the County's grading ordinance reads: "Wherever possible, natural features, including vegetation, oak trees, terrain, watercourses, wetlands and similar resources shall be preserved. Limits of grading shall be clearly defined and marked to prevent damage by construction equipment. Wetlands and oak trees shall be protected from construction activity as described in the Design and Improvement Standards Manual." Please explain the apparent contradiction with the identified impact.

4) How does the specified 4.85 acres of "unvegetated intermittent stream" relate to the figure of 7.1 acres of riparian vegetation along seasonal stream channels?

5) Is the individual Sec. 404 permit issued by the Corps of Engineers in 1994 still good or is it limited to a two-year period?

6) Will the changes in COE permit regulations promulgated in January 1997 affect this permit at all, requiring revisiting? If so, has this been done?

We do not find cited General Plan policies 7.3.3.1 and 7.3.3.2 relative to protection of wetlands. The latter calls for considering "all feasible project modification...to avoid wetland disturbance". Policy 7.3.4.1, which is cited, says that "Natural watercourses shall be integrated into new development in such a way that they enhance the aesthetic and natural character of the site without disturbance". The scale of figures 4.10-1 and 4.10-2 is so small that it is difficult to assess whether the last-named policy is followed, especially as parcels and building envelopes are not superimposed. It *is* possible to say, however, that there are more "Existing Main Swales" on the latter figure ("Site Drainage") than on the former ("Willow Creek Hydrology"). 41-38

A U.S. Soil Conservation Service study of the upper Deer Creek drainage in 1985 commented as follows: "Flooding is occurring for several reasons. Primarily poor planning

is the culprit--poor subdivision layout, failure to foresee and perform maintenance on storm channels, failure to consider natural drainage patterns, poor driveway or lot layout, failure to plan for future conditions. This lack of foresight has occurred at all levels--subdivider-developer, county planning and building departments, building contractors, and homeowners. Even since the 1982 flood, buildings have continued to be constructed in historic flood-prone areas and in the bottom of drainage swales. Homeowners continue installing obstructions such as fences across the flow area of channels."

41-38 CONT.

In view of this legacy, it would seem important to avoid placing new residences in drainage swales.

6) Please explain why there are more drainage swales on the Fig. 4.10-2 than on Fig. 4.10-1.

7) Please provide a larger-scale map in the FEIR that allows assessing adherence to Policy 7.3.4.1. Will any building envelopes occur in drainage swales? 41-39

The wetland losses are supposed to be compensated for by creation of 4.67 acres of seasonal wetlands, 6.25 acres of riparian woodland, and 14.1 acres of oak woodland buffer.

8) Where will these three types of construction take place on the project site? If any of the three will occur off-site, at what location? How will they benefit biota displaced from on-site habitat? 41-40

9) Please describe in detail the process by which "new" wetlands will be created to mitigate for lost acreage, including evidence of their success over a reasonable period of time to assure permanence. 41-41

10) Has construction of the mitigation sites commenced (see permit conditions, p. 4.8-11)? If so, when? If not, when is it planned to start? 41-42

11) What mechanism will obtain for funding maintenance of the mitigation sites? 41-43

12) We found no monitoring plan in either of the two volumes of the DEIR. That all mitigation be adequately monitored for long enough to assure effectiveness, and that there be a mechanism for adjusting mitigation should it prove ineffective, is absolutely vital. Only time will tell how successful the proposed mitigation is. Certainly it will do little for on-site biota if implemented off-site. It is far too early to judge that this impact, with the proposed mitigation, will be reduced to LTS. It may be impossible ever to make that judgment. 41-44

Impact 4.10-4: Implementation of the proposed project would expose future residents and structures to inundation in the event of the failure of the Mormon Island Dam. This would be a potentially significant impact. (p. 4.10-12) 41-45

Villages 1, 2, 3, 5, and 7 are said to be at least partially should this dam fail. The mitigation proposed (p. 4.10-12) is to prepare an evacuation plan to be implemented in event of failure of the Mormon Island Auxiliary Dam. This is said to reduce this impact to LTS. 41-45 CONT.

13) Please explain how, even should evacuation of residential areas at risk take place without loss of life or serious injury, owners of flooded residences will have a Less Than Significant impact on their lives. We feel confident that all those affected by flooding this past winter from broken levees would share this judgment. This conclusion is absurd!

Impact 4.10.3: Implementation of the proposed project would result in the increase of impervious surfaces on the site, limiting areas for groundwater recharge. This would be a less than significant impact. (p. 4.10-12)

We have been told nothing about the presence on the site of any wells that might be affected by diminished groundwater recharge. A statement is made, unsupported by any evidence, that "Areas of potential groundwater rechare are the two intermittent tributaries of Willow Creek in the northern portion of the project site". Because these are intended to remain as public open space, it is implied that overall groundwater recharge will not be affected. 41-46

In some of the County's DEIRs we are told that creek channels are recharge areas, and in others we are told they aren't recharge areas. Whatever seems most convenient for the desired outcome appears to be presented, always without any supporting evidence.

14) Please provide evidence in the FEIR that these drainageways are the only places where groundwater recharge takes place. What about the wetlands now on the site, which will, at least in part, be destroyed? What about other dainageways? Without supporting evidence, the LTS judgment cannot be made.

Impact 4.10.6: Implementation of the proposed project would result in an increase in storm runoff flows in a northern drainageway that drains into Folsom Lake. An increase in flows could result in flooding of residential areas north of the project site. This would be a potentially significant impact. (p. 4.10-16) 41-47

Impact 4.10.5: Implementation of the proposed project, in conjunction with approved and proposed developments in the El Dorado Hills area and the City of Folsom, would result in increased flows in Willow and Humbug creeks in the City of Folsom. This cumulative increase in flows could result in on-site and downstream flooding in the City of Folsom. This would be a cumulatively significant impact. (p. 4.10-14)

We consider these two impacts together because they are so interrelated with respect to underlying cause and our comments. In connection with them, we are told in the DEIR that the areas referred to north of the project site are already built up but that "No data is

[sic] currently available on existing and future peak runoff flows of this portion of the project site" (p. 4.10-16). Absent these baseline data, it will be impossible to judge the efficacy of the proposed mitigation. 41-47 CONT.

15) Please develop and provide the missing data in the FEIR.

Table 4.10-1 (p. 4.10-14) purports to show that a maximum of 36 percent of the land surface would be impervious at full buildout. The U.S. Geological Survey (pers. comm.) considers lawns and certain other kinds of landscaping to be poorly permeable and, therefore, to contribute to increased storm runoff after development. Table 4.10-1, in referring to "roads, parking lots, sidewalks, and buildings", does not appear to include any form of landscaping such as lawns. The drainage study concludes peak runoff will increase by ca. 7% and total storm runoff by ca. 4.2%. It is said that localized on-site flooding might result. 41-48

16) Does Table 4.10-1 include poorly permeable forms of landscaping, such as lawns, in its figures? If not, please give revised figures for this table in the FEIR. 41-49

17) Also, please revise the estimates of the increase in peak runoff and total storm runoff accordingly. 41-50

The report of the Technical Advisory Committee, Nov 1994, to the State Water Resources Control Board, on Urban Runoff, p. 9, "General Principles for Control of Urban Runoff from New Development and Construction" states: "To the extent feasible, preserve, and where possible, create or restore areas that provide water quality benefits, such as riparian corridors and wetlands, and promote the design of new development so that it protects the natural integrity of drainage systems and water bodies." It would appear that to some extent, these principles are not being followed by the project proponent. 41-51

Mitigation measures proposed in the Specific Plan, we are told, "would assist in reducing peak storm run-off flows from project development, but does [sic] not ensure that flows will not increase over existing conditions." Measures vaguely described include "bank improvements", "water veolcity reduction measures:, "retention/detention basins" and sharing of retention/detention capacities with the planned Russell Ranch project". Mitigation Measure 4.10.5b, p. 4.10-15, proposes *future* studies of site hydrology and drainage to ascertain peak runoff flows during storms, to determine the 100-year floodplain, and to design "retention/detention" basins to address any problems. 41-52

18) Future studies are unacceptable as mitigation. 41-53

In Quality Growth's Scoping Comments (1994) we asked for details about the retention/detention ponds. We repeat our request here. Answers should appear in the FEIR: 41-54

19) Please clarify the operation of the detention ponds. How will collected runoff be released and to where? What on-going maintenance will be required in the way of, for 41-55

example, removal of collected sediments, by whom will this be performed, to where will sediments be taken, and how will this maintenance be paid for? Describe the year-round operation and appearance of these ponds, especially with respect to their proposed use for aesthetic purposes. Will they need to be fenced off for purposes of public safety? If so, how will this be accomplished in an effective manner? To what extent is it anticipated that they will exist in a dry condition? What will be their appearance then? Is it expected that migratory waterfowl will be attracted to them seasonally? What sort of water quality is anticipated, given their collection of runoff likely contaminated with pesticides, fertilizers, and oil and grease? Will they provide a healthy environment for wildlife? Clarify their relation to improvement of natural drainage channels "to carry...storm drainage flows" if the ponds are sized to reduce these flows to "existing levels for both 10-year and 100-year storm events". Why, then, would "riprap, revetment material or gabion material" be needed?

41-55 CONT.

The DEIR tells us that reaches of Willow & Humbug creeks now have trouble passing 100-year flows because of restricted channel capacities.

41-56

20) What has degraded their natural floodplains?

21) If the specified reaches are downstream of the project, what remedies are possible?

GEOLOGY AND SOILS

Though Quality Growth asked that cumulative removal of grazing land from the agricultural land base be evaluated, no attempt to do so appears either in this section or under Biological Resources. It is apparent to anyone driving Highway 50 over time that loss of grazing land to urbanization is occurring and that this is, indeed, a cumulatively significant impact that, if unchecked, could easily end with a sea of roofs from Sacramento to Placerville. It is occurring on the former Russell Ranch property adjacent to The Promontory on the west. 41-57

1) Please do this evaluation in the FEIR.

Impact 4.2.4: Implementation of the proposed Specific Plan would convert the project site from grazing land to urban development, adding to the cumulative loss of grazing lands. This impact was deemed Less Than Significant. 41-58

2) Please show supporting evidence, derived from the evaluation requested in (1), to substantiate the LTS conclusion. Casual observation over time leads to a directly opposite conclusion.

Impact 4.9.1: Development of the project site would include substantial grading activities that would result in ground instability and soil erosion. This would be a potentially significant impact. 41-59

In 1994, the Conservationist for the local Natural Resources Conservation District calculated maximum permissible slopes for development for soils of the various series found in El Dorado County to prevent excessive soil loss through erosion. The slope calculated for soils of the Auburn series was 14 percent. Much of the land in The Promontory greatly exceeds this figure. On p. 3-19 general policies are set forth to guide grading activities according to slope steepness. It appears that "lot pad grading" will be used when slopes are between 10 and 20 percent.

3) In the FEIR, please explain how this relates to the limiting figure of 14 percent in the District Conservationist's calculations and present evidence that erosion will not prove excessive under these guidelines.

We asked in scoping comments that problems of installation of utilities where bedrock is so close to the surface be discussed. Will special measures, such as blasting, be required. What will be the response should any such excavations intercept groundwater routes supplying on-site wetlands? 41-60

4) These questions were not addressed and should be in the FEIR.

As mitigation (pp. 4.9-11 to 4.9-12), the DEIR calls for site-specific studies by qualified professionals to identifiy areas of potential geohazards, such as instability of slopes, erosion, and suitability of excavated material for other uses. Questionable areas shall be avoided "to the maximum extent practicable". An erosion control plan is to be submitted that will be consistent with the County's grading ordinance and the Erosion and Sediment Control Plan published by the El Dorado County Resource Conservation District, according to the DEIR. Stabilization of graded areas shall take place prior to the rainy season according to Best Management Practices. And grading activities near water channels shall be avoided "to the maximum extent feasible". Grading is also described on p. 3-19. 41-61

5) The concept of mitigation by studies to be performed in the future is unacceptable. The Erosion and Sediment Control Plan alleged to have been published by the RCD doesn't appear in the bibliography, and a spokesman for the RCD says that there is no such publication. Please clarify and correct this in the FEIR. It is also referred to on p. 3-19.

No matter what ordinance or plan is used for guidance, however, in El Dorado County there is a large gap between a plan on paper and field implementation. Without adequate implementation, and because of the County's record in this regard, the proposed mitigation cannot be judged to reduce the impact to LTS, as is stated. 41-62

Impact 4.9.2: Implementation of the proposed project would expose people and structures to major seismic hazards. This would be a potentially significant impact. 41-63

Mitigation proposed includes assessment of seismic hazard potential by qualified professionals, together with recommendations for mitigation, and review of plans by County in the approval process in accordance with designation of the area as Seismic Zone 3.

Quality Growth agrees that adequate attention to proper engineering and construction standards can reduce exposure to major seismic hazards to LTS status.

6) We disagree with the concept of "future mitigation" to be found in a requirement for studies and recommendations to occur in the future.

Impact 4.9.3: Implementation of the proposed project may affect mineral resources at the project site. This would be a less than significant impact. 41-64

Though a portion of the village center area has been identified by the State Division of Mines and Geology as MR2-3a for placer gold deposits, this has not been recognized by the County in its Mineral Resource overlay in the General Plan land use map. Measure A in 1985 precludes mining within 10,000 feet of residences but is widely believed to be vulnerable to legal challenge. We agree, however, that mining in the specified area is

probably not going to occur.

41-64
CONT.

SOLID WASTE DISPOSAL

The County's dump site is having serious problems associated with runoff of surface waters and leachate, as well as sedimentation into a nearby creek. El Dorado Landfill, Inc., no longer operates the dump for the county. The Union Mine Landfill is currently under a Cease and Desist Order from the Central Valley Regional Water Quality Control Board. The dump was announced a few months ago as closed to receipt of all but inert materials and partial closure is reportedly underway. Non-recyclable materials are supposedly now being trucked to Lockwood, Nevada. It is rumored that rate increases are on the horizon to cover escalating costs. We are unaware of any long-term projections of operation of the dump or of garbage service. Closure has an estimated price tag of $30 million but only ca. $5 million is in the fund set aside for this purpose. None of this is reflected in the outdated material presented in the DEIR (p. 4.13-5 to 4.13-7, and 4.13-10 to 4.13-11, 4.13-13, 4.13-20 to 4.13-21). 41-65

Impact 4.13-5: Implementation of the proposed project would result in an increase in the amount of solid waste accepted at the Union Mine Disposal Site. This would be a less than significant impact. 41-66

The LTS judgment cannot be substantiated on the basis of the discussion in the DEIR. As noted in the first paragraph, the Union Mine Disposal Site is no longer even accepting garbage. The county does not at present own the adjacent BLM land supposedly available for expansion. Quality Growth asked questions about the use of this land in our 1996 scoping comments that were not responded to. A copy of the permit to use the BLM land obtained since submission of these comments shows that surface disturbance is prohibited. These terms have been violated by the County. It is unfortunate that so little heed was paid to our 1996 scoping comments (see Solid Waste Disposal, especially pp. 2-4). The preparer of the DEIR would have been alerted to the need to update the information presented therein.

1) This part of the DEIR must be completely redone to present current information.

We also pointed out the need to include discussion of disposal of waste generated during construction (pp. 3-4), a topic that was entirely ignored in the DEIR despite the quotation from the Regional Water Board's *Guidelines for Waste Disposal from Land Development* presented as the lead paragraph under Background, p. 1, of our 1996 scoping comments. 41-67

2) Please present in the FEIR the plan called for in the Regional Board's *Guidelines*. Include discussion of waste generated during construction as to volume, place of disposal in relation of life of landfill (as influenced by long-term plans for the Union Mine Landfill), and arrangements for recycling of some of this waste. Refer, for instance, to the attached article from *Fine Homebuilding*, March 1995, wherein new houses are said to generate an average of 4 pounds of waste per square foot.

Concerns for rising illegal dumping have been expressed in both letters and articles in the local newspaper. One such article focused on increased dumping taking place in Eldorado National Forest. 41-68

3) If garbage rates are increased, as has been hinted, how will illegal dumping be affected and addressed by the County, especially as population also increases? How is Eldorado National Forest being affected and at what cost?

In the past, illegal dumping was overseen by the Local Enforcement Agency. El Dorado County no longer has an LEA but contracts with Placer County for this service. 41-69

4) How has this affected enforcement of statutes against illegal dumping? Give statistics showing effectiveness of programs to identify perpetrators and bring sanctions to bear. Also give statistics adequate to show trends. How will the County respond as the problem increases?

Construction Waste

With new houses generating 4 lb. of waste per square foot, reducing, reusing and recycling construction debris makes sense for everyone

by Chris Donnelly

While a new house is built, rising from foundation to roof cap, another structure, albeit a more disorganized one, rises somewhere else on the lot: the pile of scraps from the building process—framing cutoffs, triangular pieces of sheathing, asphalt shingles, cans, boxes, lunch bags, drywall scraps, cardboard, sweepings from cleanups. Sometime near the end of the job, all the junk is loaded up and taken to the dump.

There used to be alternatives. You could torch the pile with kerosene and set fire to it, or a bulldozer could bury the whole mess in the backyard. But for the most part, those methods of disposing of construction waste have gone [illegible]

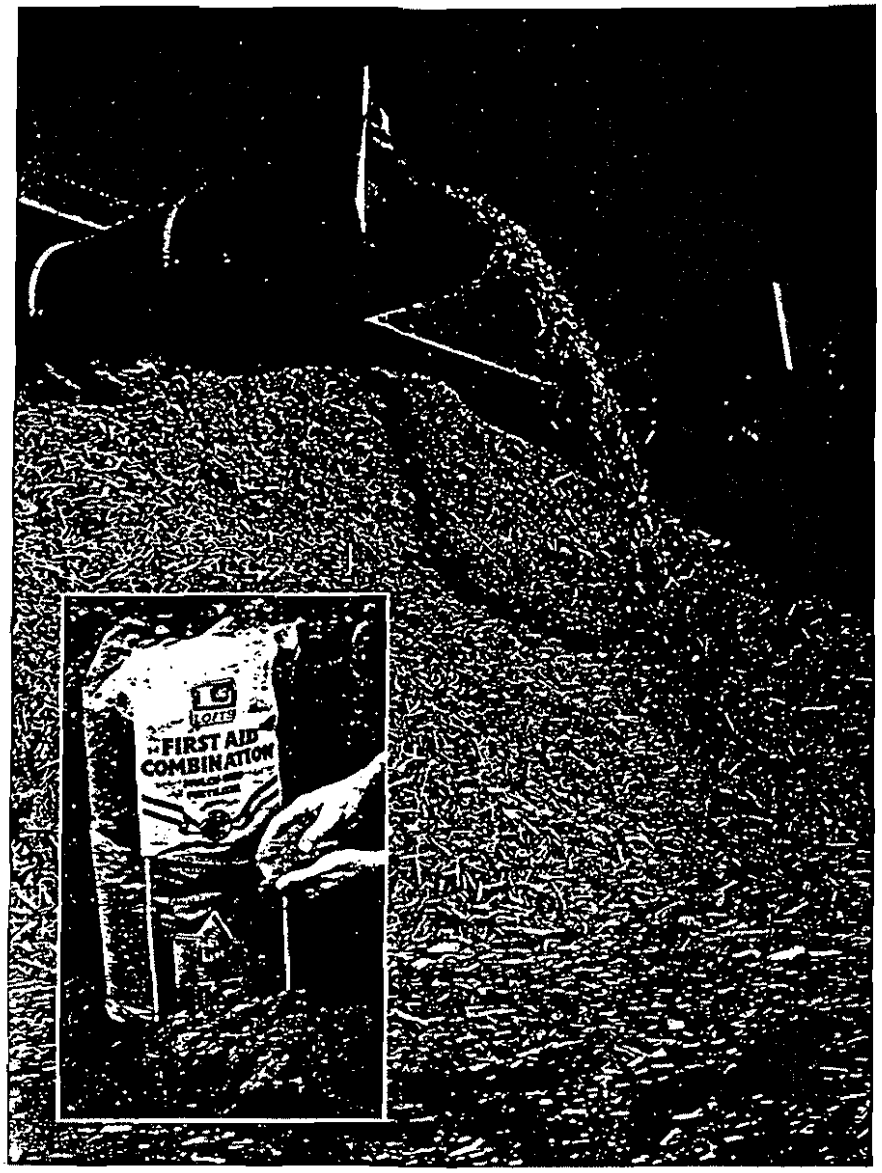
Now it costs a lot of money to get rid of construction waste. You rent a Dumpster, and material you paid for once costs you more to get rid of.

Many builders already have begun some recycling, and local organizations have sprung up to support builders in their efforts. For most builders, however, dealing with waste on the job is still pretty much business as usual. So what about jobsite recycling? Is it a choice that is going to come to home building? If so, when, and what will it look like? And what's going to happen to all that stuff that's recycled?

Most of the debris is wood and drywall— [illegible] of total building fall [illegible]

category of construction and demolition (C/D) waste, a category that also includes debris from road work, demolition work and other types of construction projects. It is estimated that 10% to 30% of the solid waste generated in the United States and Canada is C/D waste. In all likelihood, the amount of C/D waste greatly exceeds 20 million tons per year in the two countries, perhaps by three or four times that number.

A builder can expect to generate between 2 tons and 7 tons of waste during the construction of a new single-family detached house. One study, authorized by the Metropolitan Service District of Portland, Oregon, found that the waste [illegible]



Keeping the wood out of the landfill.
In the photo at left, a Portland, Oregon, business called Clean It Up Mark! removes construction waste from job sites and recycles 75% of the materials. In the photo above, taken at Stapleton Resource Recycling in Milford, Connecticut, wood culled from mixed construction debris is chipped for fuel for a steam-generating power plant. The inset photo shows a pulverized-wood lawn-care product made by Wood Recycling Inc. in Woburn, Massachusetts.

frame houses ranged between 3.7 lb. and 4.6 lb. per sq. ft.

The study shows that the largest component of this waste stream is woody material. This includes both solid-sawn lumber and manufactured-wood products, such as plywood, engineered lumber and pressure-treated wood. In weight it makes up somewhere between one-half and three-quarters of the total; in volume it's about half—that percentage.

The second-largest category is drywall. In both weight and volume, drywall is between a fourth and a third of the load. The third-largest category [illegible] cardboard, while the [illegible] concrete, etc.—make up the rest. Hazardous materials are a relatively small component of the residential-construction waste stream. On single-family projects between 15 lb. and 70 lb. may be generated. Most of this hazardous waste is containers—caulk tubes, paint cans, roofing-cement cans and aerosol cans—along with various solvents, paints, adhesives, oils and greases. The generation of hazardous wastes occurs largely during the painting phases of construction.

Because of its variability job to job, demolition debris—unlike construction discards—is difficult to characterize. The components of demolition materials often are attached to one another: The drywall is coated with paint, the lumber is full of nails, and so on. This also makes demolition debris more difficult to recycle.

Concern about landfill space has pushed the discussion of construction waste to the fore. Simply trucking the material directly to the landfill or renting a large-enough waste container has become increasingly expensive. Jim D'Alessio, a builder in Deerfield, New Hampshire, pays $500 for a 30-yd. Dumpster, and if the weight of its contents exceeds 5 tons, it costs him $70 for each additional ton.

You need to know what you throw away and when—What should builders in the field do? Initially, builders can look for allies. A good first contact may be the local Home Builders Association. The HBAs provide information on local regulations and can put builders in contact with others who share similar concerns. Also, contacting the local solid-waste authority or the state agency responsible for recycling and waste management may be worthwhile. Builders also might wish to do some independent research, using the Yellow Pages and personal contacts. Look for recyclers, salvage operators and scrap dealers. Also, be aware that composting operations and charitable organizations can be an outlet for used materials.

Inevitably, though, the real work begins at the job site. Builders who are serious about improving their waste situation should know as much as possible about how waste is generated on the job. The best way to learn is to conduct waste audits of individual jobs in progress.

Waste audits do not have to be complicated. If waste is collected at a central location, the audit can be accomplished by keeping a written log next to the dumping site. This log should be a record of what gets tossed, by whom and when. The purpose of tracking the trash accumulation is simply to learn about both the volume and the pattern of waste generation. Construction jobs tend to have phases in which particular materials dominate the discard pile. Knowing when individual materials are going to be part of the mix is a major step toward determining how to handle them. Recycling thrives on this information.

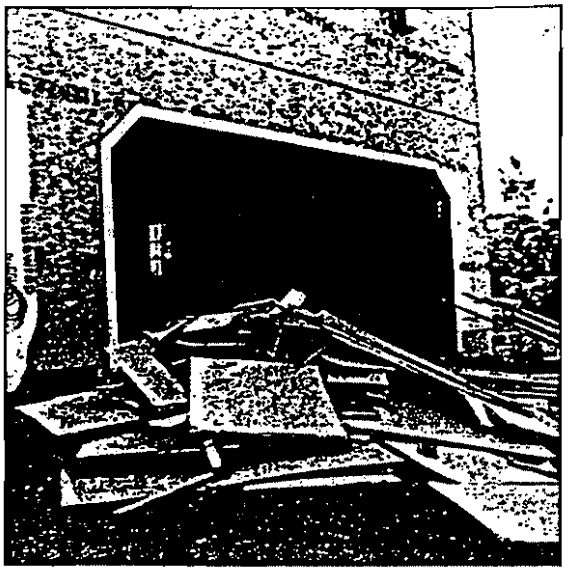
What do "reduce, reuse and recycle" mean on the job site?—A review of the audit likely will lead to specific ideas. A builder looking for a plan of action has to go no further than the three Rs of waste management: reduce, reuse, recycle. While these instructions are succinct and fairly complete, they leave the field of interpretation wide open.

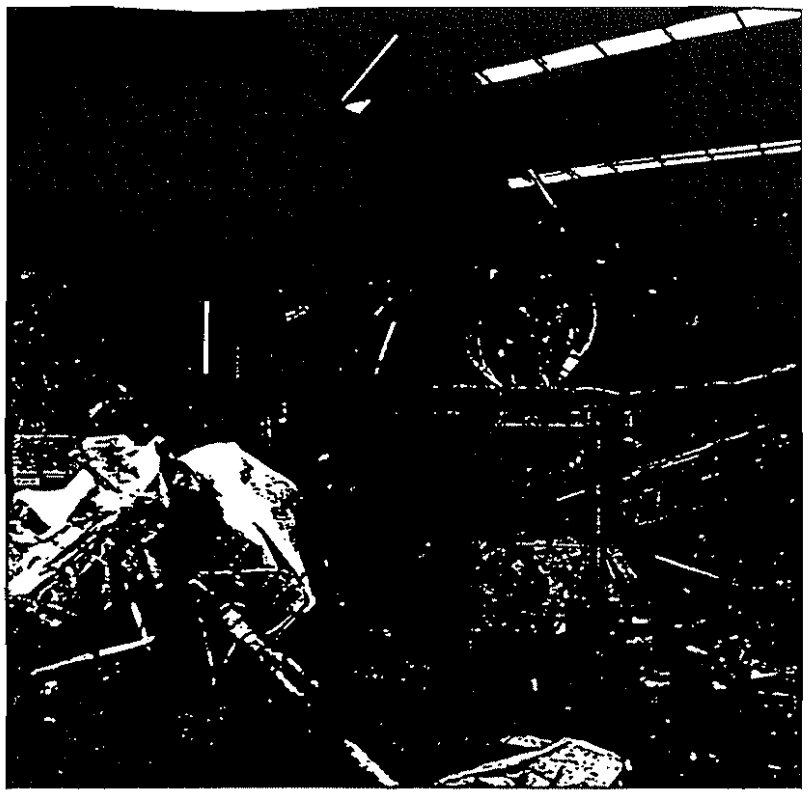
There are several strategies that can reduce job-site waste. Before construction begins, while designing a building, the use of materials of standard size and the inclusion of specific recommendations for the use of leftover cuttings can help. For example, the cutting of joists and use of wall blocking can be coordinated.

Designs that reduce the overall amount of building materials, such as 24-in. o. c. stud spacing, may reduce waste by causing fewer scrap ends. Such reduction may be an additional advantage of Optimum Value Engineering (OVE)—a wood-framing system developed by the

Less drywall went to the dump, and it could have been recycled.

The contractor on the job shown below didn't know that 3 miles away, Domtar Gypsum's Newington, New Hampshire, gypsum-recycling facility is open to anyone who wants to drop off scraps. Domtar takes in about 100 tons of drywall scraps a month. At Stapleton Resource Recycling (photo right), construction debris is loaded onto a conveyer for sorting.





National Association of Home Builders (NAHB)—that reduces the amount of lumber used in a house without sacrificing quality or structural integrity. (For more information on OVE, see *FHB* #84, pp. 46-49.)

Once construction is under way, other methods of reducing waste will present themselves. Proper storage and careful scheduling of deliveries will help minimize damage. Centralized cutting areas for lumber and drywall help when someone calls for a short length. A laborer can be designated to hunt for useful scraps and bring them to a central location. Novel reuse of scraps should be encouraged, such as using insulation scraps in interior partition walls as sound deadeners. You might be surprised how scrap wood disappears (and how much goodwill you promote) if you post a sign that says free kindling.

Jim D'Alessio said that he always is surprised by the huge volume of cardboard left at the end of a job. You might want to ask suppliers to strip packaging before shipping or to take the packaging back when they leave the job. Subs can be made responsible for the waste they produce. This is not necessarily passing the buck. Many times, effective recycling requires that a volume of recyclables be collected. Subs and suppliers may be in a better position to accumulate the quantity of packaging materials, such as cardboard, necessary to interest buyers of recyclables. Another way to reduce packaging is to buy in bulk.

The problems with recycling on the job—For two reasons, the builders of residential new construction are in an enviable position regarding recycling. As much as 95% of the waste generated on the job site is potentially recyclable, and most of the material, even in scrap form, is clean, uncontaminated and unmixed with other waste materials. In the industry jargon, it is "source separated," which greatly increases its value as a raw material to be used in other ways in manufacturing.

The problem for job-site recycling is that recycling has not yet proved itself to be cost effective on a wide-scale basis. There are several hurdles yet to be crossed. From the recycler's point of view, the economics of the industry are fairly rigid. Besides the problems associated with any business start-up, recyclers have to deal with a market that restricts what they can charge for their product and what they can charge for their services. On the one end, most recyclers compete with the producers of virgin material in the sale of their output. And because recyclers often must travel to construction sites that are scattered and always changing, collection costs tend to be high. What recyclers do not get from the sale of materials they must make up by charging a recycling fee. Yet that fee is severely restricted by the fees charged by the traditional waste hauler or at the local landfill or transfer station.

This situation is further complicated because traditional waste handling has not developed with recycling in mind. Many times, the fixed costs of hauling favor the aggregation of one large pile of trash rather than numerous smaller ones. Bringing multiple Dumpsters on the job costs more than a single large one. This expense in itself is a disincentive to a builder who might wish to try recycling.

Job-site recycling can work—Clearly, increased cooperation as well as increased options are needed between builders and waste haulers. Clean It Up Mark! is a Portland, Oregon, business run by Mark McGregor. Clean It Up Mark! works with builders and developers, handling their site-clean-up waste hauling (photo p. 70).

Typically, McGregor schedules visits that coincide with the completion of each major stage of the job. His crew may stop by a first time when the framing is complete and the discards are largely 2x stock and paneling products; a second time when the shell is done and the waste is largely roofing materials, siding and painting discards; and then a final time when cardboard, carpeting and other scrap from interior work dominate the trash. Gypsum wastes (left photo, above) usually are handled by the drywall crew and do not enter into this operation.

In a unique feature, Clean It Up Mark! offers its service as a package, based on the square footage of the structure. Builders like it because the cost can be agreed on and fixed before the job begins. Although McGregor thinks his services are different from old-fashioned waste hauling and not readily comparable, he does admit that Clean It Up Mark! may save a builder as much as 25% in disposal costs.

Clean It Up Mark! succeeds because, as the employees clean up the job site, they know how to separate the wood and other recyclables and deliver them to a recycler at a savings over the land-

fill tipping fee. In a quirk of the waste-handling industry, materials at the job site usually are measured in volume, while at the landfill they are measured by weight. By finding a less costly outlet for a component that contributes more to the weight of the load than to the volume, such as occurs with wood, McGregor not only saves money on the recyclable items, but he also makes the landfilling of the leftovers cheaper. Of course, he also is feeding a recycling industry that will continue to require his input as it develops and grows.

The majority of the materials McGregor recycles is wood and wood products. About half the wood he picks up is taken to industrial facilities that burn the wood to generate steam. The other half is taken to particleboard plants that remanufacture the debris into new particleboard.

While Clean It Up Mark! is a valuable and innovative service, it is geared toward a specific segment of the industry. Also, it takes advantage of the opportunities for recycling present in that region. Not all regions will have those same opportunities, and the waste from other construction activities will need to be handled. Those challenges need different solutions.

A look at a large-scale recycling plant— Large-scale facilities for mechanical sorting of mixed C&D waste are being built. These facilities handle the full range of material, from large-scale demolition projects to pickup trucks loaded with debris. An example of such a C&D recycling and waste-reduction facility is Stapleton Resource Recycling in Milford, Connecticut (right photo, facing page). The goal of this multimillion dollar operation is to reclaim approximately 80% of the construction, demolition and other bulky waste that it receives. Coincidentally, this operation saves its customers about 25% over traditional landfilling, the same as Clean It Up Mark!

Stapleton's operation begins at the scale, where incoming waste containers are weighed and assessed as to the grade of their contents. Grade is based on the desirability of material and on cleanliness. The fee is lower for unmixed, source-separated loads. The next stop is the tipping floor, where workers hand pull items that are bulky, valuable or undesirable. From there, the waste is placed on a system of conveyor belts to be separated mechanically, passing over and through a series of grinders, screens and blowers that sort the material according to size, density, magnetism and, ultimately, makeup.

Out of the waste, Stapleton produces specific products, including metals, aggregate from brick and concrete, and chipped wood. Right now, the company ships about 20% of the final result to a landfill, a number it would like to see decrease. The rest is sold to a variety of buyers, such as road builders, who buy the aggregate; scrap metal dealers; and steam-generating plants, which burn the wood.

Quality control is a watchword in resource recycling. For example, approximately 60% of the C&D portions of waste that Stapleton processes is wood. Wood material is inspected as it comes in so that the operators can eliminate [illegible] wood [illegible] its

paint, grease or contaminants. Government regulations control the level and types of contaminants acceptable in wood chips produced. Customers tend to have other, more stringent criteria, such as those related to chip size or moisture content.

Recycled construction waste is turned into many products— Converting recycled building materials into marketable products is the key to the success of recycling. The fiber from recycled wood is capable of going to a variety of applications. Current efforts include the manufacture of fiberboard and particleboard-type products, the production of biomass fuel, the salvage of usable timbers and the mixing of wood fiber with other materials to extend the useful life of both.

Clean wood from construction sites can be an excellent resource for many wood-product-manufacturing industries. In the Pacific Northwest, where restrictions on timber harvests have had a significant impact on the availability of sawdust and other sawmill residues, manufacturers of reconstituted-wood products have begun looking closely at this alternative source. According to Gene Davis of the IRU Group in Eugene, Oregon, close to 100% of solid-sawn lumber and 95% of panel products could be remanufactured into such items as medium-density fiberboard, particleboard and hardboard.

Currently, one particleboard facility—the Eugene, Oregon, plant of Willamette Industries—certifies its product as having a 10% minimum recycled content. In this facility, clean wood from construction sites is mixed with sawmill remainders. The operators view their approach as a practical one: They are opening a new source of supply while preparing themselves for the future, when interest in recycled materials will be even greater than it is now.

The largest market for wood waste, currently, is as fuel. In the Northeast alone, there are more than 100 facilities that use wood for energy. Many commercial boiler operators see wood as an available, renewable and clean alternative to fossil fuels. Properly burned, it produces relatively little of the more harmful combustion gases, such as sulfur dioxide. Although some argue that burning wood is not a form of recycling, it does displace nonrenewable fossil fuels, and it provides an alternative to landfilling demolition waste.

More and more, builders are looking into the use of salvaged lumber (see related article, pp. 86-91). Reclaimed timbers from old buildings often offer wood of a species or a quality less readily available otherwise. American chestnut and old-growth forms of longleaf pine, Douglas fir and redwood are some examples. These woods have the additional advantage of being well-seasoned and stable.

One area of great promise for recycled wood is its use in combination with plastics. Many builders are already aware of such wood-polymer composites as Trex (formerly Timbrex), produced by the Mobil Oil Corporation (left photos, p. 74). This lumber substitute is made of two recycled materials: wood and polyethylene. It is seeing increasing use in exterior applications such as decks due to its decay resistance. Similar

Guides to Recycled Materials

Strong markets for recycled products are essential to the success of recycling efforts. The number of recycled building materials available is large and increasing. Local groups and state agencies put together regional reference lists. Nationally, there are many useful publications:

***The Harris Directory: Recycled Content Building Materials*; available from Stafford-Harris Inc., 1916 Pike Place #705, Seattle, Wash. 98101-1056; (206) 682-4042. Published in 1994 on computer diskette, updated semiannually. Spreadsheet software needed. Price: $45, or $69 with update. This lists more than 1,500 recycled-content building materials with supplementary information such as product descriptions, test standards and more.**

***The Recycled Products Guide*, published annually, available from P. O. Box 577, Ogdensburg, N. Y. 13669; (800) 267-0707. A 400-page, encyclopedic reference to well over 4,300 recycled products that includes but also extends well beyond building materials. Costs are three-tiered: $275 gets a full guide, plus regular updates, plus access to a call-in line; $175 gets a current edition of the guide; $49 gets a condensed edition, in which the product descriptions have been shortened.**

***A Reference Guide to Resource Efficient Building Elements*, fourth edition, 1994; published by the Center for Resourceful Building Technology, P. O. Box 100, Missoula, Mont. 59806; (406) 549-7678; cost: $25; updated annually. This is a 90-page listing of companies that manufacture resource-efficient building products.**

***The Sourcebook for Sustainable Design*; published in 1992 by The Boston Society of Architects, 52 Broad St., Boston, Mass. 02109; (617) 951-1433; cost: $25. A two-part publication. Part one is a listing of products and materials; part two is a resource guide.**

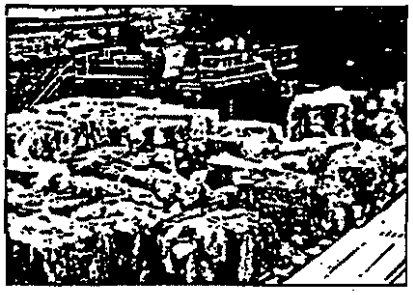
***Environmental Resource Guide*; published quarterly by The American Institute of Architects' Committee on the Environment, 1735 New York Ave. NW, Washington, D. C. 20006; (800) 365-2724; cost: $200 per year for individual nonmembers. Assessments, articles and case studies of the environmental and resource qualities of building materials.**

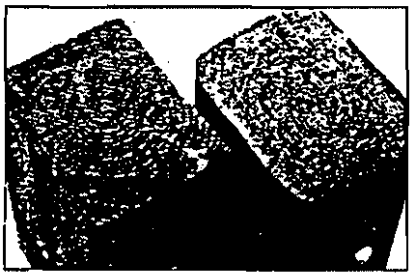
***Environmental by Design*; written in 1993 by Kim LeClair and David Rousseau, published by Hartley and Marks, Publishers, P. O. Box 147, Point Roberts, Wash. 98281; (206) 945-2017; cost: $19.95. A detailed materials directory.**

***Environmental Building News*; RR#1, P. O. Box 161, Brattleboro, Vt. 05301; (802) 257-7300; cost: $60 per year. A bimonthly newsletter on environmentally sustainable design and construction.**

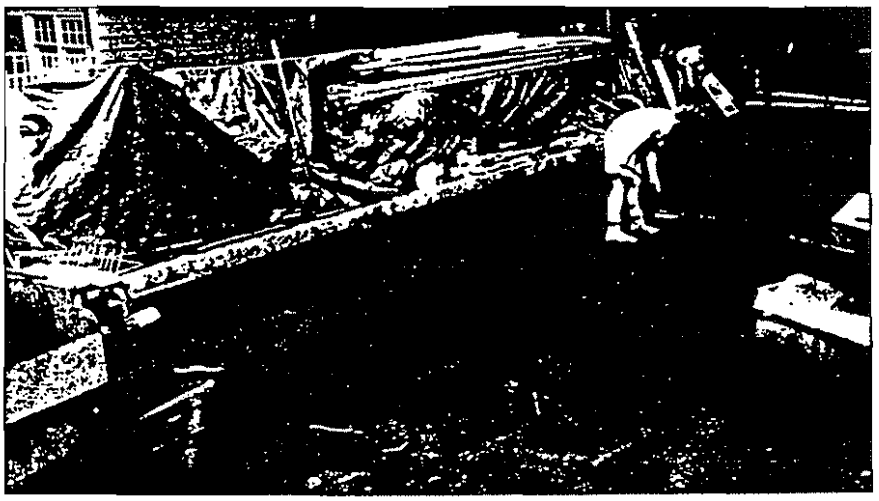
—C. D.

Synthetic wood makes decks. Developed by Mobil Oil Corporation, Trex synthetic wood is made of plastic grocery bags (top photo) and recycled wood. In the middle photo, Trex is shown beside a piece of pressure-treated wood after a six-month weather test. Below, a deck made of Trex is splinter-free. Photos: Mobil Oil Corp.





Recycled shingles become driveway paving. Asphalt shingles are processed by ReClaim Inc. into a paving product called RePave. At each of its New Jersey facilities, ReClaim processes 200 tons to 300 tons of asphalt roofing a day. Top photo: Rich Zeigner; bottom photo: ReClaim Inc.



composite materials are being developed at the USDA Forest Products Lab in Wisconsin. Tough, formable wood-plastic composites have a huge potential for everything from automobile parts to preformed building components.

Chips from clean wood also can be used as landscape mulch and as bulking agents for composting sewage sludge. Officials in Schenectady, New York, estimate that they might require 26,000 tons of wood chips a year for their sewage-treatment facility. The problem of this facility is clean wood that can be used on lawns and in horticultural applications. Other this product gains [illegible]

Wood Recycling Inc., which is in Woburn, Massachusetts, turns scrap wood into landscaping products (inset photo, p. 71). On an average day WRI grinds up about 1,100 tons of wood from construction projects. From the wood it makes mulch for hydromulching and another product called Fast Aid Combination that contains pulverized wood fibers, grass seed and fertilizer. It is used for sprouting grass on the bare spots in your lawn.

Drywall scraps can become full sheets again or fertilize your garden—Gypsum, the main component of drywall, also has a [illegible]

scraps from shipping. But the recycling of job-site gypsum is, as of yet, less common.

The greatest obstacle is cost. Raw gypsum is abundant and cheap, with deposits fairly widespread. Recycled gypsum is not only more expensive, but also adds complexity to the manufacturing process. To use recycled drywall, operators must remove the paper and also may have to deal with additives, such as the fiberglass that is in Type X drywall.

Such problems are not insurmountable. For Kirby Hyland, a principal in New West Gypsum, these difficulties present a challenge. New West [illegible]

also has plants in Tacoma, Washington, and Toronto. These plants reclaim gypsum from clean drywall and sell it to drywall manufacturers. New West gets its drywall from transfer stations, drywall contractors and specialty collectors in the region of the facilities.

New West works closely with several drywall manufacturers, most notably Domtar and Westroc. These manufacturers mix the recycled and virgin gypsums to produce drywall with a recycled content of as much as 33 %, although 20 % is more typical. The marketplace acceptance of this drywall is reported to be high. The use of recycled-content gypsum will continue to grow, particularly if it is called for by builders and designers on specific jobs.

Domtar Gypsum has other recycling efforts under way. Since late 1992 at its Newington, New Hampshire, facility, Domtar has been recycling clean, source-separated drywall collected from contractors and homeowners. At present, the greatest limitation on this effort has been the relatively undeveloped network for bringing clean drywall to the plant. Domtar also manufactures drywall from 100% byproduct gypsum at its Savannah, Georgia, facility.

Gypsum, both raw and recycled, also is used as a soil treatment for croplands. Mineral gypsum has been used for centuries to increase the fertility of fields. Even Benjamin Franklin is reported to have "plastered his fields." Gypsum is like limestone in its effect, with the additional benefit of adding sulfur to soil.

A graduate student at the State University of New York at Syracuse, Mark Burger, tested the use of ground-up drywall as a soil amendment on a cornfield. He found the effects of processed gypsum on crop yield to be comparable to those of agricultural gypsum and of limestone. Other studies have shown that gypsum can be used to reduce sodium from the soil and so ameliorate the effects of salt contamination on roadside soils, a common problem wherever winter roads ice up.

Old asphalt shingles become new roads—The recycling of asphalt shingles has three problems to overcome. First, the shingles, while easy to collect, are bulky and expensive to transport. Second, used shingles tend to be full of nails and other extraneous materials. Third, asphalt shingles are only a modest component of the asphalt stream of the C&D waste stream, well behind pavement. Although several asphalt-recycling plants exist, few are willing to deal with the problems created by asphalt shingles.

Those concerned about recycling can take heart from the efforts of ReClaim Inc. This [illegible] Florida company was founded in the [illegible] specifically for the purpose of recycling shingles and other asphalt-based roofing materials. ReClaim operates two facilities, in New Jersey with 22 company-authorized collection points throughout the state. The company's goal is that, with the success of these facilities, recycling will expand to other locations around the country.

[illegible] source-separated asphalt roofing [illegible] manufacturers, [illegible] to remove the metal and, through a patented process, turns them into road-paving and road-patching materials (bottom right photo, facing page). In a typical day, each New Jersey facility will process 200 tons to 300 tons of roofing materials and produce an equivalent amount of product. Reaction to ReClaim's products has been good, particularly to the pothole-repair patch called RePave. Recently, it became available nationally through retail outlets.

Recycled paint is a hard sell—Typically, recycled products have to prove themselves before they gain acceptance. Often, they are presumed to be inferior to the original, where one exists. Such is the story of recycled paint. There are several companies that recycle paint, taking back leftovers from consumers as well as reclaiming paint from the manufacturing process. One constant challenge in the marketing of these paints is their limited color selection. Recycled paints also must demonstrate their ability to perform over the long term.

Corrugated cardboard and various metals are already well-established as a recyclable materials. Recycling certain other materials, such as plate glass, is more difficult because the formulations can vary so much among manufacturers. However, the attention being paid to recycling and recyclability ensures that the technical problems associated with these materials will eventually be pursued.

Salvaged materials help low-income families—The opportunity to salvage items should not be overlooked. Although salvage is often local and small scale, it can be a satisfying way to give away [illegible] and building materials. It also can be a way to assist nonprofit groups and the underemployed.

In Gray, Maine, the Building Materials Bank collects everything from building materials to used appliances from remodeling jobs and sells them at a fraction of their original costs to low-income families that otherwise couldn't afford to maintain their homes. Last year, the bank kept 90 tons of material out of the local landfill while helping 300 families.

In Baltimore, Maryland, the Loading Dock is a nonprofit group whose members come to job sites to pick up cast-off furnishings and excess building materials. They bring them to a central warehouse to distribute at modest cost to other nonprofit groups and to low-income individuals. Members of the Loading Dock also comb landfills looking for useful items.

A similar operation, the Building Materials Bank in Gray, Maine, collects new and used building materials and sells them at a small fraction of their new cost to low-income families that shop at the warehouse (photos above). Last year, according to Kathleen Scott, director of the operation, the Building Materials Bank kept more than 90 tons of material out of local landfills and supplied 300 families with goods for their homes.

Cooperation is critical—Recycling is not the total answer. It is one valuable tool among others for builders to use in addressing one of society's greatest problems. Recycling is important as a means of extending our resources and of allowing a reasonable quality of life to be maintained for ourselves and for future generations. Recycling will depend heavily on the efforts of individual builders because builders best understand the opportunities present in the practice of their profession. Recycling also depends heavily on alliances between builders, designers, suppliers, waste handlers, agencies and others in the community. The future is bright, even if the process seems at times slow.

Chris Donnelly lives in Southeast [illegible]. Tom Phelps is [illegible]

LIGHT AND GLARE

The Promontory DEIR says very little about this topic (4.3-8, 4.3-10, 4.3-20, 4.3-21), which was treated at length in Quality Growth's scoping comments (1994, Sec. VI). The DEIR (p. 4.3-10) refers to Goal 2.8, Objective 2.8.1, and Policy 2.8.11 in the General Plan and admits that the Specific Plan does not discuss lighting standards but "would be subject to County zoning standards and prudent safety standards. 41-70

Impact 4.3.7: Implementation of the proposed project would result in the introduction of new nighttime light sources associated with project roadways, residential, and commercial uses that could adverse affect [sic] on adjacent residential areas. This is judged a Significant effect. The following mitigation is proposed: 41-71

4.3.7a: Outdoor light fixtures for non-residential areas shall be low-intensity, shielded and/or directed away from residential areas, and only used where necessary for safety and security purposes.

4.3.7b: Street light fixtures shall not exceed 30 feet in height and limited [sic] to the village center and major project roadway intersections.

4.3.7c: Native landscaping, such as shrubs and trees, shall be planted in such a manner to shield motor vehicle lights and street lights from adjacent areas.

4.3.7d: Lighted park sports fields shall be restricted to the community park in the village center. Light fixtures for the neighborhood park shall be limited to that required for safety purposes.

The foregoing measures are said to mitigate the effect to Less Than Significant. This is patently impossible. Even with perfect shielding of exterior lights, this effect will remain significant. Nothing is said about private lighting, both exterior and interior. Private "barn lights" are among those people find most offensive.

It should be possible drastically to lessen light pollution, but absent baseline information, we'll never know. Elsewhere, to no avail, we have presented to the county an inexpensive method to establish baseline information, repeated in the attachments here.

1) Baseline information as to present light pollution levels should be presented in the FEIR.

Specifying that fixtures be low-intensity continues the county's confusion of *level* of illumination with *direction* of illumination. This confusion is reflected in the Goal, Objective, and Policy specified. The supposed correlation of lighting with safety, also reflected in the General Plan policies cited, was addressed by the U.S. Department of Justice in a study summarized by the International Dark-Sky Association in Information Sheet No. 63, cited by us in comments on the General Plan DEIR. (A copy is included here with our attachments.) 41-72

2) Though lighting decreases the *fear* of crime, we know of no studies showing that street lighting affects the level of crime though that is implicit in the County's stated policies. Supporting evidence should be included in the FEIR. As "Dissecting Light Pollution" (attachment) makes clear, improperly shielded exterior lighting actually makes it more difficult to see potential criminals because of glare. 41-73

More information can be obtained from various web sites such as the following: www.harvard.edu/graaf/nelpag.html (New England Light Pollution Advisory Group); www.skypub.com/lpnotes/lpnotes.html; and www.scs.uiuc.edu/~nash/lightpol.html.

3) The General Plan is under legal challenge. The matter of lighting standards is deferred therein to the zoning ordinance, which, being as yet unrevised, includes no such standards. It is unacceptable to depend upon a zoning ordinance that hasn't yet been revised to include lighting standards. 41-74

This problem is easily resolved by proper shielding and it is amazing that proponents of developments seem so recalcitrant in dealing with it. It is particularly surprising in the present case, where the developer claims to be so interested in good design. Why not "show the way" to others?

Information Sheet Number 63 (Edition No. 1, June 1993):

International Dark-Sky Association
3545 N. Stewart, Tucson AZ 85716 U.S.A.

US Department of Justice Study of Street Lighting and Crime

[In 1977, a US Department of Justice study report was published giving the results of a thorough study of the correlation of street lighting and crime. This information sheet reproduces the abstract of that study and offers a few additional comments. As far as we know, there has been no comprehensive study since, though many "studies" have been done, most suffering from the defects identified in the report.]

National Institute of Law Enforcement and Criminal Justice
United States Department of Justice, July 1977

By James M. Tien, Principal Investigator,
Vincent F. O'Donnell, Arnold I. Barnett, and Pitu B. Mirchandani

National Evaluation Program, Phase I Final Report

Abstract: The purpose of this report is to detail the present state of knowledge regarding the impact of street lighting on crime and the fear of crime, based on a comparative analysis of past and on-going street lighting projects whose description and impact have either been documented or are easily accessible. As with every NEP Phase I study, this report does not purport to be prescriptive with respect to the design of street lighting projects. The report briefly traces the historical and technical development of street lighting; reviews the pertinent issues in street lighting and crime; develops an evaluation framework for the comparative analysis of street lighting projects; undertakes a systematic assessment of available evaluation studies in street lighting; outlines a single project evaluation design; and identifies gaps in the present knowledge base and makes recommendations concerning future research and evaluation activities which should be undertaken to fill those gaps.

Although the paucity of reliable and uniform data and the inadequacy of available evaluation studies preclude a definitive statement regarding the relationship between street lighting and crime, a number of policy-relevant findings are contained in the report. In particular, while there is no statistically significant evidence that street lighting impacts the level of crime, especially if crime displacement is taken into account, there is a strong indication that increased lighting--perhaps lighting uniformity--decreases the fear of crime. Consequently, it is recommended that LEAA continue to fund street lighting projects for the purpose of deterring crime, but that the funding be a joint inter-agency effort so that the range of street lighting objectives is taken into consideration in the development of such projects.

[The report is very lengthy and has many appendices. It is a worthwhile reference to many of the issues, and discusses quite well the many pitfalls that "research" studies can and have fallen into. The Abstract above summarizes well the issues. Let us note in passing: A zero order look at lighting and crime "statistics": Is there more crime and worry of crime now, in our cities, than there was only a few decades ago? Is there more street lighting and other "security" lighting? Obviously, crime and lighting (mostly bad lighting) are correlated! However, as with most all "studies," this is also flawed. IDA's position is that good lighting can often be helpful in promoting safety and security, while bad lighting is generally not helpful at all, and, in fact, may badly compromise the very goals for which the lighting was "designed" and installed.]

Dissecting Light Pollution

EVERY ASTRONOMER is familiar with the artificial skyglow that hangs over populated areas, washing out almost everyone's view of the universe to a greater or lesser degree. In the last two generations, light pollution has spread from a problem of cities to a major astronomical disruption almost everywhere.

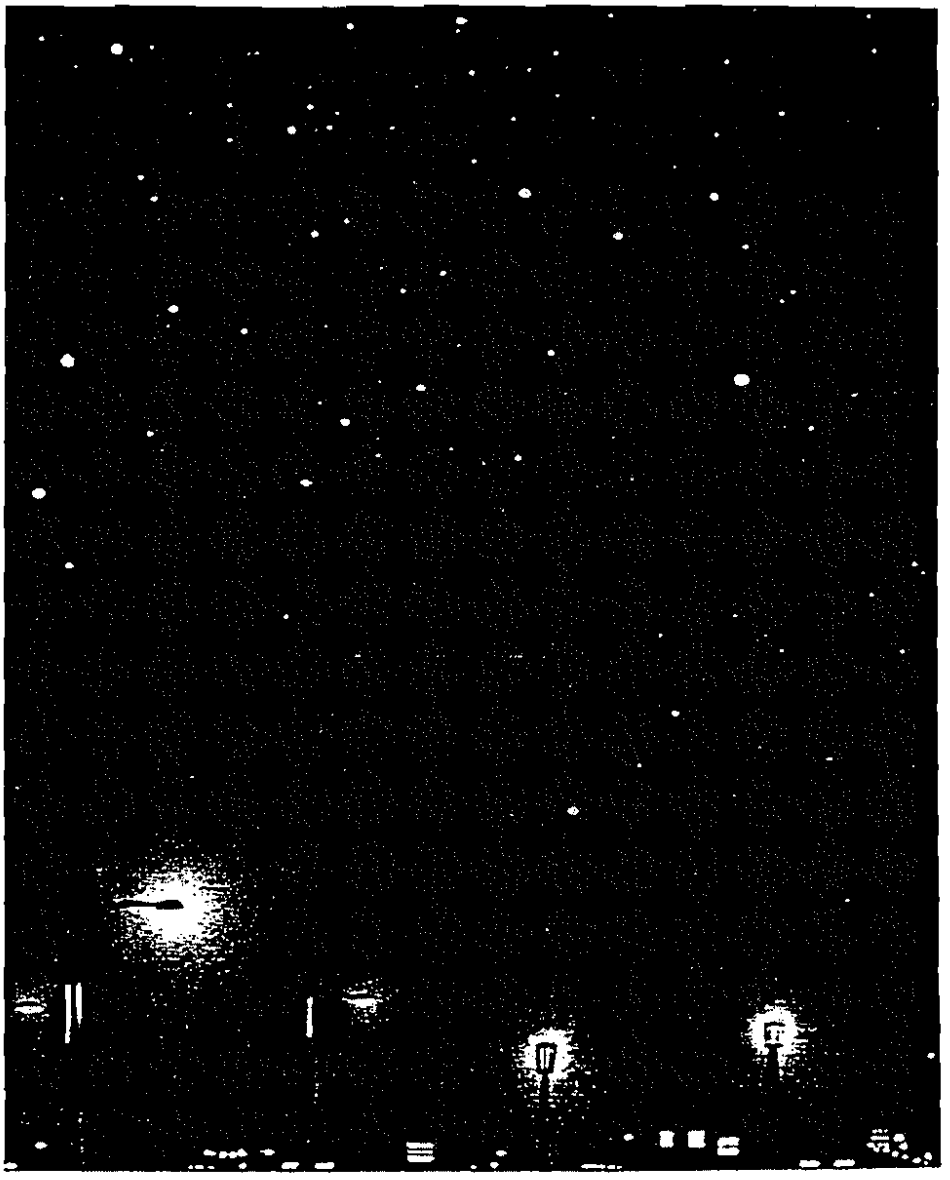
But some aspects of light pollution are not widely appreciated by amateur astronomers. Knowledge is power; here are facts that may help you avoid some of the problem and combat the rest more effectively.

• **Glare versus skyglow.** The most annoying and destructive problem is light that beams directly into your eye from a bright bulb. This is called *glare;* it comes from fixtures that are poorly designed or improperly aimed, perhaps a majority of those currently in use. When glare crosses property lines and creates a nuisance, it's called "light trespass." Glare is often the easiest problem to avoid — by setting up your telescope in a shadowy corner, erecting a tarpaulin to shade the telescope, or negotiating with your neighbors or local government to have the offending light replaced with a modern one of better design.

Skyglow is what the term "light pollution" properly means. The sky has a certain minimum surface brightness even in the most pristine, unspoiled environment. This natural component of skyglow has four sources: faint airglow in the upper atmosphere (a permanent, low-grade aurora), sunlight reflected off interplanetary dust (zodiacal light), starlight scattered in the atmosphere, and background light from faint, unresolved stars and nebulosity. Airglow peaks around the maximum of the 11-year sunspot cycle; the other sources vary with the hour of night and the seasons. But their combined average is well known.

A typical suburban sky today is about five to 10 times brighter at the zenith than the natural sky. In city centers the zenith may be 25 or 50 times brighter than the natural background.

• **Full-cutoff shielding** inside light fixtures is the essential remedy for both glare and skyglow. A lamp should send all its light down where the light is intended to be used, not upward or sideways. "Full cutoff" is usually taken to mean that no light rays from the fixture go above the horizon, and that at least 90 percent of light is blocked in the near-sideways range from 0° to 20° below the horizontal plane.



Stars competing with city lights. This composite illustration by the International Dark-Sky Association is really too generous: few stars can be seen at all when a glary light beams directly into your eye.

Light that shines in this near-sideways range contributes nothing to most lighting needs. It is merely a dazzling annoyance in the eyes of people nearby and dissipates useless into the distance. Or course, light spilling upward is totally wasted. Tremendous above-the-horizon waste is tolerated because it goes unseen. People who install lights don't normally check them at night from high in the air! The cost of electricity for this wasted light has been put at $1 to $2 billion annually in the United States.

• **Near-horizontal light is especially destructive.** A light beam aimed straight up is usually not the worst kind. It escapes into space quickly, passing through what

astronomers call one "air mass." A ray aimed 10° above the horizon, on the other hand, passes through 5.6 times as much atmosphere — 5.6 air masses — polluting all the way. A ray that skims the horizon pollutes up to 10 air masses, though not much of the light is left by the time it goes through the last few.

The situation is comparable to atmospheric extinction of starlight arriving in the opposite direction. When a light ray travels straight up through clear air from sea level, only 20 to 30 percent of it is absorbed or scattered by the atmosphere. The rest escapes harmlessly into space. When the same ray is aimed 5° above the horizon, about 90 percent of it is absorbed or scattered. Thus it causes three or four times as much pollution, when all the damage is summed up over an area many miles across. (That, anyway, is the situation in clear air. Aerosols can complicate the picture.)

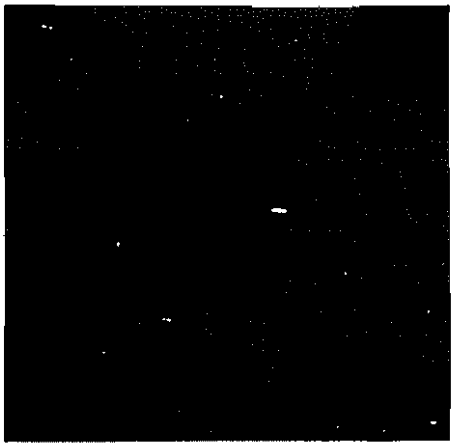
Add the fact that most lights provide *some* blockage at high angles, and it becomes clear that much of the light-pollution war will be won or lost in the narrow battleground just a little way above the horizon. At least this is true at sites fairly far from the offending lights — the semirural areas that seem to have suffered the worst changes in the last 20 years. Right inside a city, rays at higher angles (and reflected from the ground) are the primary problem.

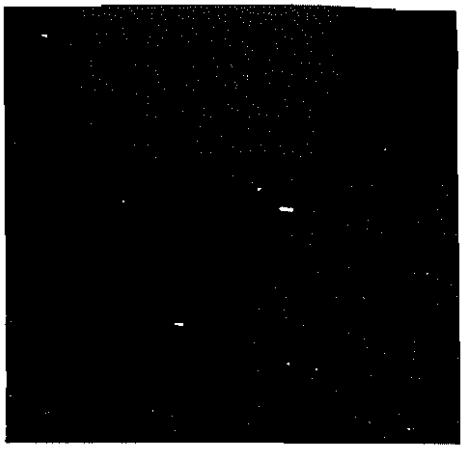
• **Some skyglow is surprisingly local.** You can often see more stars 15 miles from a city than a quarter mile from a bad rural shopping center.

I've made extensive sky-brightness measurements of the zenith at two sites in Middletown, Connecticut: at the Van Vleck Observatory on the Wesleyan University campus, and at my home two miles away in wooded, semirural suburbia. The campus had, until recently, a night sky more than 20 times brighter than the natural sky background. The sky over my house is only four to five times brighter than the natural level. The change in two miles was remarkable — from a nearly invisible Milky Way to views of the Sagittarius and Scutum star-clouds on good nights.

In 1994 the university agreed to replace most of its walkway lights within a block of the observatory with properly shielded fixtures. The sky brightness at the zenith dropped by almost half — a dramatic improvement of 0.6 or 0.7 magnitude.

Such observations point up the importance of dealing with local lights. You don't have to convert an entire city to see results. Hartford, Connecticut, a metropolitan area of a million people, is only 15 miles north of the Wesleyan campus. Its lights obtrude only marginally. Those of New York City about 90 miles southwest interfere not at all.





Traveling just a couple of miles can darken your sky dramatically. These identical exposures of Lyra overhead were taken from Van Vleck Observatory on the brightly lit Wesleyan University campus *(left)* and at the author's home just two miles away *(right)*. The difference amounted to a factor of four in sky brightness.

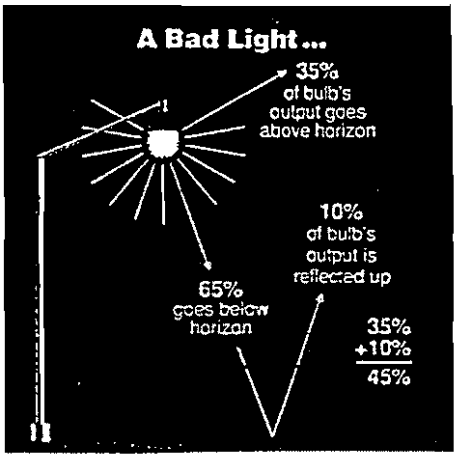
Another example appears on the light-pollution map of the Washington, D.C., region made by the Northern Virginia Astronomy Club and published in the June issue, page 82. The club members found surprising holes of relatively dark sky in a region that looks solid white in nighttime spacecraft photographs.

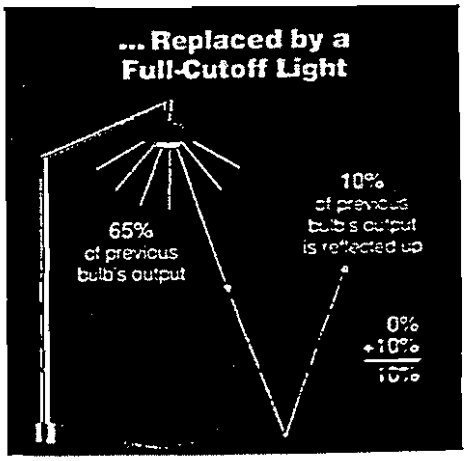
• **Watch the color of the daytime sky,** especially near the horizon. The bluer the sky, the darker the night will probably be. Whiteness in a daytime sky is due to sunlight scattered by tiny particles. They do just as good a job of scattering artificial light at night. A deep blue sky in the afternoon should mean a transparent sky after dark.

Dry air is another good sign. Even if the upper atmosphere is fairly free of haze, high humidity is liable to bring haze (or fog) lower down. Watch for forecasts of low humidity.

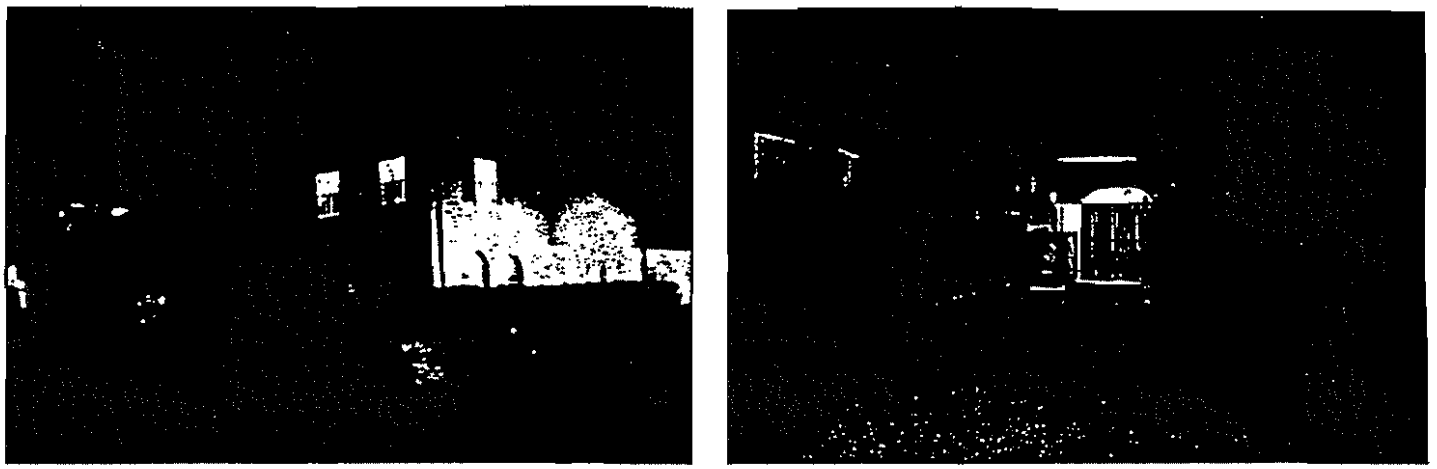
• **Air pollution matters.** The whitish haze in a blue sky consists of microscopic water droplets that have condensed on tiny solid particles, primarily sulfate dust from distant factories and power plants. These particles are the precursors of acid rain. Sulfur emissions in the United States peaked in 1970 and have since been reduced by about 30 percent. Whether these reductions will continue or backslide is an open question. But the Clean Air Act of 1970 has meant darker skies in the 1990s than we otherwise would have had.

A windy cold front sweeping through a city can clear out local pollution, leaving the night marvelously dark. The windiest





Skyglow can potentially be reduced by about three-fourths by switching to full-cutoff fixtures. *Left:* A typical unshielded lamp may spill 35 percent of its light above the horizon. Of the light shining down, roughly 15 percent (amounting to 10 percent of the bulb's total output) reflects off typical ground. The result: 45 percent of the bulb's output ends up in the sky. *Right:* A full-cutoff shielded fixture can provide the same illumination with a bulb 65 percent as bright. Only the light reflected from the ground gets to the sky.



Bad and good security lighting. ***Left:*** **Can you see the burglar in this scene? The unshielded lamp dazzles the eyes just as it did the camera, creating dark shadows and poor visibility as well as pollution in the sky.** ***Right:*** **Would you see a burglar here? Good-visibility lighting shows you lit ground instead of dazzling bulbs. A rule of thumb used by lighting engineers is that if you *see the bulb*, it's a *bad light*. The fixture at left uses 175 watts; the two at right use a total of 28 watts. Courtesy International Dark-Sky Association.**

city and suburban nights are often the darkest. A passing rainstorm or blizzard can also leave an unusually dark night in its wake.

• **A case based on money, energy, and good-looking surroundings** will get you further than one based only on astronomy when appealing for light-pollution control. Light sent into the sky wastes money. It adds to noxious power-plant emissions and all the other problems of energy profligacy. It creates an annoying, garish nighttime environment. Those are the points that will carry the most influence with the public and elected officials.

Full-cutoff fixtures that illuminate the ground efficiently with a smaller bulb can save electricity so fast that the cost of retrofitting is typically recovered in three years. After that the savings are free and clear. The city of San Diego, for example, is now saving about $3 million a year in this manner.

Full-cutoff lighting looks more pleasant. By reducing glare it improves nighttime visibility, so that motorists, for instance, can see pedestrians and objects more clearly. Many full-cutoff fixtures are becoming available in various styles. The best ones rely entirely on reflection above the bulb rather than refraction by a plastic cover hanging below it. They provide not only less waste and glare but smoother, more uniform illumination. When people see what well-designed lighting looks like at night, they want it for their own area.

When light pollution is reduced, everybody wins. This conceptual breakthrough was what led David Crawford of Kitt Peak National Observatory and his amateur colleague Tim Hunter to found the International Dark-Sky Association (IDA) in 1988. Kitt Peak's successful efforts against light pollution from neighboring Tucson, Arizona, convinced Crawford and Hunter that astronomers have common cause with everyone else. Before then, most astronomers had assumed that "good lighting" was exactly what they didn't want and that they faced a hopeless battle against the rest of the world.

• **Join the IDA.** The IDA produces useful fact sheets and educational materials (including sources for good lighting fixtures), lobbies the lighting industry, and has worked for state and local light-pollution control initiatives. It is currently supported by about 1,850 dues-paying members. This is not enough to hire a full-time staffer needed to handle the education, advocacy, and member-support projects crying for action. Hunter estimates that the revenues from 2,500 members would be enough to turn this corner.

Supporting the IDA financially is the most effective thing you can do to turn the light-pollution tide. Basic membership starts at $20 a year; the address is 3545 N. Stewart, Tucson, AZ 85716. The IDA maintains a Web site which includes its fact sheets and newsletters at http://www.darksky.org/~ida/index.html. Every amateur astronomer should be eager to help.

ARTHUR R. UPGREN

Upgren is an astronomer at Wesleyan and Yale Universities and a charter member of the IDA. He has long been active in night-sky brightness research.

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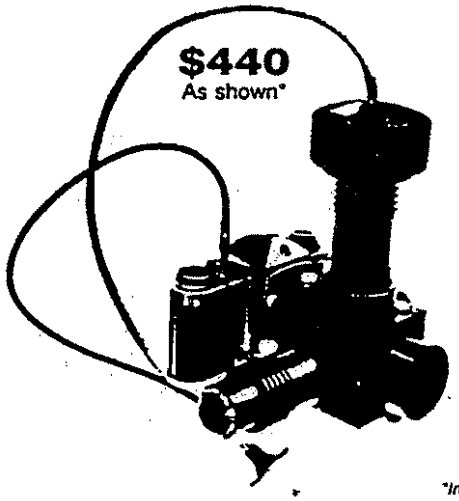

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TRAFFIC

CEQA REQUIRES THAT AN EIR PRODUCE RIGOROUS ANALYSIS AND CONCRETE SUBSTANTIAL EVIDENCE TO SUPPORT A DETERMINATION THAT A PROJECT'S IMPACTS ARE INSIGNIFICANT. 41-75

Under no circumstances would a reasonable person assume that the addition of 21,857 ADT to the quiet neighborhoods of El Dorado Hills could constitute anything less than a significant impact. The FEIR must provide a detailed analysis of the impacts of this added traffic to the health and safety of existing residents.

Mitigation measures 4.5.2a, 4.5.2b, 4.5.2c, 4.5.3b, 4.5.4,4.5.5,4.5.6,4.5.7b, and 4.5.8 have no specific timelines and therefore cannot be deemed "substantial evidence" of mitigation. There is not absolute guarantee whatsoever that any of these mitigation measures will be implemented prior to the buildout of the project. Some mitigation measures are not even within the control of El Dorado County. The FEIR must supply substantial evidence that the massive traffic impacts of this project will be mitigated to a lesser than significant level. 41-76

CEQA REQUIRES THAT AN EIR DISCUSS SIGNIFICANT CUMULATIVE IMPACTS, OR EXPLAIN WHY CUMULATIVE IMPACTS ARE NOT SIGNIFICANT. 41-77

Cumulative projects in the area total 25,000 approved units and 6000 in-process. Add business park (190,000 ADT), commercial parks and schools, subtract internal trips and the total cumulative ADT in the area (in addition to existing) is 655,975. This figure can be verified. Would the FEIR please verify this and provide substantial evidence, including timelines for mitigation, that the only cumulative SU will take place some time in the future at Blue Ravine Rd/E. Natoma St.?

AESTHETICS - COMMUNITY DESIGN

CEQA REQUIRES THE ADOPTION OF FEASIBLE MITIGATION MEASURES IN ORDER TO SUBSTANTIALLY LESSEN OR AVOID OTHERWISE SIGNIFICANT ENVIRONMENTAL EFFECTS. 41-78

CEQA REQUIRES THAT AN EIR SHALL CONTAIN A DISCUSSION OF ALTERNATIVES CAPABLE OF ELIMINATING ANY SIGNIFICANT ADVERSE ENVIRONMENTAL EFFECTS OR REDUCING THEM TO A LEVEL OF INSIGNIFICANCE, EVEN IF THESE ALTERNATIVES WOULD IMPEDE TO SOME DEGREE THE ATTAINMENT OF PROJECT OBJECTIVES, OR WOULD BE MORE COSTLY

Narrow roadways, split-level roadways, tree-protected pedestrian pathways, curvilinear roadway routing, inter-linked wildlife corridors, open drainages, street and parking lot shading, and interconnected public open spaces/child playscapes constitute examples of feasible mitigation measures capable of substantially lessening project impacts and cumulative project impacts that result in altering the landscape from rural land to developed urban/suburban uses . 41-79

The EIR, in its present form, omitted consideration of these feasible, low-cost measures, as mitigation or alternatives.

In accordance with the requirements of CEQA, please include an analysis of the above community design issues, and any other relevant design issues, as they relate to lessening the significance of project and cumulative project impacts to county aesthetics. 41-80

ADDENDUM

WATER

The Carson Creek DEIR includes the following statement in Table 2-1:

41-81

4.18-4: General Plan Consistency. The proposed Specific Plan would be required to comply with relevanty General Plan goals, objectives, and policies. Because insufficient water is currently available to supply the project site at buildout, the Specific Plan would be inconsistent with Policies 5.2.1.2, 5.2.1.3, and 5.2.1.4. This would be considered a significant impact.

We feel that this same issue should apply to this project also. Especially in light of the recent El Dorado Project court decision (7/28/97). Would the FEIR please explain?

SCHOOL IMPACTS

The information in the environmental impact report for this project as it relates to elementary schools is deficient. It fails to adequately identify the impacts for both the Rescue & Buckeye Unified School Districts with the recent adoption of the 20:1 class size reduction program. Currently, three grade levels qualify for class size reduction, with the possibility of a fourth grade level this school year (1997/98). The EIR fails to mention or identify this change in policy. As a result of the 20:1 class size reduction the following needs to be updated: 41-82

1. **Current capacity of each school site within the affected districts. Projected capacity of each school site over the next five years.** 41-83

2. **Identify number of class rooms that are <u>not</u> designed to be used as classrooms (i.e. libraries, etc.) that are currently being used for classrooms. Also, identify the number of portables at each site.** 41-84

3. **Identify the number of classrooms needed as a result of this project.** 41-85

4. **The per student classroom construction cost projections provided by the districts needs to be re-computed based on the increased classroom needs due to the implementation of the 20:1 program.** 41-86

5. **Identify the cost to provide the necessary classrooms and other facilities (multi-purpose room, bathrooms, playground equipment, etc.) needed as a result of this project.** 41-87

MISCELLANEOUS ISSUES

LAND USE

Please include a copy of Ordinance No. 4349 in the Final EIR. The owner of the Specific Plan Area rezoned a portion of 280 acre parcel to a 2.15 acre single family two-acre zone. If this area is important enough to set aside a large 2+ acre parcel for personal use, why wasn't this considered the standard for lot size in the specific plan area? 41-88

Also public notices reflect there was an attempt to sell this property on May 16, 1996 and June 11, 1996. (See Attachment). Would this property still be available for purchase? Could an opportunity be presented to El Dorado Hills or El Dorado County residents to purchase this property to keep it in its natural state? or Maybe it could be developed into use as natural regional park as was done with the park in El Dorado Hills? 41-89

NOISE

The noise from the Mather Field Flights (See Attachment) has been a issue in El Dorado Hills. The following Mitigation is recommended: Laminated Dual Pane Windows on all new construction. 41-90

MISC. COMMENT:

All previously submitted comments by the public or agencies during any public comment period must be addressed in any FEIR. 41-91

EL DORADO COUNTY PLANNING COMMISSION
Regular Meeting
November 10, 1994 8:30 A.M.
Building C Hearing Room
2850 Fairlane Court, Placerville, CA 95667

A G E N D A

8:30 A.M.

1. CALL TO ORDER

2. PLEDGE OF ALLEGIANCE

3. ADOPTION OF AGENDA

4. CONSENT CALENDAR (All items on the Consent Calendar are to be approved by one motion unless a Commission member requests separate action on a specific item.)

   a. Minutes of October 27, 1994

5. DEPARTMENTAL REPORTS AND COMMUNICATIONS

   These items will be considered during the day as time permits.

6. COMMISSIONERS' REPORTS

9:30 A.M.

7. ZONING BOUNDARY AMENDMENTS (Public Hearing)

   a. Z94-09; petition submitted by COOPER-THORNE and ASSOCIATES (Property Owner: Russell Ranch Partnership/Angelo K. Tsakopoulos) to rezone a 2.15-acre portion of a 280-acre parcel from Residential Agricultural Forty-acre (RA-40) to Single-family Two-acre Residential (R2A) Zone. The property, identified by Assessor's Parcel No. 111-020-04, is located at the north end of Powers Drive, approximately 150 feet north of the intersection with Mossridge Way, in the El Dorado Hills area. (Negative declaration prepared)*

   RECOMMENDED APPROVAL

   The Board of Supervisors will consider this item on December 13, 1994, at 2:00 p.m., in the Board Chambers, 330 Fair Lane, Placerville, CA 95667.

   The Planning Commission and/or Board of Supervisors may consider other zoning found to be consistent with the County General Plan.

   STAFF (DZ) Recommendation: Approval

ORDINANCE No. 4349

THE BOARD OF SUPERVISORS OF THE COUNTY OF EL DORADO DOES ORDAIN AS FOLLOWS:

RELATED TO REZONING IN THE EL DORADO HILLS AREA PLAN PETITIONED BY RUSSELL RANCH PARTNERSHIP/ANGELO K. TSAKOPOULOS

Section 1. The Official Zoning Map for the El Dorado Hills Area Plan is hereby amended to rezone the following described lands from Residential Agricultural Forty-acre (RA-40) to Single-family Two-acre Residential (R2A) zone:

El Dorado Hills Area

A portion of Assessor's Parcel No. 111-020-04 (Parcel 1 of P94-11), being described as Section 34, Township 10 North, Range 8 East, M.D.M., consisting of 2.15 acres.

Section 2. This ordinance shall take effect and shall become effective thirty (30) days following the adoption hereof.

PASSED AND ADOPTED by the Board of Supervisors of the County of El Dorado at a regular meeting of said Board, held on the 10TH day of January, 1995, by the following vote of said Board:

Ayes: SUPERVISORS WILLIAM S. BRADLEY, RAYMOND J. NUTTING, J. MARK NIELSEN, WALTER L. SHULTZ, JOHN E. UPTON

NOES; None

ABSENT: None

J.MARK NIELSEN, Chairman
Board of Supervisors

ATTEST
DIXIE L. FOOTE, Clerk of the
Board of Supervisors
By Margaret E. Moody
Deputy Clerk
68.5 Mt Demo 1t 0120

JAN 20, 95
Pro m. Dixie

Folsom residents object to noisy Mather flights

BY ROSS FARROW
Neighbors staff writer

El Dorado Hills residents have complained for two years about noisy cargo planes heading toward Mather Field and waking them up in the early-morning hours.

Now Folsom residents are complaining.

"It's gotten worse the last couple of months," said Barbara Leary, former president of the Natoma Station Neighborhood Association in the southwest corner of Folsom. "I think they used to be going over (U.S.) 50. Now they're going right over our houses."

Leary said she hears airplanes fly over her house every 5 or 10 minutes from 6 a.m. until she leaves for work about 8 a.m.

"One will wake me up," she said. "I'll doze off, and another will wake me up."

Larry Kozub, manager of Sacramento Mather Airport, said he has begun receiving more such complaints.

"I've been receiving some calls from the Folsom area, probably one every two weeks," Kozub said.

Leary said she has received four or five complaints from Natoma Station residents.

Three air-cargo businesses use Mather Field. Zantop flies its DC-8 planes from Portland, Ore., into Mather once a day between 6 and 7 a.m., Kozub said. Zantop usually approaches Mather from the Folsom Lake area and flies over Folsom at altitudes ranging from 3,200 to 3,400 feet, he said. Sometimes planes fly east of Folsom Lake; other times they fly west of the lake.

Two other cargo businesses, Airborne Express and Emery, fly into Mather daily from Ohio. Airborne comes in once a day, while Emery sometimes has two flights.

Flights from the Midwest come over the center of El Dorado Hills, generally over Ridgeview Village, said Tara McCann, who heads a citizens committee concerned with aircraft noise in El Dorado Hills.

The flights from Ohio, which also fly over Folsom at 3,200 or

SEE NOISE, PAGE 12

NOISE

CONTINUED FROM PAGE 3

3,400 feet, should go about a mile south of U.S. 50, Kozub said, "but I don't dispute that they go over Folsom."

June Cowles, a planning technician for the city of Folsom, said she has received four or five calls from residents complaining about the noise. Complaints have come from the Natoma Station, Broadstone and Lexington Hills areas, she said.

David Storer, director of the Folsom Planning, Inspections and Permitting Department, said he asked Cowles to respond to the environmental impact report from the Sacramento Area Council of Governments' land-use plan for the area surrounding Mather, because Cowles worked on B-52 bombers at Mather from 1986 to 1989 as a member of the Air Force reserves.

"We're concerned about noise and safety," Cowles said. "They responded, 'Well, you're out of the area.'"

Kozub said, "Folsom and El Dorado Hills are both way outside the noise-impact area."

The SACOG noise study area extends only a short distance east of Sunrise Boulevard in Rancho Cordova.

"When we're talking Folsom, we're talking 8 miles from the airport," Kozub said.

El Dorado Hills residents are asking the Federal Aviation Administration to realign the flight path so that plan rural areas south of U they descend into Math

"We have no intentio the FAA to relocate patterns," Kozub said.

"It seems to me that County should have interest in the economi of this region from th

SEE NOI

NOISE

CONTINUED FROM PAGE 12

generated by business and property taxes of the area," McCann said in a written statement.

"Why should we let Sacramento County affect our economic viability, peaceful enjoyment of our properties, property values and, ultimately, our quality of life?" McCann asked.

McCann said in an interview that she and other El Dorado Hills residents aren't concerned about a few daily flights going over their community as much as increased noise when Mather expands with several more air-cargo companies.

McCann said the El Dorado Hills committee will make a presentation to the Airport Land Use Commission representing El Dorado County at 7 p.m. Feb. 11 in the county Planning Commission meeting room in Building C, 2850 Fairlane Court, Placerville.

McCann said she hopes the Airport Land Use Commission can influence its Sacramento County counterpart.

NOTICE OF SALE BY SECURED PARTIES
OF INTEREST IN LIMITED PARTNERSHIP

PLEASE TAKE NOTICE that the undersigned will sell the personal property described below at a public sale at the Main (East) entrance to the Sacramento County Court House, 720 Ninth Street, Sacramento, California, on May 16, 1996 at 10:00 a.m.

The personal property described below is collateral under a security agreement dated March 30, 1992 between RUSSELL LAND & CATTLE COMPANY, as Debtor ("Debtor"), and ANGELO K. TSAKOPOULOS, WILLIAM C. CUMMINGS, JD RANCH PARTNERSHIP, AKT DEVELOPMENT CORPORATION, a California corporation, WILLIAM B. BRODOVSKY, ALAN A. BRODOVSKY, LAGUNA CREEK WEST 289 INVESTORS, a California General Partnership, as Secured Party ("Original Secured Party"). The Security Agreement was clarified by a Clarification Agreement dated December 4, 1992 (collectively, the Security Agreement and Clarification Agreement are referred to as the "Security Agreement"). Laguna Creek West 289 Investors has assigned its interest in the Security Agreement and the Notes secured thereby to Angelo K. Tsakopoulos, Jack Mixon and Helen Mixon by assignment dated January 17, 1996. William C. Cummings has assigned a portion of his interest in the Security Agreement and some of the notes secured thereby to Angelo K. Tsakopoulos by assignment dated January 16, 1996 (all as more specifically set out in the Assignment Agreements). The Security Agreement was perfected by filing with the Secretary of State on March 30, 1992, File No. California 92058136 and a clarification thereto filed with the California Secretary of State on January 14, 1993. The Assignments were filed with the Secretary of State of the State of California on January 18, 1996. The current holders of the Security Agreement and obligations secured thereby are Angelo K. Tsakopoulos, William C. Cummings, JD Ranch Partnership, AKT Development Corporation, a California corporation, William B. Brodovsky, Alan A. Brodovsky, Jack Mixon and Helen Mixon, hereinafter called "Secured Party".

Such personal property is being sold because of Debtor's default under the Security Agreement and there is now due and owing under the Notes secured by the Security Agreement and UCC-1 the amounts set forth in Exhibit "A" attached hereto incorporated herein by reference, together with accrued interest after April 1, 1996 and attorneys' fees incurred relative to the enforcement of the Secured Parties' rights.

The personal property interest being sold consists of a 41.67% Limited Partnership interest in Russell Ranch, a California Limited Partnership, existing and operating pursuant to its Amended and Restated Agreement of Limited Partnership as amended (the "Partnership").

The personal property interest being sold will be sold "AS IS, WHERE IS," with no representations or warranties.

The General Partners of the Partnership are AKT Development Corporation and Angelo K. Tsakopoulos, an individual.

The Partnership's purpose as provided in the Amended and Restated Agreement of Limited Partnership as amended is to own, hold, subdivide, improve, develop, operate and manage as a long-term real estate investment the Partnership real property and improvements. The Partnership real property consists generally of an undivided twenty-four percent (24%) fee interest in approximately 999 acres of land located in El Dorado County along the Sacramento County boundary north of Highway 50 and approximately 446 acres of land located in Sacramento County, south of Highway 50 along the El Dorado County boundary, which real property is sometimes referred to as the "Partnership Property." The Partnership also owns an undivided twenty-four percent (24%) interest in an option to acquire approximately 10 acres of real property which can provide access for the Partnership's real property in El Dorado County to Green Valley Road in El Dorado County.

The bid price shall be paid in cash, lawful money of the United States at the close of the auction at which time the successful bidder shall be required to execute the Bid Form and Assignment form described in the Terms and Conditions of Sale by Auction by Secured Parties of a 41.67% Interest in Russell Ranch, a California Limited Partnership (hereinafter called "Terms and Conditions of Sale") which will be sent to interested parties, together with the confidentiality Agreement provided for below. In the event a bidder has prequalified with the Secured Party's representative at least ten (10) days prior to the date of the sale, then the bidder shall be required to deposit 25% of the bid amount in cash or other acceptable funds as defined in the Terms and Conditions of Sale at the close of the auction, (at which time the successful bidder shall also be required to execute the Bid Form and the assignment form described in the Terms and Conditions of sale) with the balance of 75% of the purchase price or bid amount being due and payable within seven (7) days after the date of the bid. The entire sale will be held in accordance with the Terms and Conditions of Sale, which is available to bidders, together with the Confidentiality Agreement as set forth below.

Additional information about the Partnership interest being sold and the Partnership property is available for interested parties by executing a Confidentiality Agreement and purchasing a Bid Package. Confidentiality Agreements and Bid Packages are available from AKT Development Corporation, Attention: Diane Richmond, 7700 College Town Drive, Suite 101, Sacramento, California 95826, telephone (916) 383-2500. Confidentiality Agreements and information on the contents of bid packages will be sent upon request.

Additional information concerning the Partnership, the interest being sold, Secured Parties Debt Instruments, Security Documents and Modifications thereto and the Partnership property may be reviewed at the office of AKT Development Corporation by persons who have executed Confidentiality Agreements by appointment only.

SECURED PARTIES BY THEIR AGENTS:
April 4, 1996 ANGELO K. TSAKOPOULOS
April 11, 1996 WILLIAM C. CUMMINGS

AMOUNTS DUE UNDER NOTES SECURED BY SECURITY AGREEMENT DATED MARCH 30, 1992, EXECUTED BY RUSSELL LAND AND CATTLE COMPANY AS DEBTOR

PAYEE	PRINCIPAL BALANCE	TOTAL ACCRD INTEREST TO 04-01-96	TOTAL ACCRD PRIN & INT TO 04-010-96
ANGELO K. TSAKOPOULOS 50%	$66,472.79	$36,554.03	$103,026.82
WILLIAM C. CUMMINGS 50%			
ANGELO K. TSAKOPOULOS 50%	$14,685.92	$14,961.32	$29,647.24
WILLIAM C. CUMMINGS 50%			
ANGELO K. TSAKOPOULOS 100%	$35,739.01	$36,491.78	$72,230.79
JD RANCH PARTNERSHIP 100%	$3,552.48	$2,572.11	$6,124.51
JD RANCH PARTNERSHIP 100%	$6,444.37	$3,543.82	$9,988.15
RUSSELL RANCH DEBT*	$535,749.50	$503,881.31	$1,039,630.81
RUSSELL RANCH DEBT*	$40,284.13	$22,208.10	$62,492.23
RUSSELL RANCH DEBT*	$36,629.72	$42,528.89	$79,158.61
RUSSELL RANCH DEBT*	$11,502.69	$6,505.58	$18,008.27
JD RANCH PARTNERSHIP 100%	$19,426.89	$9,905.26	$29,332.15
ANGELO K. TSAKOPOULOS 50%	$56,623.01	$28,870.57	$85,493.58
WILLIAM C. CUMMINGS 50%			
	$827,110.51	$708,022.77	$1,535,133.28

PER DIEM INTEREST FROM 4-01-96 $228.61

*RUSSELL RANCH DEBT HELD AS FOLLOWS:
AKT DEVELOPMENT .856%
ANGELO K. TSAKOPOULOS 95.932%
JACK AND HELEN MIXON .640%
WM. BRODOVSKY 1.286%
A. BRODOVSKY 1.286%

41. EL DORADO COUNTY TAXPAYERS FOR QUALITY GROWTH

Response 41-1 The commentor opines that the project is inconsistent with identified project objectives and that these inconsistencies "have been allowed to occur" because the thresholds of significance contained in the County General Plan are "abysmally low or absent." The County's General Plan is, however, a separate project for which a separate EIR was prepared and certified. Therefore, this response will explain, in general terms, how the proposed project is consistent with the project objectives listed by the commentor.

1. Create new balanced communities in County areas suitable for urban levels of development due to the accessibility of adequate infrastructure and general public services: As discussed on page 4.2-3 of the Draft EIR, development of The Promontory project site was expressly anticipated by the County General Plan. The proposed project is located within the boundaries of a "Community Region" and is designated "Planned Community" in the General Plan. "Community Regions" are identified under General Plan Objective 2.1.1 as areas appropriate for urban and suburban development based upon the availability of infrastructure, public services, and major transportation corridors and travel patterns. In addition, the project would be located adjacent to numerous residential development projects which have already been approved, including Ridgeview West, Crown Valley, Rancho Dorado and Russell Ranch.

2. Insure that adequate public services and utilities are provided concurrent to each phase of project development: The detailed discussion, impact analysis and mitigation measures set forth in Chapters 4.10 (Hydrology and Water Quality), 4.12 (Public Services) and 4.13 (Utilities and Service Systems) of the Draft EIR demonstrate that adequate public services and utilities are provided concurrent to each phase of project development. See also Response to Comment 41-1.

3. Provide for the retention and conservation of distinct topographic features and native vegetation: The detailed discussion, impact analysis and mitigation measures set forth in Chapters 4.6 (Aesthetics) and 4.8 (Biological Resources) of the Draft EIR demonstrate that the project will, to the extent feasible, provide for the retention and conservation of distinct topographic features and native vegetation.

4. Provide a visual and physical separation of the project site from existing communities: As indicated on page 4.3-10 of the Draft EIR, the proposed project would provide adequate visual and physical separation

from existing communities through the use of residential density transition areas and open space/landscape areas.

5. Conserve wetlands, riparian areas, natural drainages, and other wildlife habitat of significant biological, scenic, and recreational values: The detailed discussion, impact analysis and mitigation measures set forth in Chapters 4.6 (Aesthetics) and 4.8 (Biological Resources) of the Draft EIR demonstrate that the project will, to the extent feasible, conserve wetlands, riparian areas, natural drainages and other wildlife habitat of significant biological, scenic and recreational values.

Response 41-2 Table 4.3-1 on pages 4.3-9 and 4.3-10 of the Draft EIR provides an analysis of the project's consistency with the specific visual and aesthetic goals, policies and objectives of the County General Plan. As indicated in Table 4.3-1, the project is generally consistent with those goals, policies and objectives notwithstanding the project's significant unavoidable impact to views from the City of Folsom. The General Plan does not require that any such impacts be mitigated to a less-than-significant level. The General Plan EIR itself recognized that, despite the Plan's visual and aesthetic goals, policies and objectives, visual impacts arising from implementation of the General Plan (including development of the proposed project) would remain significant and unavoidable.

Response 41-3 The thresholds of significance for evaluating the project's visual and aesthetic impacts are set forth on pages 4.3-11 and 4.3-12 of the Draft EIR. The proposed project is neither "consistent" nor "inconsistent" with the identified thresholds of significance. Rather, the thresholds of significance provide the criteria upon which to determine whether the project's impacts are significant or less than significant.

As indicated in Response to Comment 41-1, the project site is specifically designated in the General Plan for urban/suburban use. Thus, development of the site must incorporate design elements which, to the extent feasible, provide a visual and physical separation from existing communities. The Promontory Specific Plan does that by providing for reduced residential densities and open space/landscape/recreation areas adjacent to existing communities.

Response 41-4 As indicated in Response to Comment 41-1, the detailed discussion, impact analysis and mitigation measures set forth in Chapters 4.10 (Hydrology and Water Quality), 4.12 (Public Services) and 4.13 (Utilities and Service Systems) of the Draft EIR demonstrate that adequate public services and utilities will be provided concurrent to each phase of project development. For example, the discussion on pages 4.13-14 through 4.13-16 makes clear

that the project applicant will be required to have a permanent and reliable water supply prior to the subsequent approval of final subdivision maps or the issuance of building permits. Likewise, the project applicant will be required to prepare and submit to EID a Facility Plan Report which identifies all water and sewer improvements which will be necessary to serve the project. All identified facility improvements must be paid for by the project applicant. (Draft EIR, pp. 4-13.14 through 4-13.20.)

The commentor indicates that there is "substantial evidence" in the Draft EIR that the current level of public services will decline upon project buildout. However, the commentor fails to identify what that "substantial evidence" is. In fact, the Draft EIR indicates that the proposed project will not diminish existing public services (see, e.g., Table 4.13-2). Through the payment of development impact fees, and property taxes, along with participation in facility improvements and assessment districts, the project applicant will ensure that such services will be maintained.

Finally, the controlling standards of significance for proposed projects for which El Dorado County is the lead agency are those standards set forth in the County General Plan. Accordingly, it would be inappropriate to evaluate the environmental impacts of the proposed project based upon the standards of significance established by, and applicable to, other jurisdictions.

Response 41-5 As indicated by the commentor, General Plan Policy 2.1.4.4 provides examples of design features which the County has determined to be "for public benefit." The "negotiable design features for public benefit" are ultimately determined by the County Board of Supervisors following input from staff, the applicant and interested citizens through the public hearing process.

Response 41-6 The commentor asserts that the proposed project fails to provide an adequate amount of open space in light of the target acreage percentages set forth in General Plan Policy 2.1.4.5. That policy designates a "target" of 20% of lands within a specific plan for public facilities/parks/open space. However, Policy 2.1.4.5 also makes clear that "[t]he actual mixture of uses will be refined and defined through the Specific Plan process."

In this case, the specific land use allocations for the Promontory site are expressly set forth in General Plan Policy 2.1.4.3. Policy 2.1.4.3 states that land use allocations for planned communities, including the Promontory, "shall be consistent with the applicable Land Use Summary Table." The Land Use Summary Table for the Promontory calls for 60.0 acres of open space, 23.1 acres of parklands and 10.0 acres for public schools. As shown below, the proposed project is fully consistent with those requirements:

Land Use	Acreage		% of Project
Public Open Space	99.8 acres	or	9.98%
Parks	22.8 acres	or	2.8%
School	10.0 acres	or	1.0%
Total	**132.60 acres**	**or**	**13.78%**

In response to the commentor's concern regarding "private open space", lands so designated have been excluded from the above "open space" calculations. The open space acreage set forth above is thus public open space and accordingly, fulfills the purposes of open space as set forth in General Plan Policy 7.6.1.1.

Response 41-7 Page 4.8-23 (bottom of page) of the Draft EIR is amended to add the General Plan Consistency Table attached hereto as Table 4.8-4. This new table sets forth the specific basis for determining the consistency of the proposed project with the relevant General Plan policies and objectives.

TABLE 4.8-4
PROJECT CONSISTENCY WITH THE GENERAL PLAN GOALS, OBJECTIVES, AND POLICIES RELATED TO BIOLOGICAL RESOURCES

General Plan Goals, Policies, Objectives	Consistency With General Plan	Analysis
Objective 7.3.3	Yes	The proposed project would conserve natural primary waterways on the project site by designating the waterway areas as open space (see Figure 3-3). The project would also create approximately 25 acres of wetland/riparian woodland/oak woodland buffer for the filling of 7.35 acres of "waters of the U.S." as part of its Individual 404 permit.
Policy 7.3.3.1	Yes	The project applicant has already performed an on-site wetland investigation and has obtained an Individual 404 permit from the U.S. Army Corps of Engineers.
Policy 7.3.3.2	Yes	As previously described, the project applicant has performed an on-site wetland investigation and will be required to mitigate for the future loss of "waters of the U.S." on-site. In addition, the project would designate on-site primary waterways as open space (see Figure 3-3).
Objective 7.3.4	Yes	As previously described, the project would designate on-site primary waterways as open space (see Figure 3-3). No substantial modifications to the on-site waterways are proposed.
Policy 7.3.4.1	Yes	As previously described, the project would designate on-site waterways as open space. No substantial modifications to the on-site waterways are proposed.

General Plan Goals, Policies, Objectives	Consistency With General Plan	Analysis
Policy 7.3.4.2	Yes	As described in Mitigation Measure 4.10.5a, El Dorado County and the City of Folsom will develop a formal agreement regarding drainage and drainage retention/detention between the two jurisdictions. Currently, a memorandum of understanding is being prepared that will implement this mitigation measure.
Objective 7.4.1	Yes	As identified in Section 4.8, Biological Resources, the project site could potentially impact special status species. Implementation of Mitigation Measure 4.8.3 would ensure that special status species surveys would be performed, and consultation with the appropriate agency and mitigation would occur to protect any species discovered.
Policy 7.4.1.5	Yes	As identified in Section 4.8, Biological Resources, the project site could potentially impact special status species. Implementation of Mitigation Measure 4.8.3 would ensure that special status species surveys would be performed, and consultation with the appropriate agency and mitigation would occur to protect any species discovered.
Policy 7.4.1.6	Yes	As previously identified, the project applicant has obtained an Individual 404 permit and is required to implement a Wetland Mitigation Plan. In addition to the Wetland Mitigation Plan, mitigation measures identified in Section 4.8, Biological Resources, would require tree protection and mitigation plans be developed, as well as mitigation for special status species if they discovered on-site during surveys.
Objective 7.4.2	Yes	As previously described, the project applicant has performed an on-site wetland investigation and is mitigating for the future loss of "waters of the U.S." on-site. The project would also designate on-site waterways as open space. In addition, the project would be required to protect and mitigate for impacts to trees on-site, as well as perform special status species surveys and mitigate for any species discovered. Development of the project site would not affect Black-tailed deer winter range or migration corridors.
Policy 7.4.2.2	Yes	As previously described, development of the project site would not affect Black-tailed deer winter range or migration corridors. On-site waterways, wetlands, and created wetlands are within the proposed open space area, consistent with this policy.
Objective 7.4.3	Yes	As previously described, the project site could potentially impact special status species. Implementation of Mitigation Measure 4.8.3 would ensure that special status species surveys would be performed, and consultation with the appropriate agency (state and/or federal) and mitigation would occur to protect any species discovered.
Objective 7.4.4	Yes	The project does include provisions for the protection and preservation of existing trees on-site by designating private open space areas (approximately 184 acres) on sensitive resource areas, the designation of approximately 100 acres of public open space, and protection and revegetation of trees on the project site under project's Individual 404 permit and Mitigation Measure 4.8.1.

General Plan Goals, Policies, Objectives	Consistency With General Plan	Analysis
Policy 7.4.4.2	Yes	As previously described, the project does include provisions for the protection and preservation of existing trees on-site by designating private open space areas on sensitive resource areas, the designation of approximately 100 acres of public open space, and protection and revegetation of trees on the project site under project's Individual 404 permit and Mitigation Measure 4.8.1.
Policy 7.4.4.3	Yes	Although the proposed project design does not specifically cluster development to avoid oak woodland areas, the project does include provisions for the preservation of trees in public and private open space areas that will not be developed, which would likely retain these area's wildlife habitat value. In addition, implementation of Mitigation Measure 4.8.1 would also further protect trees on the project site.
Policy 7.4.4.4	Yes	Implementation of Mitigation Measure 4.8.1 would require the development of a tree revegetation plan which would replace lost tree canopy cover in compliance with this policy.
Policy 7.4.4.5	Yes	As previously described, the project does include general provisions for the protection and preservation of existing tree stands on-site by designating private open space areas (approximately 184 acres) on sensitive resource areas, the designation of approximately 100 acres of public open space, and protection and revegetation of project site tree stands under project's Individual 404 permit and Mitigation Measure 4.8.1. Implementation of these measures would result in the project's general consistency with this policy.
Policy 7.4.5.1	Yes	As previously described, implementation of Mitigation Measure 4.8.1 would require tree surveys and the development of tree protection, revegetation, and monitoring and management plans, consistent with this policy.
Policy 7.4.5.2	Yes	Implementation of mitigation measures 4.3.1b, 4.3.7c, 4.8.4, and 4.13.1c would require the use of native vegetation and restrict the use of non-native plant species.
Objective 7.6.1	Yes	The proposed project would consist of approximately 100 acres of public open space and 184 acres of private open space.
Policy 7.6.1.1	Yes	The project-proposed open space areas would preserve and protect on-site waterways and wetlands, on-site cultural resources, and areas of steep slopes.
Policy 7.6.1.2	Yes	Approval and implementation of the Promontory Specific Plan would result in the land use designation of open space to certain areas of the project site.
Policy 7.6.1.3	Yes	Upon approval of the Promontory Specific Plan, the project site's public open space areas will be rezoned appropriately and administered by the County as set forth the Specific Plan and the County's Zoning Ordinance.

SOURCE: Environmental Science Associates

Response 41-8 The commentor is correct that uncertainties exist regarding El Dorado County's water supply. Since the preparation of the Draft EIR for the Promontory, the El Dorado County Superior Court ruled inadequate the

environmental analysis contained in the El Dorado Project EIRs. As a result, EID's entitlement to the 17,000 afa of water from the American River at Folsom is uncertain. In addition, the petitions for reconsideration regarding that entitlement (see discussion on page 4.13-3 of the Draft EIR) are still pending before the State Water Resources Control Board (SWRCB), and EID's planned purchase of PG&E Project 184 has not yet been finalized.

However, the commentor is incorrect in concluding that, because of the foregoing uncertainties, the impacts and proposed mitigation measures described in the Draft EIR are "irrelevant." While it is possible that the El Dorado Project EIRs might ultimately be revised, and while it is also possible that the SWRCB could alter its original approval of the 17,000 afa, this water nevertheless remains the most likely source of water to serve the proposed project. The environmental effects of supplying a portion of the 17,000 afa of water to the Promontory have either already been adequately evaluated (if El Dorado County Water Agency [CWA] successfully appeals the superior court's decision) or will be adequately evaluated (if CWA revises its EIRs pursuant to the superior court's ruling) prior to the use of the water.

It is important to note that the environmental impacts associated with EID withdrawing 17,000 afa from Folsom Reservoir are caused by the exercise of the entitlement itself. The Promontory, while obviously creating a demand for additional water consumption, will use only a small portion of EID's entitlement. The Promontory is therefore not the direct cause of such impacts. Nor is the County responsible for providing in this EIR a full environmental analysis of the El Dorado Project, which, as indicated above, has been the subject of independent environmental review. Nevertheless, a summary of the impact analysis contained in the El Dorado Project EIRs is provided below.

The El Dorado Project Draft EIR provided a detailed assessment of the quality of water in Alder Creek, Weber Creek, the South Fork American River, tributaries of the Cosumnes River, portions of Camp Creek, and the lower American River and the Delta (El Dorado Project Draft EIR, pp. 4-1 to 4-39). Because water would be diverted only from Folsom Reservoir, there would be no water quality impact to waterways upstream from Folsom (Id., p. 4-47 to 4-54). Water quality effects on the lower American are expected to be minor, while the Delta could experience a slight increase in seawater intrusion from the San Francisco Bay (Id., p. 4-53). The El Dorado Project Draft EIR labeled the impacts to water quality as less than significant (Id. at 4-54). The El Dorado Project Draft Supplement concurred with this conclusion (El Dorado Project Draft Supplement, pp. III.A-7 to III.A-8).

Removal of 17,000 afa from Folsom would reduce discharge of water into the lower American River by 0.62 percent, into the Sacramento River by 0.10

percent, and into the Delta by 0.11 percent (El Dorado Project Draft Supplement, pp. III.A-7, IV.C-5; see also El Dorado Project Draft EIR, pp. 6-28 to 6-29). This reduction is too small to significantly impact fish productivity in these waterways (El Dorado Project Draft Supplement, pp. IV.C-5 to IV.C-6; El Dorado Project Draft EIR, p. 6-29). Moreover, existing minimum in-stream flow requirements would be maintained to protect chinook salmon, steelhead trout, and American shad (Id. at IV.C-6). Operations at Folsom Reservoir in response to diversion of 17,000 afa have the potential to reduce spawning success and fish productivity within the reservoir (Id. at IV.C-4). The decrease in reservoir surface area is expected to be minor; however, it is not expected to negatively impact fish productivity within the reservoir (Id. at IV.C-5). The impact is less than significant (Id).

The El Dorado Project EIRs (including Supplements) also provide a detailed analysis of the impacts to vegetation and wildlife from withdrawing 17,000 afa and distributing the water along a conveyance route yet to be constructed (El Dorado Project Draft Supplement, pp. III.D-8 to III.D-20). The diversion of 17,000 afa at Folsom Reservoir is not expected to have an impact on the vegetation and habitat in the lower American River below the reservoir (Id. at III.D-2 to III.D-3, III.D-8). Various impacts to habitat and vegetation associated with the conveyance system for distributing the water are described in the El Dorado Project Supplement at pages III.D-8 through III.D-20.

The impacts of withdrawing 17,000 afa at Folsom Reservoir on land use, geology and soils, cultural resources, recreation and aesthetics, transportation, air quality, noise, public health and safety, and growth inducement are described in the El Dorado Project Draft Supplement.

The El Dorado Project Draft Supplement also discusses the potential cumulative impacts from the El Dorado Project in conjunction with other water supply and water quality management projects. The other projects evaluated for cumulative impacts include: (1) development of the "Fazio Water" pursuant to Public Law 101-514; (2) management programs pursuant to the American River Watershed Investigation; (3) interim reoperation of Folsom Dam and Reservoir; (4) other water supply projects being explored by EID and the Water Agency (Texas Hill Project, Small Alder Project, and White Rock Project); and (5) mandatory in-stream flow requirements for the lower American River pursuant to SWRCB Decision 893 (El Dorado Project Draft Supplement, pp. IV-2 to IV-5). The El Dorado Project, in conjunction with the foregoing other projects, would contribute to an overall decline in water levels in Folsom Reservoir. The El Dorado Project would also contribute to a decline in water quality and make it more difficult to meet in-stream flow and temperature requirements in the lower American River. Overall, however, these impacts are considered less than significant (Id.,

pp. IV-5 to IV-7). Cumulative impacts to vegetation and wildlife at Folsom Reservoir and in the lower American River, as well as cumulative impacts to recreation resources, would not be significant (Id).[1]

Once the CEQA litigation and SWRCB reconsideration proceedings associated with the El Dorado Project have been resolved, the 17,000 afa from Folsom Reservoir will be available for use within EID's service area. Subsequent appeals of the court's and/or SWRCB's decisions may occur, and if they do, they may affect the amount and time of availability of this new water source. In the meantime, the CWA, on behalf of EID and the Georgetown Divide Public Utility District, is pursuing a water supply service contract with USBR pursuant to Public Law 101-514. The so-called "Fazio Water" contract is expected to provide EID with an entitlement to half the contract amount, or about 7,500 afa.

When EID uses its share of the Fazio Water, EID will have the option of diverting the water either at Folsom Reservoir or upstream along the South Fork of the American River. EID does not currently contemplate an off-stream storage facility. EID's existing pumping facilities have available capacity to convey at least some of the Fazio Water from Folsom Reservoir for use in EID's service area. New infrastructure for conveying the Fazio water may also be developed through the new Assessment District 12 (AD-12), which is described more fully in Response to Comment 41-17, below.

As indicated in the Draft EIR, EID will allocate its new water sources on a first-come, first-served bases. The resolution of the CEQA litigation, SWRCB reconsideration proceedings and/or Fazio Water contract, thus, does not guarantee that water will be available to serve the Promontory buildout.

Because of EID's "first come-first serve" policies, the actual source of water supply for the project, or portions of it, cannot be determined with absolute certainty until actual development occurs. Nevertheless, the Draft EIR identifies, to the extent possible given current information, the most likely, if not certain, source of water supply for the project. Furthermore, because of

1 The SWRCB disagreed with the conclusion in the Draft Supplement that the El Dorado Project would not make a significant cumulative contribution to water quality and fisheries impacts in the lower American River. (See El Dorado Project Final Supplement, comment letter C.) In Decision 1635, the SWRCB discusses the potential for the El Dorado Project to make significant cumulative contributions to water quality and fisheries impacts below Folsom Reservoir. The SWRCB was entitled to reach a different conclusion. Statements in the EIR are not determinative of whether a project's impact is significant. (Pub Resources Code, §21082.2, subd. [e].) Ultimately, the SWRCB determined that protections for water quality and flow imposed in the 1995 Bay/Delta Water Quality Control Plan and Water Right Order 956 adequately protect fisheries resources and water quality below Folsom Reservoir.

the lack of absolute certainty regarding water sources for future development, the County has enacted policies in the General Plan which, as discussed in the Draft EIR, ensure that development within the Promontory can only proceed once secure water supplies become available.

The General Plan expressly allows approval of specific plans such as the Promontory without a guaranteed supply of water. General Plan Policies 5.1.2.1, 5.2.1.8, 5.2.1.4 and the County Water Ordinance all require, however, that a guaranteed supply be available prior to final planning approvals for project buildout. The project applicant will thus have to demonstrate a guaranteed supply of water at the final map and building permit stages.

Response 41-9 The Superior Court's decision regarding the El Dorado Project EIRs does not effectuate a withdrawal of EID's water rights application. The decision may be appealed and/or the EIRs revised, but the application itself will remain in place. No court has invalidated the County General Plan or General Plan EIR. Accordingly, the decision regarding the El Dorado Project EIRs does not affect the validity of the General Plan. Please see Response to Comment 41-8 regarding the impact of the court decision on the Promontory Specific Plan. The impact of the decision on other pending Specific Plan proposals would depend on the details of those proposals.

Response 41-10 As indicated in Response to Comment 41-9, the validity of the County General Plan is not affected by the El Dorado Project litigation. Moreover, the General Plan was not "based on the assumption of the availability of the additional 17,000" acre feet, as the commentor asserts. Rather, the General Plan assumes that "additional water supplies will be developed to support the projected growth." General Plan Policies 5.1.2.1, 5.2.1.8, 5.2.1.4 and the County Water Ordinance are consistent with that assumption in that they require the availability of a guaranteed water supply prior to final planning approvals for project buildout.

Response 41-11 The "Diablo Grande" decision referred to by the commentor held that a Specific Plan EIR adopted by the County of Stanislaus was deficient because it failed to analyze the potential environmental impacts associated with providing a long-term water source for the project. In El Dorado County, by contrast, considerable environmental analysis has been conducted, over a period of many years, in connection with the County's efforts to procure a long term water supply. Given the uncertain status of the El Dorado Project EIRs, it is possible that even more environmental analysis may be conducted. Furthermore, El Dorado County, unlike Stanislaus County, has specific provisions in its General Plan, including a Concurrency Policy, which requires an identified, guaranteed water source prior to final map approval or the

issuance of building permits (i.e., General Plan Policies 5.1.2.1, 5.2.1.8, 5.2.1.4.)

The Contra Costa County Superior Court decision cited by the commentor does not establish binding precedent that must be applied to other cases. Likewise, it has no legal effect on the status of the El Dorado County General Plan or the Promontory EIR.

Response 41-12 Government Code section 56377 requires LAFCO to "consider" certain policies and priorities in reviewing annexation proposals. Specifically, section 56377 states that development should be "guided away from existing prime agricultural lands . . ." and that development of existing open space lands within the agency's boundaries should be "encouraged." Accordingly, section 56377 provides guidance rather than mandates. LAFCO is therefore free to exercise its discretion based on the particular facts of each annexation proposal.

No development of prime agricultural lands is proposed in connection with the Promontory. In addition, development of the project site was expressly anticipated by the County General Plan. The proposed Specific Plan is located within the boundaries of a "Community Region" and is designated "Planned Community" in the General Plan. The project is, moreover, an 'infill' development, in that it is located adjacent to numerous residential development projects which have already been approved, including Ridgeview West, Crown Valley, Rancho Dorado and Russell Ranch.

Response 41-13 The County General Plan identifies "urban limit lines" for "Community Regions" and "Rural Centers." See General Plan Land Use Map and Objectives 2.1.1 and 2.1.2. With respect to Government Code section 56377, please refer to Response to Comment 41-12.

Response 41-14 The EID and General Plan policies cited by the commentor are complementary rather than conflicting. General Plan Policy 5.2.1.4 ensures that project *development* cannot proceed absent the identification of a guaranteed water supply. EID Policy Statement No. 23 simply places project applicants on notice that annexation into EID's service area does not constitute a guaranteed water supply.

Response 41-15 The information requested by the commentor is not relevant to the environmental analysis at hand. In other words, such information, if provided, would not further or improve the quality of environmental analysis provided in the Draft EIR. EIRs should be "analytic rather than encyclopedic" (CEQA Guidelines section 15006(o)). The information requested would not change the significance of project-related impacts. For more detailed information, the

commentor should contact EID and/or refer to the County's Public Water Planning Ordinance.

Response 41-16 The planned infrastructure facilities for the project area are described in the Draft EIR on pages 4.13-5 through 4.13-6, 4.13-14 through 4.13-20 and Figures 4.13-2 and 4.13-3. Please also see Response to Comment 41-17.

Response 41-17 As the commentor identifies in Comment 41-18, AD-5 has been replaced by AD-12. On October 7, 1996, the EID Board of Directors approved the El Dorado Hills Master Facilities Plan. This Plan describes the facilities required to complete the original plans of AD-3 and those required to meet current demand in the El Dorado Hills area. Included in the Plan are specific proposed facilities and phasing for both water and sewer facilities. The EID Board directed its staff to begin formation of a new district, now referred to as AD-12, to carry out the recommendations in the El Dorado Hills Master Facilities Plan.

The new AD-12 will be implemented in essentially the same way as AD-3. Annual assessments will be imposed on properties based on the planned number of EDUs required for the development of the property. The assessments will provide the income stream for issuance of bonds for "backbone" facilities to serve the area. Additionally, increased hookup fees will be collected at the time of final map approval to provide ongoing funding for future phases of facility development. The El Dorado Hills Master Facilities Plan is available for review at the El Dorado County Planning Department, 2850 Fairlane Court, Placerville, CA 95667.

Response 41-18 The commentor appears to suggest that the proposed project should not be approved until AD-12 or a comparable assessment district has been formed. However, as indicated on page 4.13-1 of the Draft EIR, the project applicant will be required to purchase additional EDUs to serve the project site, and no additional EDUs are available within AD-3. Project development, thus, cannot proceed unless and until additional EDUs become available through the formation of AD-12 or some comparable assessment district. Furthermore, Mitigation Measure 4.13-1a and Impacts 4.13.2 and 4.13.3 of the Draft EIR make clear that project development cannot proceed unless and until the project applicant prepares and submits to EID a Facility Plan Report for the project. The report must identify the necessary water and sewer facilities improvements that will be required to serve the proposed development, and all identified facility improvements will be paid for by the applicant (please see pp. 4.13-15 through 4.13-19 of the Draft EIR). Therefore, the proposed measure would not reduce significant environmental impacts of the project and, accordingly, is not required.

The commentor also suggests the addition of a mitigation measure which would require new development to pay for the costs associated with pumping any new water ultimately acquired by EID. New development would already be required to pay its fair share of such costs through the purchase of EDUs necessary to meet the development's water supply needs (see p. 4.13-1 of the Draft EIR) and through the implementation of a Facility Plan as described above. Therefore, the proposed measure would not reduce significant environmental impacts of the project, and accordingly, is not required.

Finally, the commentor proposes a mitigation measure which would preclude annexation of the project site into EID's service boundaries until: (1) EID secures new water rights and resolves any associated legal challenges; and (2) funds from AD-12 become available. As explained in Response to Comment 41-8, the environmental impacts associated with EID's efforts to secure new water have been analyzed (and may be further analyzed) in CEQA documents prepared for such water projects. As explained in paragraph 1 of this Response to Comment 41-18, project development (i.e., actual project impacts) cannot occur unless additional EDUs are acquired and a Facility Plan Report has been approved by EID. Therefore, the proposed measure would not reduce significant environmental impacts of the proposed project, and accordingly, is not required.

Response 41-19 The Bureau's claim relates only to a portion of the 17,000 acre feet, not to all of it. Specifically, the Bureau's claim is based on a license assigned to it in 1958 by the Pacific Gas & Electric Company (PG&E). That license entitled the Bureau to water from Project 184, i.e., water released from storage at Aloha, Caples, Echo and Silver lakes for hydropower generation at the Folsom and Nimbus power plants. The 17,000 acre feet includes substantial amounts of South Fork American River water not stored in the Project 184 reservoirs.

Pursuant to the California Water Code and the express terms of the Bureau's license, water rights applications for domestic or municipal uses are considered first in right, irrespective of whether they are first in time. Since El Dorado County's water right is for domestic and municipal purposes, it takes priority over the Bureau's hydroelectric right under the PG&E license.

Furthermore, EID, the El Dorado County Water Agency and the Bureau have been negotiating a settlement agreement which acknowledges the parties' priorities to the disputed water. The agreement has been executed by EID and the Water Agency and has been sent to the Bureau for its final approval.

Response 41-20 This comment relates to the CEQA process associated with the expansion of the El Dorado Hills Wastewater Treatment Plant (EDHWTP). As such, it is not relevant to the separate CEQA process associated with this project. The

Promontory Draft EIR need not analyze environmental impacts arising from projects other than the proposed Specific Plan.

Response 41-21 EDHWTP discharges to Carson Creek would be required to comply with NPDES permit limits.

Response 41-22 The information requested by the commentor is not relevant to the environmental analysis at hand. In other words, such information, if provided, would not further or improve the quality of environmental analysis provided in the Draft EIR. EIRs should be "analytic rather than encyclopedic" (CEQA Guidelines section 15006(o)). The information requested would not change the significance of project-related impacts. For more detailed information, the commentor should contact EID.

Response 41-23 This comment relates to environmental impacts of the EDHWTP and does not pertain to the environmental impacts of the proposed project. EDHWTP's discharge standards are governed by the facility's NPDES permit.

Response 41-24 This comment relates to environmental impacts of the EDHWTP and does not pertain to the environmental impacts of the proposed project.

Response 41-25 The County Water Agency's Water and Supply Demand Summary, adopted on June 4, 1996, includes in potential supplies for EID approximately 5,680 afa of reclaimed water through the year 2015. EID has been at the forefront of using reclaimed water for landscape and industrial uses, in compliance with State water quality and health regulations. Reclaimed water represents a "supply" of water in that every landscape or industrial use relying on reclaimed water is a use that no longer requires treated potable water.

Response 41-26 This comment relates to EID's water rates, not the environmental impacts of the project. As such, the requested information pertains to economic impacts that are beyond the purview of an EIR under CEQA.

Response 41-27 This comment relates to the environmental impacts of the EDHWTP and does not relate to the environmental impacts of the proposed project.

Response 41-28 This comment relates to environmental impacts of the EDHWTP and does not pertain to the environmental impacts of the proposed project.

Response 41-29 As discussed on page 4.13-20 of the Draft EIR, EID anticipates that the EDHWTP, with planned expansions referred to by the commentor, would be able to handle the additional effluent generated by the project at buildout and maintain existing levels of service to the remainder of the EDHWTP service area.

Response 41-30 As discussed on page 4.13-20 of the Draft EIR, the proposed project will generate an estimated 0.42 million galls per day (mgd) of effluent. The developer will contribute to the costs of the EDHWTP expansion through the payment of fees, AD3, AD12, and EID's certificate of participation bonds.

The requested information about costs and funding sources pertains to economic impacts that are beyond the purview of an EIR under CEQA. CEQA Guidelines section 15131 provides: "economic or social effects of a project shall not be treated as significant effects on the environment."

Response 41-31 This comment relates to environmental impacts of the EDHWTP and does not pertain to the environmental impacts of the proposed project. EDHWTP's discharge standards are governed by the facility's NPDES permit and odor impacts on future residential areas adjacent to the EDHWTP are evaluated in the environmental documentation prepared and being prepared for the Carson Creek Specific Plan and the Valley View Specific Plan.

Response 41-32 Project site development (including the installation of on-site infrastructure facilities) anticipated as part of the implementation of the Promontory Specific Plan has been evaluated in the Draft EIR. As described in the Draft EIR (Section 4.3, Aesthetics), visual impacts of infrastructure facilities (e.g., lift stations and the water storage tank) were evaluated and mitigation measures were identified. In addition, adverse effects to project site oak trees would be reduced by implementing Mitigation Measure 4.8.1 identified in the Draft EIR.

It should also be noted that the project applicant and property owners adjacent to the project site participated in a Sewer Upgrade Agreement which oversized sewer conveyance facilities adjacent to the project site in order to adequately handle project generated wastewater flows.

Response 41-33 CEQA Guidelines section 15125 sets forth the parameters for describing the "environmental setting" of a proposed project. It requires that a Draft EIR contain "a description of the environment in the vicinity of the project, as it exists before commencement of the project, from both a local and regional perspective. The description shall be no longer than is necessary to an understanding of the significant effects of the proposed project and its alternatives."

The Promontory Draft EIR accordingly provides a "description" of the local and regional setting with regard to hydrology and water quality (see Draft EIR, pp. 4.10-1 through 4.10-7 and Figures 4.10-1 and 4.10-2.). As indicated by this description, the project site currently consists of vacant land. It

contains no perennial streams; and drainage is intermittent and short-term in nature. Therefore, detailed, technical data concerning present water quality is not "necessary to an understanding" of the project's impacts and thus is not required by CEQA Guidelines section 15125.

Response 41-34 See Response to Comment 41-33.

Response 41-35 See Response to Comment 9-1 and 47-12 and Appendix B of this FEIR.

Response 41-36 The commentor's statements regarding the El Dorado County Resource Conservation District's Erosion and Sediment Control Plan are correct. The document referenced in Section 4.9, Geology and Soils, and Section 4.10, Hydrology and Water Quality, of the Draft EIR should be the Erosion Sediment Control Guidelines (Sosa, 1997). The following text changes are made to the Draft EIR:

- Page 4.9-7, the last paragraph is revised to read:

  "The El Dorado County Resource Conservation District (RCD), a local division of the California Association of Resource Conservation Districts, published an Erosion Sediment Control Guidelines (Sosa, 1997)~~Erosion and Sediment Control Plan~~. The Erosion Sediment Control Guidelines~~Erosion and Sediment Control Plan~~ prescribes measures for controlling erosion and sediment during all stages of construction. The Guidelines~~Plan~~ assist developers in implementing appropriate practices specific to the project site and time of year.~~ In addition, the Plan includes suggestions for estimating and subsequently mitigating the peak storm runoff flow and the total storm runoff volume that would result from development of a site.~~"

- Page 2-30 (Table 2-1, Mitigation Measure 4.9.1c) and page 4.9-10 (Mitigation Measure 4.9.1c), Mitigation Measure 4.9.1c is revised to read:

  "4.9.1c Prior to approval of the improvement plans for site development, the project applicant will submit an erosion control plan to the County. Erosion control measures will include techniques such as physical and vegetative stabilization measures and runoff diversion measures. Additionally the plan will specify measures for reuse or disposal of excavated material. If excavated material is suitable for use at the project site, the plan should minimize elapsed time between excavation and reuse and provide adequate stockpile coverage and protection from wind and water erosion during the entire storage period. If excavated material is unsuitable for reuse at

the project site, the plan will include specific information regarding the eventual reuse or disposal site, transportation methods, disposal reuse management, and schedule. The plan will be consistent with the El Dorado County Grading, Erosion, and Sediment Control Ordinance and the El Dorado County Resource Conservation District's Erosion Sediment Control Guidelines~~Erosion and Sediment Control Plan~~."

- Page 2-31 (Table 2-1, Mitigation Measure 4.10.1) and page 4.10-9 (Mitigation Measure 4.10.1), Mitigation Measure 4.10.1 is revised to read:

  "4.10.1 Prior to approval of improvement plans for site development, the project applicant shall submit erosion control plans and hazardous materials control program to the County consistent with El Dorado County's Grading, Erosion, and Sediment Control Ordinance and El Dorado Resource Conservation District's Erosion Sediment Control Guidelines~~Erosion and Sediment Control Plan~~. The plan should include Best Management Practices to minimize and control pollutants in storm water runoff. Suggested water quality control practices should include the following:"

As part of the certification of the Final EIR, the County will adopt a mitigation monitoring plan pursuant to Public Resources Code Section 21081.6(a). As part of the approval of the proposed project, the project applicant and the County will be required to implement all conditions of approval and mitigation measures adopted.

Response 41-37 As described on page 4.8-26 of the Draft EIR, the proposed project would reduce the loss of oak woodland areas by the establishment of private and public open space areas which would not be developed. Mitigation Measures 4.8.1, 4.8.3, 4.8.4, and 4.8.7 address the loss of wetland and oak tree habitat that occurs on the property. A copy of The Promontory Wetland Mitigation Plan, prepared by Zentner and Zentner, April 1991, is included in Appendix C of this FEIR.

In addition, existing and created wetlands and waterways would be preserved by the proposed project from the designation of these areas as open space as shown in Figure 3-3 on page 3-8 of the Draft EIR. Thus, the proposed project would avoid disturbing wetlands and oak trees to the maximum extent feasible, consistent with the County's grading ordinance.

As described on page 4.8-10 of the Draft EIR, the 11.8 acres of waters of the U.S. on the project site consist of 7.1 acres of stream channel (unvegetated

riparian waterway and/or intermittent stream) and 4.7 acres of seasonal wetland (freshwater marsh). The 4.85 acres of "unvegetated intermittent stream" and 7.1 acres of "riparian vegetation along season stream channels" identified by the commentor are the same habitat type. The 4.85 acres of unvegetated intermittent stream consist of permitted acreage to fill.

The Individual Section 404 Permit was issued in April 1994. The Army Corps of Engineers Individual Permit is valid for five (5) years; thus, the permit will expire in April 1999. Notwithstanding, implementation of the wetland mitigation plan will commence in Spring 1998. The January 1997 Army Corps of Engineers revisions pertained only to Nationwide 404 Permits, and not Individual 404 Permits.

Response 41-38 See Response to Comment 9-1 and Appendix B to this Final EIR. General Plan Policies 7.3.3.1 and 7.3.3.2 are in the Conservation and Open Space section of the General Plan and were identified on page 4.8-20 of the Draft EIR. Figure 4.10-1 identifies intermittent creeks on the project site, while Figure 4.10-2 shows how drainage is conveyed off-site.

Response 41-39 Refer to mapping in Appendix B of this FEIR. As shown in Figure 3-3 on page 3-8 of the Draft EIR, the major waterways on the project site will be designated as open space under the proposed project. No residential or commercial development is proposed within these areas.

Response 41-40 All wetland mitigation will occur on site. No off-site mitigation is proposed. See Response to Comment 41-37 and Appendix C of this FEIR.

Response 41-41 See Response to Comment 41-39 and 41-40 and Appendix C of this FEIR for the project's 404 Permit and Wetland Mitigation Plan.

Response 41-42 See Response to Comment 41-37.

Response 41-43 The Army Corps of Engineers conditions are included in the Specific Plan Conditions of Approval. See Appendix C of this FEIR for further details regarding the project's 404 Permit. The project applicant will create a lighting and landscaping district, homeowners association or some other maintenance funding mechanism to provide funding for common area landscaping, project entries, detention facilities and wetland mitigation areas.

Response 41-44 See Response to Comment 41-40 through 41-43. The commentor is also referred to Appendix C of this FEIR.

Response 41-45 Impact 4.10.4 identifies the significant impact as substantial damage to property because human beings would most likely have an adequate

opportunity to flee the area in the event of dam failure. Furthermore, Mitigation Measure 4.10.4 requires an evacuation plan be prepared subject to the approval of the El Dorado County Office of Emergency Services and the U.S. Bureau of Reclamation. Mitigation Measure 4.10.4 reduces the impact to less than significant; therefore, no further mitigation is necessary. As identified in the Russell Ranch Specific Plan EIR, the U.S. Bureau of Reclamation has recently performed repairs on Mormon Island Dam which were expected to minimize the potential for dam failure (City of Folsom, 1991).

Response 41-46 The drainage study prepared for The Promontory contained in Appendix B of this FEIR was prepared in conformance with the El Dorado County Drainage Manual. In complying with the Drainage Manual, certain assumptions were used for ground recharge rates. Particularly, in the flatter portions of the property along the County line, it is assumed that a greater recharge potential will occur because (1) the flatter topography lends runoff an opportunity to recharge into the soil and (2) the existing drainage and preserved wetland characteristics support greater recharge. In addition, as described in Section 4.9 of the Draft EIR, the geology of the project site consists of volcanic bedrock (Copper Hill volcanics). Volcanic (igneous) rocks generally consist of tightly interlocking crystals, which results in low porosity and permeability. Based on these geologic conditions, on-site groundwater sources are anticipated to be minimal and are more likely to occur in a small area of alluvium under the proposed Village Center. As identified in Figure 3-4 on page 3-10 of the Draft EIR, a substantial portion of the Village Center would be designated open space under the proposed Specific Plan, which would consist of wetland areas and existing natural drainages that would allow for groundwater recharge.

Response 41-47 See Response to Comment 9-1 and Appendix B to this Final EIR.

Response 41-48 See Response to Comment 9-1 and Appendix B to this Final EIR.

Response 41-49 See Response to Comment 9-1 and Appendix B to this Final EIR.

Response 41-50 See Response to Comment 9-1 and Appendix B to this Final EIR.

Response 41-51 See Response to Comment 41-37 through 41-42, 41-44, 41-46, and 41-47. As identified in Figure 3-3 on page 3-8 of the Draft EIR, the Promontory Specific Plan would designate existing major waterways on the project site as open space.

Response 41-52 See Response to Comment 9-1 and Appendix B to this Final EIR.

Response 41-53 See Response to Comment 9-1 and Appendix B to this Final EIR. Court interpretations of the California Environmental Quality Act (CEQA) have made it clear that mitigation measures that rely on future actions are adequate if a performance standard is provided (Remy *et. al*, 1996). Mitigation measures 4.10.5a and 4.10.5b identify performance standards for minimizing impacts of increased runoff volumes, which are further discussed in Appendix B of this FEIR.

Response 41-54 See Response to Comment 9-1 and Appendix B to this Final EIR.

Response 41-55 See Response to Comment 9-1 and Appendix B to this Final EIR. As required in Mitigation Measure 4.10.5b, drainage plans for the project site will be required to identify a maintenance program for all drainage facilities. Implementation of Mitigation Measure 4.10.1 (operation measures) would require that drainage facilities (including detention basins) be designed to improve water quality, and would provide on-site habitat for wildlife. Since on-site waterways are intermittent, operational and visual characteristics of the project drainage and detention facilities will likely vary based on frequency storm events and precipitation in the project area.

Response 41-56 See Response to Comment 9-1 and 47-15 and Appendix B to this Final EIR.

Response 41-57 Contrary to the commentor's assertion, the Draft EIR does address the cumulative impacts associated with the conversion of the project site from grazing land to urban development (see Draft EIR, pp. 4.2-22 and 23). The overall loss of grazing land is, moreover, a Countywide issue that was evaluated in the General Plan EIR. As explained in response to Comment 11-4, above, the project site was specifically designated in the General Plan for urban development.

Response 41-58 The Draft EIR clearly sets forth the basis for concluding that the conversion of the project site from grazing land to urban development will be a less than significant cumulative impact. It states:

> "Implementation of the specific plan would result in the loss of existing grazing activities. However, the project site is located within the boundaries of a Community Region and is designated Planned Community by the General Plan. As identified in General Plan Policy 2.1.4.3 (The Promontory Planned Community Land Use Summary Table), the project site is anticipated for urban development under the General Plan. In addition, the project site is designated as "Other Land" by the California Department of Conservation's Farmland Mapping and Monitoring Program and is not considered to be productive (or prime) farmland. The 1980 Draft Environmental Impact Report on the cancellation of the

Williamson Act contract for the project site concluded that, due to the site's steep topography and soil conditions, the only agricultural use the property would be suited for is grazing (El Dorado County, 1980). The 1980 EIR also found that cattle operations in this area would not be profitable because of the steep terrain and interference from residents and pets in adjacent residential areas. Since the project site is not suited to agricultural uses, the loss of grazing land that would result from the project would not be considered significant." (Draft EIR, pp. 4.2-22 and 23.)

Response 41-59 Section 4.9.1, which describes the setting for the geology and soils element of the EIR, provides a table in which the Auburn series of soils ranges from 2% to 50%, describing the permeability, runoff and erosion hazard. Mitigation Measures 4.9.1a through 4.9.1d will mitigate any impact to soil erosion or ground instability to less than significant.

Response 41-60 As described on page 4.9-9 of the Draft EIR, impacts related to the installation of utilities (such as blasting) on ground stability and soil erosion were evaluated and the implementation of mitigation measures 4.9.1a, 4.9.1b, 4.9.1c, 4.9.1d, and 4.9.1e would reduce potential impacts to ground stability. If perched groundwater were discovered during project construction activities, the project would need to comply with the Central Valley Regional Water Quality Control Board standards and the provisions of *General Permit for Dewatering and Other Low Threat Discharges to Surface Waters* (Dewatering General National Pollutant Discharge Elimination System Permit).

Response 41-61 Court interpretations of the California Environmental Quality Act (CEQA) have made it clear that mitigation measures that rely on future actions are adequate if a performance standard is provided (Remy *et. al*, 1996). Mitigation measures 4.9.1a, 4.9.1b, 4.9.1c, 4.9.1d, and 4.9.1e identify performance standards for minimizing impacts to ground stability and soil erosion. The commentor is also referred to Response to Comment 41-36 regarding the El Dorado County Resource Conservation District's Erosion and Sediment Control Plan.

Response 41-62 The County's past implementation and/or enforcement of mitigation measures for other projects is not relevant to the environmental analysis and significance determinations for the proposed project. Moreover, a mitigation monitoring plan will be prepared for the project pursuant to Public Resources Code section 21081.6 to ensure that mitigation measures adopted by the County are implemented.

Response 41-63 Contrary to the commentor's assertion, the Draft EIR may properly rely on mitigation measures that defer some amount of environmental problem-

solving until after project approval so long as such measures set forth performance standards or criteria that, if met, will ensure the avoidance of any significant effects. (Sacramento Old City Association v. City Council of Sacramento (1991) 229 Cal.App.3d 1011, 1028.) Mitigation Measures 4.9.2a and 4.9.2b do just that: Measure 4.9.2a requires the preparation of a seismicity report prior to the approval of improvement plans for site development, and Measure 4.9.2b sets forth the seismic design standards with which all structures proposed for the project site will be required to comply.

Response 41-64 The information provided in this comment is set forth on pages 4.9-7 and 4.9-8 of this Draft EIR.

Response 41-65 All solid waste is now being processed, recycled, transformed and/or disposed of through the materials recovery facility (MRF) and solid waste transfer station operated by Western El Dorado Recovery Systems (WEDRS). Waste taken to the transfer station is transported by an independent hauler to a landfill in Lockwood, Nevada. Currently, WEDRS is utilizing only 50 percent of its authorized disposal capacity under its solid waste facility permit. Therefore, adequate capacity remains under the WEDRS's permit to dispose of waste generated by the proposed project. If, in the future, WEDRS wishes to increase its solid waste disposal capacity, it could do so by applying to the California Integrated Waste Management Board for an amendment to the existing permit. (Dutra, 1997)

The following changes are accordingly made to the text of the Draft EIR:

- Page 4.13-6, the first sentence is revised to read:

  "El Dorado Disposal provides curbside pick-up and transport of solid waste to the Diamond Springs Materials Recycling Facility and a Nevada landfill ~~until roads to the Union Mine Disposal site that were damaged by winter storms are repaired (El Dorado County, 1996)~~."

- Page 4.13-6, the discussion under "Disposal Facilities" is revised to read:

  "Union Mine Disposal Site is a Class II landfill located at 5700 Union Mine Road in El Dorado owned by El Dorado County and operated under contract by El Dorado Landfill, Inc. (El Dorado County, 1996b). Landfills are assigned Class designations by the Regional Water Quality Control Board based on the types of wastes they are designed to accommodate and allowed to accept. Class II landfills are allowed to accept all designated wastes specified in the Waste Discharge Requirements (WDRs) for the landfills, as well as non-hazardous wastes. However, a Cease and Desist Order has been issued by the Central Valley Regional Water Quality

Control Board for the Union Mine Disposal Site. The Union Mine Disposal Site is currently closed and is only accepting inert materials.

Solid waste is currently being processed, recycled, and transformed and/or disposed of through the materials recovery facility and solid waste transfer station operated by Western El Dorado Recovery Systems (WEDRS). Solid waste accepted at the waste transfer station is currently transported to a landfill in Lockwood, Nevada. Currently, WEDRS is utilizing only 50 percent of its authorized disposal capacity under its existing solid waste facility permit (Dura, 1997).~~The Union Mine Disposal Site is the only active landfill in its service area, which consists of approximately 955,000 acres of western El Dorado County. The landfill serves an estimated population of 111,900 people and receives approximately 72,300 tons of solid waste per year, with an estimated capacity of 4,860,000 cubic yards (Dutra, 1996). The landfill has recently been expanded and converted to a bale fill system, extending its life expectancy from 5 to 7 years to 32 years, with additional land available for future expansions. The bale fill system removes recyclable material and then compacts the remaining trash. The resulting trash requires much less landfill space as well as requiring less cover material. The increased capacity of the Union Mine Disposal Site will allow the provision of service to the County to the year 2028 (Dutra, 1996).~~"

- Page 4.13-6, third paragraph, the last sentence is deleted:

  "~~Achieving the reduction and recycling goals set out in AB 939 would increase the life of the Union Mine Disposal Site.~~"

- Page 4.13-10, Table 4.13-2, Analysis for Objective 5.5.2 is revised to read:

  "WEDRS is currently utilizing only 50 percent of its authorized disposal capacity under its solid waste facility permit. Therefore, adequate capacity remains under WEDRS existing permit to dispose of waste generated by the proposed project.~~The capacity of the Union Mine Disposal Site was recently expanded to extend the landfill's life expectancy to the year 2028. Additional land is available for future expansions. Therefore, the landfill has adequate capacity to serve the project.~~"

- Page 4.13-11, Analysis for Policy 5.5.2.1, is revised to read:

  "WEDRS is currently utilizing only 50 percent of its authorized disposal capacity under its solid waste facility permit. Therefore, adequate capacity remains under WEDRS existing permit to dispose of waste generated by the proposed project.~~The capacity of the Union Mine Disposal Site was~~

~~recently expanded to extend the landfill's life expectancy to the year 2028 to handle planned development in the County.~~ El Dorado Disposal offers a source reduction program that includes buy back centers, a curbside collection program, and newspaper and cardboard drop-off centers. In addition, El Dorado Disposal opened a new materials recovery facility in December 1996 to increase source reduction, recycling, and composting."

- Page 2-40 (Table 2-1, Impact 4.13.5) and page 4.13-20 (Impact 4.13.5), is revised to read:

  "4.13.5 Implementation of the proposed project would result in an increase in the amount of solid waste accepted by the Western El Dorado Recovery Systems~~at the Union Mine Disposal Site~~. This would be a less than significant impact."

- Pages 4.13-20 and 4.13-21, under Impact 4.13.5, the discussion is revised to read:

  "The application of existing El Dorado Disposal source reduction programs to the project site could reduce the amount of waste sent to the landfill in Lockwood, Nevada. The Materials Recovery Facility (MRF) in Diamond Springs is planning to increase its capacity to process solid waste (Dutra, 1996). ~~The Union Mine Disposal Site has recently expanded, extending its life expectancy from 5 to 7 years to 32 years. Additionally, the disposal site has land available for future expansions. The~~ WEDRS's solid waste facility permit ~~MRF and the Union Mine Disposal Site~~ would provide adequate capacity for the processing, recycling, transformation, and disposal of solid waste generated on the project site, as required by El Dorado County General Plan Policy 5.5.2.1. The generation of solid waste on the project site would have a less than significant impact (Dutra, 1997~~6~~)."

- Page 6-27, Solid Waste Disposal, the discussion under "Impacts" is revised to read:

  "The Materials Recovery Facility (MRF) in Diamond Springs is planning to increase its capacity to process solid waste (Dutra, 1996). ~~The Union Mine Disposal Site has recently expanded, extending its life expectancy from 5 to 7 years to 32 years. Additionally, the disposal site has land available for future expansions.~~ WEDRS's solid waste facility permit and future amendments to the permit would ~~The MRF and the Union Mine Disposal Site~~ provide adequate capacity for the processing, recycling, transformation, and disposal of solid waste generated on the project site

and future County growth, as required by El Dorado County General Plan Policy 5.5.2.1. The cumulative generation of solid waste would be a less than significant impact."

Response 41-66 See Response to Comment 41-65. WEDRS's existing solid waste facility permit would provide adequate capacity for the processing, recycling, transformation, and disposal of solid waste generated on the project site. Accordingly, the generation of solid waste on the project site would remain less than significant impact.

Response 41-67 An estimation of construction waste generated by the proposed project on an annual basis would be speculative because the buildout period of the project is dependent on market demand. In any event, construction waste generated by the project would be processed, recycled, transformed and/or disposed of at the MRF and/or transfer station.

Response 41-68 Illegal dumping within El Dorado County will be addressed pursuant to the provisions of County Ordinance Number 4319, adopted February 8, 1994. The information requested by the commentor concerning the El Dorado National Forest is not relevant to the environmental analysis at hand. In other words, such information, if provided, would not further or improve the quality of environmental analysis provided in the Draft EIR. EIRs should be "analytic rather than encyclopedic" (CEQA Guidelines section 15006(o)). The information requested would not change the significance of project-related impacts. For more detailed information, the commentor should contact the El Dorado National Forest.

Response 41-69 Please see Response to Comment 41-68. The County's contract with the Placer County Local Enforcement Agency for enforcement services related to illegal dumping activities does not pertain to an environmental impact of the proposed project. The information requested by the commentor concerning enforcement statistics and trends is not relevant to the environmental analysis at hand. In other words, such information, if provided, would not further or improve the quality of environmental analysis provided in the Draft EIR and would not change the significance of project-related impacts. EIRs should be "analytic rather than encyclopedic" (CEQA Guidelines section 15006(o)). For more detailed information, the commentor should contact the Placer County Local Enforcement Agency.

Response 41-70 Scoping comments from the commentor regarding nighttime lighting effects of the proposed project were considered during the preparation of the Draft EIR. Section 4.3, Aesthetics, of the Draft EIR evaluated the potential nighttime lighting impacts of the proposed project on the existing conditions of the project area in Impact 4.3.7.

Response 41-71 Several sources of nighttime light exist in the immediate project area and in the project vicinity. The most dominant nighttime light source in the project area is the surrounding residential development in the El Dorado Hills area. Residences adjacent to the project site are lit at night primarily from interior sources, although some exterior lighting is used. In the project vicinity, light sources include vehicle headlamps from automobiles on U.S. Highway 50 and local roads, the El Dorado Hills community in general, the City of Folsom, and other development in the area. Therefore, the Promontory project would be created in an area in which nighttime lighting is already in use.

Response 41-72 As described on page 4.3-20 of the Draft EIR, mitigation measures identified under Impact 4.3.7 not only identify reducing the intensity of lighting, but also include standards for shielding and directing light as well as the minimization of street light fixtures. The commentor is referred to Response to Comment 41-73 regarding lighting and crime rates.

Response 41-73 The introduction of new nighttime light sources associated with the proposed project is an environmental effect of the project and is therefore discussed in the Draft EIR on pages 4.3-20 and 21 and in Response to Comment 41-71, above. The social issue of whether lighting affects crime rates, on the other hand, is not an environmental effect of the project and as such, is beyond the scope of the Draft EIR.

Response 41-74 Contrary to the commentor's assertion, the proposed project does not "depend" upon any zoning ordinance to address nighttime lighting impacts associated with the project. Draft EIR Mitigation Measures 4.3.7a-d specifically address such impacts.

Response 41-75 See Response to Comment 7-1, 7-3 through 7-13, 8-1, 11-1, and 12-7.

Response 41-76 The timing of improvements identified in all mitigation measures will be determined by the El Dorado County Department of Transportation based on the findings of the subsequent traffic studies that will be required for each tentative map submitted for the Promontory project, pursuant to Mitigation Measure 4.5.1a.

Response 41-77 Under cumulative conditions, the Draft EIR assumed that roadway improvements identified in the *El Dorado County General Plan*, January 1996, would be in place. These improvements were developed to provide level of service (LOS) "E" or better daily traffic operations through 2015 based on development assumptions that included the entire Promontory project and additional growth throughout El Dorado Hills including projects such as the El Dorado Hills Business Park, Carson Creek, and Valley View.

Since the roadway system was planned to accommodate the projected growth through 2015, a limited number of intersection improvements were identified to reduce cumulative impacts to less than significant levels with the notable exception of the Blue Ravine Road/East Natoma Street intersection in Folsom.

Response 41-78 This comment simply paraphrases the requirements set forth in CEQA Guidelines sections 15126(c) and (d). No response is required.

Response 41-79 Each of the suggested "mitigation measures" set forth in this comment are in fact project design features which have already been incorporated into the proposed Specific Plan and have been identified in the Draft EIR. Since these design features are part of the proposed project, they were not listed in the Draft EIR as mitigation measures. These features identified in the Specific Plan are summarized below.

Narrow Roadways: See Specific Plan Section 3-4 and 3-6. Narrow roadways have been provided in an effort to reduce the amount of grading otherwise required with standard street rights-of-way.

Split-level roadways: See Section 3-4 of the Specific Plan.

Tree-protected Pedestrian Paths: See Specific Plan Section 3-5 and 3-4. A hiking and biking trail is proposed within the public open-space corridors as reflected in the Specific Plan. The open-space corridors will meander under the existing tree canopy and will be designed in such a way as not to impact existing trees. The precise alignment of the hiking and biking trail will be determined as the tentative subdivision map for the area abutting the open-space corridor is submitted to the County.

Curvilinear Roadway Routing: See Specific Plan Section 3-5. All of the street plans and alignments in The Promontory Specific Plan have been designed to follow the natural topography of the property.

Interlinked wildlife corridors, open-space drainage's and interconnected public open-space/child playscapes: See Specific Plan Section 3-5. The Promontory's public open space corridors represent one of the only continuous open space corridors provided in a development project. The public open space corridor preserves the natural drainage corridors, interconnects the hiking and biking trails, and connects the wetland mitigation area to the upper natural drainage corridors, thus providing connected wildlife corridors that presently does not exist. In addition to the public open space corridors, over 184 acres of private open space is provided in the project. The private open space areas are those area that will remain in private ownership, but will have

conservation easements place over them to ensure human intrusion is limited in an effort to preserve the natural vegetative and wildlife habitat. The conservation easements will restrict tree removal, structures, clearing, and fencing. See response to comment 41-6 for more information on The Promontory's open space.

The public open-space plan constitutes one of the only 99.8-acre, contiguous open-space area west of El Dorado Hills Boulevard. This open-space corridor is primarily intended to preserve the natural canopy occurring along the natural drainage swale. By preserving the contiguous open-space corridor, stretching approximately 1.5 miles in length, will ensure that wildlife habitat, which currently exists along the drainage corridors, will have the opportunity for continued existence.

Response 41-80 See Response to Comment 41-79.

Response 41-81 The commentor quotes from the Carson Creek Draft EIR, in which the County's consultant erroneously concluded that the proposed project was inconsistent with the General Plan policies relating to water supply. To correct that error, the County subsequently prepared and certified an Addendum to the Final EIR for the Carson Creek project. The Addendum specifically addressed the issue of General Plan consistency as it related to the County's water supply policies and concluded that the Carson Creek project was, in fact, fully consistent with those policies. The analysis contained in the Addendum to the Carson Creek Final EIR regarding the project's consistency with the County's water supply policies is equally applicable to this project (see pp. 4.13-14 and 4.13-15 of the Promontory Draft EIR). For a discussion regarding the effect of the recent court decision concerning the El Dorado Project, please see Response to Comment 41-8.

Response 41-82 As described on pages 4.12-25 and 4.12-26, development of the project would increase student enrollment at local school districts (including Rescue Union School District and Buckeye Union School District) beyond current capacities resulting in a significant impact. A reduction in class sizes at Rescue and Buckeye school districts may result in a more severe capacity impact, but would not change the level of significance identified in the Draft EIR. As identified on page 4.12-26 of the Draft EIR, Mitigation Measure 4.12.5 would require the project applicant to enter into a formal agreement with the school districts for the mitigation of project impacts, which would likely include consideration of capacity impacts as a result of class size reductions. Thus, implementation of Mitigation Measure 4.12.5 would minimize potential effects of school capacity constraints from project development.

Response 41-83 Commentor is referred to Response to Comment 10-2 regarding current school capacities identified by Rescue, Buckeye, and El Dorado Union school districts. The commentor is also referred to Rescue, Buckeye, and El Dorado Union school districts for information regarding school capacity projections.

Response 41-84 The information requested by the commentor concerning classroom characteristics and portables in use is not relevant to the environmental analysis at hand. In other words, such information, if provided, would not further or improve the quality of environmental analysis provided in the Draft EIR. EIRs should be "analytic rather than encyclopedic" (CEQA Guidelines section 15006[o]). The information requested would not change the significance of project-related impacts. For more detailed information, the commentor should contact Rescue, Buckeye, and El Dorado Union school districts.

Response 41-85 Page 4.12-25 of the Draft EIR identifies the number of students anticipated to be generated from the project site as 638 elementary school students, 180 middle school students, and 319 high school students. Since the project is anticipated to be developed for a 20-year period, a determination of the number of additional classrooms that will be needed would be speculative at this time. In addition, such information, if provided, would not further or improve the quality of environmental analysis provided in the Draft EIR. EIRs should be "analytic rather than encyclopedic" (CEQA Guidelines section 15006[o]). The information requested would not change the significance of project-related impacts.

Response 41-86 The requested information regarding construction costs for classrooms pertains to economic impacts that are beyond the purview of an EIR under CEQA. CEQA Guidelines section 15131 provides: "economic or social effects of a project shall not be treated as significant effects on the environment."

Response 41-87 The requested information regarding costs for classrooms and other facilities pertains to economic impacts that are beyond the purview of an EIR under CEQA. CEQA Guidelines section 15131 provides: "economic or social effects of a project shall not be treated as significant effects on the environment."

Response 41-88 The County's adoption of the referenced ordinance involved a prior discretionary approval of an independent project proposal that was the subject of a separate CEQA review process. Copies of the ordinance are available from the County and need not be included in the Final EIR for this project.

Response 41-89 The public notices issued on May 16 and June 11, 1996, were not to sell the property; rather, the general partner was acquiring a limited partner's shares in the development. In accordance with State law, public notices offering a limited partnership interest for sale are required.

Response 41-90 Noise from the operation of Mather Air Force Base was analyzed and discussed in the County General Plan. That analysis did not identify the 65 dB CNEL contour within the project area. Therefore, it was determined that Mather Field overflights would not significantly contribute to ambient noise in the project area or create a condition of land use incompatibility with respect to noise. The General Plan did, however, identify that weather conditions sometimes force Mather Field aircraft to adjust their course, thus causing flights to pass over the project area, creating a condition where aircraft are audible in a location where they are not common. The frequency of these overflights does not extend the 65 dB CNEL contours to the project area, and therefore, does not create a condition of land use incompatibility as presented in the County General Plan.

In addition to the noise analysis in the County General Plan, Sacramento County recently completed an environmental review of the Mather Field Specific Plan (95-SFB-0669). The noise analysis contained in that environmental document identified that the 60 Community Noise Equivalent Level noise contour (the lowest noise contour identified in the Mather Field Specific Plan EIR) ended east of Sunrise Boulevard in Sacramento County. Based on the environmental analysis prepared for the Mather Field Specific Plan, Sacramento County does not anticipated any significant noise impacts to El Dorado County. (Gonzales, 1997)

It is a common construction practice to include dual pane windows in new residential construction, albeit more for the purpose of energy efficiency. Because the impact of Mather Field overflights was initially determined as less than significant, the suggested mitigation measure is not required.

Response 41-91 CEQA requires that a Final EIR respond to all environmental comments received on the Draft EIR within the public review period. (Public Resources Code, § 21092[d][2][A].) The County may, but need not, respond to comments received after that period ends. (Public Resources Code. § 25088[a].)

42

El Dorado Planning Department
2850 Fairlane Court
Placerville, CA 95667
Attn: Roger Trout, Senior Planner

July 30, 1997

Dear Mr. Trout,

I am in receipt of the Notice of Completion of a Draft Environmental Impact Report for the Promontory Project. My family resides at 2218 Tabari Court, since 1993, directly adjacent to the project.

My children and I have major concerns with respect to this project. First, we have a wonderful view of Folsom Lake. Secondly, the neighbors, many of whom own homes that directly adjoin the project, have been wonderful. Now several of them are considering selling before the project construction begins. In the 4 ½ years that we've resided here, the tranquil view, peaceful surroundings, and wonderful neighbors have been a large part of our healing from the loss of my wife in 1993. Without this view, I would not have chosen this house or paid this price. I've rebuilt the deck in the last 12 months to favor the view of Folsom Lake, at a cash cost of $31,000, a cost I would not expect to recoup once the hillside is developed. Looking at the proposed site map (mailed to us) I fail to see how houses could be constructed there without blocking the view of Folsom Lake. I expect, in fact, that the value of my house will drop substantially once the view is blocked and the hill behind my house is populated with houses. 42-1

I understand that development is a fact of life in El Dorado Hills. I believe that development can be done with an eye towards the needs of those who already live here and wish to stay here, without irreparable harm. I expect that with a modified design, those with views of Folsom Lake could have those views preserved without loss, while providing new homes with views. 42-2

Thank you for consideration of these issues. I look forward to future discussions and and developments.

Sincerely,

David J. Shield

LATE DEIR COMMENT

PAT ANGELL 564-4501
MIKE 353-0268

42. DAVID J. SHIELD, RESIDENT

Response 42-1 See Comment and Response to Comment 45-4 and 5-1. The project applicant has indicated that development standards will be added to the proposed Specific Plan to minimize project impacts on existing private viewsheds. Accordingly, those standards will be added to this EIR, as indicated in Response to Comment 45-4. The inclusion of these standards, to which all subsequent tentative maps will be required to comply, will enable the project applicant to modify the tentative map, as needed, to minimize any impacts to existing viewsheds.

Response 42-2 See Response to Comment 42-1.

El Dorado Co. Planning Dept.
attention: Roger Trout, Senior Planner

RECEIVED
PLANNING DEPARTMENT
1992 04

Re: The Promontory
SCH # 94012056

Dear Mr. Trout

In response to the Draft Environmental Impact Report in the aforementioned project, "The Promontory", the EIR refers to many environmental problems (too many) that are addressed by the report as Significant Unavoidable Impact. Many, if not most are cumulative in effect. Many are regarded as "less than Significant Impact." 43-1

However, when the Gross number of new, approved, and under review projects now in the Planning Process both in Folsom and Western El Dorado County the cumulative effect becomes a problem not being adequately addressed by El Dorado County. 43-2
With Seven new developments in Folsom and Eleven identifiable in Western El Dorado County covering approx 29,000 Acres of land and more than 20,000 new residences your Cumulative effect becomes Extremely Significant

indeed.

43-2 CONT.

Air Quality:

At present El Dorado County is listed as being Unclassified with respect to attainment of State and Federal CO Standards.

43-3

There has not been sufficient monitoring data accumulated to determine whether or not El Dorado County complies with ambient CO air Quality standards.

Many if not all of the projects indicate that upon completion that they will add to the deterioration of ambient air Quality in El Dorado Hills. These projects include Carson Creek, Marble Valley, Rancho Dorado and Promontory. This even after mitigations are in place.

43-4

Promontory's modeling of air Quality used as a basis Folsom and Citrus Heights. While no tests have ever (to my knowledge) been conducted in Western El Dorado Hills.

43-5

Air Quality Monitoring must be conducted in El Dorado Hills to assure certain knowledge of conditions in that area and to protect the tax payers of

43-6

El Dorado Hills.
El Dorado County must take action to clean up the air. Air Quality tests would without doubt require El Dorado County to seek redesignation to a Non-attainment status and require El Dorado County, by law, to seek all available remedies. 43-6 CONT.

I am not against development. I am against development that is uncontrolled and costs the citizens of El Dorado Hills worse air Quality and in my mind I wonder if County Governments greed for a large tax base doesn't override the safety of its citizens. 43-7

Noise:
Traffic flow:
Public Services
Water:
Biological Resources
Sewage + Waste Water
all of the above are noted in the EIR as Problems with Less than Significant, Significant or Significant Unavoidable impact. 43-8
But all do have an impact.

Each taken alone may be overlooked. together they are Significant and apposently unavoidable except on a no project basis. | 43-8 CONT.

Water. It is written that Water must be available before approving construction of any new development.
There is only little Water available now with E.I.D. Hoping their law suits will Prevail so they would have enough Water for the future? | 43-9

Transportation Circulations appears to impact neighborhoods that formerly Were not Subjected to excessive noise & traffic - Significantly impacting Quality of life. | 43-10

Solid Waste disposal - No adequate nor new sights are proposed for disposal. accumulation from Eleven Plus Developments in El Dorado Hills area alone will add considerable Solid Waste to an already overburdened system. | 43-11

By over building in the El Dorado Hills area we are adding to the potential for Fire Storms in this area. Fires driven by prevailing Winds could be as or more devastating than in the Los Angeles Area as Oakland Area and Concentrations of Houses must be avoided. 43-12

Wet lands. No adequate explanation has been set forth for the preservation of Wetlands in the Promontory area. 43-13

Police Services. It seems that revenues generated by the new areas, including Promontory, Carson Creek etc. would be inadequate to maintain sufficient Law enforcement presense in the areas. 43-14

While these are <u>some</u> of my Concerns I had not sufficient time during the 30 day period granted to adequately study the impact of all areas covered in the Promontory EIR. After all it took several months to prepare. 43-15

I have tried to show that El Dorado County has inadequately gathered 43-16

Information to judge the impacts to the environment this and other Developments will make on the Quality of life in these Hills.

43-16
CONT.

Sincerely

James C Miller
956 Kings Canyon Dr.
El Dorado Hills, Ca. 95762
916-933-2230

43. JAMES MILLER, RESIDENT

Response 43-1 The commentor is correct that the Draft EIR identifies less than significant, significant, significant and unavoidable, and cumulative significant impacts related to the proposed project.

Response 43-2 Chapter 6.0, Other CEQA-Required Sections, of the Draft EIR identifies the development allowed under the El Dorado County General Plan and the City of Folsom General Plan as well as large-scale proposed and approved development projects in El Dorado County and the City of Folsom in the project vicinity (the commentor is referred to pages 6-4 through 6-6 for description of the cumulative setting). As identified in Section 6.0, the Draft EIR has adequately addressed cumulative impacts of the proposed project pursuant to CEQA Guidelines Section 15130(b).

Response 43-3 In past years, The El Dorado County Air Pollution Control District did maintain a carbon monoxide (CO) monitoring station in Shingle Springs. CO is currently monitored in the City of Placerville. Judgments as to El Dorado County's attainment with federal and state carbon monoxide attainment is based on this station's readings. However, the monitoring station opened in April of 1992. As of the publication of this EIR, the California Air Resources Board has not made a formal determination as to El Dorado County's attainment status for CO based on the limited data set (number of years) and lengthy process of making such a decision. In any event, the value of data collected in Placerville is limited when attempting to make judgments regarding air quality in another area of the County which differs in topography, climate, and intensity of urban development, such as the El Dorado Hills Area relative to Placerville. For this reason, CO modeling for the project site assumed somewhat similar ambient conditions as that presented by the Sacramento Metropolitan Air Quality Management District (SMAQMD) for Sacramento County.

Response 43-4 As described in Section 4.6, Air Quality, of the Draft EIR, the proposed project is anticipated to result in significant unavoidable impacts to air quality from increases in reactive organic gases, nitrogen oxides, carbon monoxide, and particulate matter emissions. For air quality impacts from the Carson Creek Specific Plan, Marble Valley, and Rancho Dorado, the commentor is referred to the environmental documents prepared for those projects.

Response 43-5 As described on page 4.6-9 of the Draft EIR, project air quality impacts were evaluated using the Air Resources Board's estimating program URBEMIS5 as well as the CALINE4 model. Only the CALINE4 model uses ambient CO concentrations as a factor in its calculation of air quality impacts. However, these ambient CO concentrations are modified (rolled back) depending on the

year of analysis in order to account for improvements in emission technologies. As described on page 4.6-6 of the Draft EIR, ambient air quality data from monitoring stations in Folsom, Citrus Heights, and Sacramento were used because of their relative close proximity to the project site.

Response 43-6 It is unclear whether the commentor desires that the project perform air quality monitoring for the El Dorado Hills area, or desires the County to perform such monitoring. Given the time required to collect enough data to characterize air quality conditions of the El Dorado Hills area, it would be inappropriate and infeasible to require the project applicant to perform such monitoring. The California Air Resources Board and the individual air districts are typically responsible for the operation of air quality monitoring stations. Currently, there no plans to install an air quality monitoring station in the El Dorado Hills area.

Response 43-7 The commentor's general statements regarding development and the relationship with County government is noted. The El Dorado County General Plan EIR identified that implementation of the General Plan would result in increases in stationary and mobile emissions of air pollutants. The EIR identified mitigation measures consisting of revisions and additions to General Plan policies, which were adopted by the County and incorporated into the General Plan. However, the impact to air quality after implementation of mitigation measures was considered significant and unavoidable because the mitigation measures would lessen, but not avoid, air pollutant emissions. (El Dorado County, 1996).

Response 43-8 The commentor's comment only mentioned six of the fourteen environmental issue areas addressed in the Draft EIR and states that the environmental impacts considered together results in a significant unavoidable impact, except for the No-Project Alternative. As generally identified in the Draft EIR, project impacts in one environmental issue area tends to also impact other environmental issue areas (e.g., traffic impacts identified in the Draft EIR also result in noise and air quality impacts). The combined effect of project impacts on environmental issue areas has been evaluated in the Draft EIR.

As identified in Chapter 5.0, Analysis of Alternatives, No-Project Alternative would result in some significant impacts to the environment, though these impacts would generally tend to be less intense than the proposed project.

Response 43-9 See Response to Comment 41-8 through 41-11.

Response 43-10 The commentor is referred to Response to Comment 7-1 regarding traffic impacts on local residential roadways and Section 4.7, Noise, of the Draft EIR regarding project noise impacts to adjacent residential areas.

Response 43-11 See Response to Comment 41-66.

Response 43-12 Implementation of mitigation measures 4.12.3a and 4.12.3b identified in the Draft EIR will address the commentor's comments. It should be noted that the El Dorado Hills Fire Department has stated that the Draft EIR adequately addressed wildland fire impacts (see Comment Letter 1).

Response 43-13 The impact, preservation and enhancement of existing wetlands, and the recreation of new wetlands has been authorized by the U.S. Army Corps of Engineers (Corps) (permit # 199001102). The Draft EIR on page 4.8-29 states that the conditions of the Corps permit will be implemented as part of the project to reduce the wetland impacts to less-than-significant. Further, comment 45-28 (from the project applicant) clarifies that the wetland conditions set forth in the Corps permit **are required** (emphasis added) to be conditioned on the Specific Plan's approval. With the inclusion of the wetland mitigation plans as a condition of approval to the Specific Plan, the impacts to wetlands have been mitigated to less than significant levels.

A copy of the project's 404 Permit and Wetland Mitigation Plan is contained in Appendix C of this FEIR.

Response 43-14 See Response to Comment 2-1.

Response 43-15 The Draft EIR was available for public review for the required 45-day review period, pursuant to CEQA Guidelines Section 15087(c).

Response 43-16 Comments 43-1 through 43-15 have been responded to and no inadequacies of the Draft EIR for the project have been identified. The commentor is referred to the El Dorado County General Plan EIR for further information regarding impacts to the El Dorado Hills area from planned County growth.

44

CITY OF FOLSOM
Planning, Inspections & Permitting
50 Natoma Street
Folsom, California 95630

97 JUL 30 PM 4:07
RECEIVED
PLANNING DEPARTMENT

David A. Storer, AICP
Director

July 30 ,1997

Roger Trout, Project Planner
El Dorado County Planning Department
2850 Fairlane Court
Placerville, CA 95667

Dear Roger:

Thank you for the opportunity to respond to the Specific Plan for the Promontory Project. The City of Folsom provides you with the following comments and requests for additional information:

(For your information the City of Folsom has reviewed a **Draft** Specific Plan for the Promontory that was released on September 6, 1994 and has provided comments. Further, City staff has also provided comments on the specific plan at a meeting with the project proponents on August 2, 1996, and December 6, 1996, prior to the release of this Specific Plan. Our comments on this Specific Plan (released July 23, 1997) are reiterated from previous meetings and correspondence as most of our comments have not been addressed.

Page No's are referenced as follows: **Draft** Specific Plan (1994) = "DSP #" and current Specific Plan (1997) = "SP X-XX"

- Circulation DSP 33 - The project proposes deviations from County standards on DSP 42 and on SP 3-6. The City of Folsom requests that the Specific Plan discuss the need for consistency between City and County street standards as the project interfaces with our adjacent developments. 44-1

- Access to Village 1 is provided from Russell Ranch Boulevard, SP 3-7. The City requests that the Specific Plan address the most recent alignment of Russell Ranch Boulevard that we understand has been agreed to by the proponent and the adjacent Russell Ranch developer. The alignment may or may not be that which has been authorized by the Board of Supervisors and or the Folsom/El Dorado County JPA. For your information, Russell Ranch Boulevard has been described as the main access to the community/project on page 42 of the **Draft** Specific Plan, and page 3-15 of the Specific Plan. 44-2

- The Draft Specific Plan includes a discussion on page 37 of view sheds of the project from the City of Folsom. It states that Village 6 will be very visible from the City of Folsom. The Specific Plan (SP 3-39) now has no discussion of this topic whatsoever, where the Draft Specific Plan did. The Specific Plan should be amended to discuss how Village 6 is no longer visible from the city of Folsom, or include discussion as necessary. 44-3

- The Specific Plan should address circulation/access to Village 1 and Village 8 as they link to Russell Ranch Boulevard. See Figure 8, DSP 43, and SP 3-7. 44-4

- The link to Green Valley Road should be coordinated with the City of Folsom relative to Russell Ranch Boulevard, and the recently distributed NOP for the Green Valley Road Ultimate Improvement Project, dated July 24, 1997. 44-5

- The City of Folsom requests that the Specific Plan include a discussion of how trees are to be preserved on the project site as the Draft Specific Plan (DSP 48) states that trees will be preserved per the Design Guidelines which were to be a separate document. The Specific Plan is now devoid of any discussion with the exception that design guidelines are to be approved by the developer at a later date and are not a part of the Specific Plan/EIR process (see SP 3-25). 44-6

- The Specific Plan should address view sheds from Highway 50 as was mentioned in the Draft Specific Plan. Additionally, on DSP 37 it states that Village 7 is very visible from Folsom. This sentence has been deleted from the Specific Plan and needs to be included, unless of course there will be no development of Village 7. 44-7

- The Specific Plan should address impacts of the proposal upon the interchanges on Highway 50 at Russell Ranch Boulevard and East Bidwell/Scott Road. 44-8

Again, the City of Folsom thanks you for the opportunity to review the aforementioned materials. If I can be of any further assistance, please call.

Sincerely,

David A. Storer, AICP
Director, Planning, Inspections & Permitting

JUL-30-97 WED 2:58 PM CITY OF FOLSOM FAX NO. 916 355 7204 P. 5

44. DAVID STORER, DIRECTOR, CITY OF FOLSOM - PLANNING, INSPECTIONS, AND PERMITTING

Response 44-1 Although this comment is provided by the City of Folsom addressing the Specific Plan rather than the Draft EIR (the City of Folsom comments regarding the Draft EIR are addressed in comment letter #47), the comment is discussed here because the Draft EIR mitigation measures addresses some of the commentor's questions/comments.

With regard to the comment regard consistent right-of-way, during the tentative map process, the County will ensure that The Promontory street right-of-ways are consistent with those of existing and planned streets stubbed to the property.

Response 44-2 The City of Folsom/El Dorado County Joint Powers Authority (JPA) approved the alignment of Russell Ranch Boulevard and the El Dorado County Board of Supervisors approved the JPA's resolution regarding the Russell Ranch Boulevard alignment. To date, the City of Folsom has not formally acted on the JPA's resolution. The JPA alignment for Russell Ranch Boulevard is incorporated into the Specific Plan.

Response 44-3 The Hillside Development Standards as outlined in Section 4 of the Specific Plan coupled with mitigation measures 4.3.1a through 4.3.1d and 4.3.5 of the Draft EIR provide measures to address the aesthetic impacts (Folsom was considered in the impact discussion of the Draft EIR) of the development. However, due to the nature of constructing homes on an otherwise undeveloped property, the aesthetic impact is still considered significant and unavoidable, even with mitigation.

Response 44-4 The Specific Plan does address access to Russell Ranch Boulevard from Village 1 (see Specific Plan Section 3.3), but Village 8 does not access to Russell Ranch Boulevard as the commentor suggests. With regard to Village 1, page 3-7 (Section 3.3) of the Specific Plan states:

> "Access to Village 1 will be provided from Russell Ranch Boulevard".

The exact lane configuration for the access will be determined at the time the tentative map for Village 1 is submitted to the County and will be consistent with the road standards provided in the Specific Plan.

Access to Village 8 is provided by access from the Village 7, neighboring subdivisions from the east, and the City of Folsom.

Response 44-5 The exact intersection configuration to Green Valley Road will be determined by the El Dorado County Department of Transportation in accordance with its standards and mitigation measures 4.5.1, 4.5.3a, 4.5.3b, 4.5.4, 4.5.7a and 4.5.7b, 4.5.11a or 4.5.11b, 4.5.15, and 4.5.16 of the Draft EIR.

Moreover, the planned Green Valley improvements, as outlined in the July 24, 1997 NOP, are consistent with the General Plan Circulation Element and mitigation measures 4.5.7a, 4.5.7b, 4.5.3a (El Dorado County Portion), and 4.5.3b of the Draft EIR.

Response 44-6 The preservation of trees on The Promontory will be carried out through Mitigation Measure 4.8.1 identified in the Draft EIR. Mitigation Measure 4.8.1 requires the project applicants to prepare Tree Preservation, Replacement, Maintenance, and Monitoring plan to address the preservation and recreation of trees on the project site. Mitigation Measure 4.8.1 will be incorporated into the Final Specific Plan, and thus is incorporated into the Specific Plan as the commentor suggests.

Response 44-7 See Response to Comment 44-3.

Response 44-8 The purpose of the Specific Plan is to provide a description of the propose development and demonstrate consistency with the objectives, goals and policies of the El Dorado County General Plan. The purpose of the Specific Plan EIR is to identify impacts from implementation of the Specific Plan and provide mitigation measures to reduce the impacts. As identified on page 4.5-27 of the Draft EIR (Table 4.5-8), the Draft EIR did analyze project traffic impacts to the Russell Ranch Boulevard/U.S. Highway 50 Interchange and identified that no significant impacts to the interchange were anticipated. The commentor is referred to Response to Comment 47-5 regarding the East Bidwell/Scott Road/U.S. Highway 50 Interchange.

DP&F
DICKENSON, PEATMAN & FOGARTY
A Professional Law Corporation

45

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Walter J. Fogarty, Jr., Of Counsel
Howard G. Dickenson, Retired

July 10, 1997

Transmitted via Facsimile; Original via U.S. Mail

Roger Trout, Senior Planner
El Dorado County Planning Department
2850 Fairlane Court
Placerville, CA 95667

RE: Comments on the Promontory Draft Environmental Impact Report (DEIR)

Dear Mr. Trout:

I am writing on behalf of Palisades Properties, Inc. (PPI), to comment on the Promontory Specific Plan DEIR. Our comments are as follows:

Page	Comment	
General Comment	Public Resources Code section 21083.3 provides for streamlined review of projects which are consistent with applicable general plans. Specifically, section 21083.3 limits the review of such projects to the environmental effects that are "peculiar to the parcel or to the project and which were not addressed as significant effects in the prior [EIR] or which new information shows will be more significant than described in the prior [EIR]." So long as all relevant feasible mitigation measures adopted in connection with the applicable general plan are applied to the proposed project, additional analysis of environmental effects addressed in the general plan EIR is not required.	45-1

The DEIR indicates that the Promontory Specific Plan is substantially consistent with the County General Plan. In addition, the DEIR appears to apply to the proposed Specific Plan all relevant feasible mitigation measures adopted in connection with the County General Plan. Therefore, to the extent the DEIR addresses significant environmental impacts which were already addressed in the General Plan EIR and are not unique to the proposed Specific Plan, the DEIR should clarify that section 21083.3 is applicable to the analysis of such significant impacts. 45-1 CONT.

3-11 *Elementary School:* The DEIR should explain that an elementary school site is also proposed within the approved Crown Valley project, which is located immediately north of the proposed Promontory Specific Plan. Both the Crown Valley and the Promontory properties are owned by PPI. If the Crown Valley site is ultimately utilized for the construction of an elementary school, then the elementary school in the Promontory Specific Plan will be unnecessary. In that event, the site should revert back to its underlying residential zoning. To reflect this possible scenario, the following sentence will be added to the Promontory Specific Plan and, accordingly, should be added to the DEIR: 45-2

"If the elementary school site within the Crown Valley project is utilized for the construction of an elementary school, then the elementary school site within the proposed project shall revert back to its underlying residential zoning."

3-17 *Conservation Areas:* This paragraph should be clarified to indicate that open view fencing will be allowed within the private open space/conservation easement areas. The following sentence will be included in the Promontory Specific Plan and should likewise be included in this section of the DEIR: 45-3

"Fencing shall be permitted within the private open space areas, but shall be limited to open view fencing."

45-3 CONT.

4.3-12

Second paragraph: The DEIR indicates that the analysis of potential adverse effects to private viewsheds will be deferred until the subsequent review of "tentative subdivision maps and other approvals." However, because of the streamlining provisions contained in CEQA Guidelines section 15182, no additional environmental analysis (beyond that contained in the Specific Plan EIR) may be required for such approvals.[1] Accordingly, the potential effects to private viewsheds should be discussed in the DEIR to the extent that such effects are not speculative.[2] In addition, the DEIR should set forth specific performance standards or criteria that, if met, will ensure the avoidance of any significant effects. (See, e.g., Sacramento Old City Association v. City Council of Sacramento, 229 Cal.App.3d 1011, 1028.)

45-4

The standards set forth below will be included in the Promontory Specific Plan. We therefore suggest that these standards also be included in the DEIR:

"Where the project site abuts existing homes, residential lot lines within the project shall be staggered from residential lot lines outside of the project so as to retain viewsheds for existing homes.

[1]Where a lead agency has prepared an EIR for a properly adopted specific plan, no EIR or negative declaration is required prior to approving a residential project conforming to that specific plan, unless a subsequent EIR for the plan is required pursuant to section 15162 of the CEQA Guidelines. (CEQA Guidelines section 15182.)

[2]CEQA Guidelines section 15145 makes clear that, where a potential impact is "too speculative for evaluation," discussion of that impact should be terminated.

Where the project site abuts existing homes, the minimum residential lot size within the project shall be 30,000 square feet. This will allow homes to be situated on such lots so as to avoid significantly impacting the viewshed of existing homes."

45-4 CONT.

4.3-13 *Hillside Development Standards:*

In paragraph 6, the maximum building envelope should be changed from 30,000 square feet to 15,000 square feet.

45-5

The first sentence in paragraph number 8 should begin with the word "Solid." As indicated above, open view fencing should be allowed outside of the development envelope.

4.3-15 *Hillside Development Standards:* Paragraph 9 should be clarified with respect to the permissible colors and materials for roofs and walls. Specifically, we propose that the DEIR set forth the following standards:

45-6

"Roof Color:

* Roofs shall be earth tones, with low or muted chrome.

* Avoid brighter, higher chrome colors that will be visually prominent.

Roof Materials:

* Tiles, shingles, slate, high quality raised composition/asphalt, and high quality simulated materials (e.g., concrete/fiberglass shakes) in natural colors are encouraged.

* The roofing material must be consistent with the style of the house.

* Avoid "plastic" looking, reflective or glossy materials or other low quality materials.

* Avoid metal or glass roofs that might reflect sunlight.

* Roof vent pipes and roof fixtures should be painted a flat color to match the roof color.

45-6 CONT.

Wall Color:

* Wall surfaces shall utilize muted, warm earthtone colors. Medium values with low chroma are encouraged.

* Avoid highly reflective, bright white stucco surfaces (e.g., refrigerator or "appliance" white).

* Bright white may be used for window sash, door, trellis and trim color or for wood siding accents."

4.3-17 *Mitigation Measure 4.3.1e:* This paragraph should be clarified to indicate that solid fences and walls will be allowed within the development envelope of each lot. 45-7

4.3-19 *Impact 4.3.4:* Please see comment for Page 4.3-12, above. The final sentence in this paragraph should be deleted. 45-8

4.5-1 *Transportation and Circulation:*

Neighbors from the surrounding area have suggested that the community collector for the project be modified in such a manner as to not abut the existing homes on Hensley Circle in the Governor's West subdivision. However, due to topography constraints in this area, it is not possible to fully accommodate the wishes of the residents and provide for the community collector. Therefore, PPI instead proposes the alternative street pattern shown on the diagram attached hereto as "Attachment A." We request that the County evaluate this alternative and determine whether it could be implemented without affecting the circulation system of the proposed Specific Plan. It is 45-9

	our understanding that this alternative street pattern would require the approval of the El Dorado Hills Fire Department, the Community Services District and the relevant County departments. In addition, we propose a more specific alignment of the east/west collector as shown on the diagram attached hereto as "Attachment B." We understand that this alignment would be subject to the usual County trip standards, i.e., no more than 4,000 average daily trips (ADTs), and that recognition of this alignment in the Final EIR would not affect or alter the mitigation measures set forth in the DEIR.	45-9 CONT.
4.5-14	*Table 4.5-6:* Trip generation information should be added to this table to reflect the possibility that the elementary school will be constructed within the Crown Valley project area, rather than within the Promontory Specific Plan area. (Please see comment regarding Page 3-11, above.) Under this scenario, the ADTs would be reduced from 872 to 633.[3]	45-10
4.5-19	*Table 4.5-7:* Why is the El Dorado Hills Boulevard/Wilson Boulevard intersection projected to go from LOS A to LOS F when the El Dorado Hills Boulevard/Olson Lane intersection is projected to go from LOS A to LOS B?	45-11
4.5-29	*Mitigation Measure 4.5.2a:* This mitigation measure calls for the construction or funding of transportation facilities located <u>both</u> inside and outside the County's jurisdiction. Pursuant to CEQA Guidelines section 15091, the County is not responsible for ensuring the implementation of extra-jurisdictional mitigation measures. Accordingly, this mitigation measure should be divided into two mitigation measures which separately address: (1) facilities over which the County has	45-12

[3] 10 acres x 2.5 units/acre x 9.55 - 872 = 633 ADTs.

	jurisdiction; and (2) facilities which are outside the County's jurisdiction. In addition, PPI's right to reimbursement and/or fee credit for the installation of any public improvements which exceed the project's fair share contribution for such improvements should be expressly set forth (both here and in Table 2-1) in capital letters using bold type.	45-12 CONT.
4.5-30	*Mitigation Measure 4.5.3a:* Please see comments regarding Page 4.5-29, above.	45-13
4.5-32	*Mitigation Measure 4.5.5:* Signalization of the El Dorado Hills Boulevard/Wilson Boulevard intersection should be identified in this mitigation measure as one of the improvements to be funded through the 1998 update of the El Dorado Hills Road Improvement Fund (RIF) program. Mitigation Measure 4.5.5 also should clarify that, if PPI is ultimately required to signalize this intersection, PPI will be entitled to reimbursement or fee credit from the RIF program. Please see comment regarding Page 4.5-29, above.	45-14
4.5-33	*Mitigation Measure 4.5.7a:* Please see comment regarding Page 4.5-29, above.	45-15
4.5-34	*Impact 4.5.8:* The discussion for this impact should be modified to reflect the fact that the County is completing a PSR/PR (Project Study Report/Project Report), rather than a PSR.	45-16
4.5-38	*Mitigation Measure 4.5.11a:* This mitigation measure should indicate that the required barrier to Mormon Island Drive shall be located on the property line which separates the Mormon Island and Crown Valley subdivisions.	45-17
4.5-42	*Mitigation Measure 4.5.15:* Please see comment regarding Page 4.5-33, above.	45-18
4.6-10	*Mitigation Measure 4.6.1:* This paragraph should be clarified to indicate that the	45-19

	recommended mitigation measure will be included as a condition of approval of the "subsequent development."	45-19 CONT.
4.7-4	*El Dorado County Noise Element:* This discussion should be expanded to include the special transportation noise standards set forth in Table 6-1, footnote 1, of the General Plan: "In Communities . . . 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." *Table 4.7-1:* This table should be modified to include the special transportation noise standards set forth in Table 6-1, footnote 1, of the General Plan.	45-20
4.7-9	*Third full paragraph, last sentence:* Please see comments regarding Page 4.7-4, above.	45-21
4.7-11 to 15	*Impact 4.7.2:* Please see comments regarding Page 4.7-4, above. The County General Plan allows an outside noise level of 65 dBA, Ldn. Therefore, the anticipated change in noise exposure should not exceed the performance standards of the County General Plan.	45-22
4.7-19 to 23	*Impact 4.7.4:* Please see comments regarding Page 4.7-11 to 15, above.	45-23
4.8-14	*Special Status Species at The Project Site:* This section indicates that, of the species listed in Table 4.8-2, "several special status species are highly likely to occur on the project site. . ." In fact, only two of the 57 species listed in Table 4.8-2 are designated as having a "high potential" of occurrence on the project site. Of those species, neither is listed on the federal or State list of threatened, endangered or rare	45-24

	species. This paragraph should be clarified accordingly.	45-24 CONT.
4.8-25	*Impact 4.8.1:* The phrase "with the exception of villages 1 and 3" should be revised to say: "with the exception of the village center and villages 1 and 3."	45-25
4.8-27	*Mitigation Measure 4.8.1:* This paragraph should be clarified to indicate that: (1) the recommended mitigation measure will be applied to the entirety of the Specific Plan area, rather than to individual portions of the area; and (2) consistency with General Plan policy 7.4.4.4 will be satisfied through the approval of a tree mitigation plan for the entire Specific Plan area, rather than for each tentative map within the Specific Plan.	45-26
4.8-28	*Third Bullet:* The specific time frame for the Monitoring and Management Plan should be based upon the information and recommendations provided in the Plan. Accordingly, the reference in this paragraph to a ten-year time frame should be deleted.	45-27
4.8-29	*Impact 4.8.2:* This paragraph should be clarified to indicate that the conditions of the 404 Permit and the Wetland Mitigation Plan are <u>required</u> components of the proposed project.	45-28
4.8-30	*Mitigation Measure 4.8.3:* Mitigation Measure 4.8.3 appears to require PPI to deliver information to state and federal agencies where such information would not otherwise be required. The measure should be revised to require the submission of survey results to such agencies only where special status species have been found on the project site. To accomplish this, we propose the following changes to paragraph one of the mitigation measure: Line 2-3: change "having a potential to occur on the property" to "having a `High	45-29

	Potential' to occur on the property or as being a `Potential Resident' of the property" Line 6: begin the first full sentence as follows: "If special status species are found on the project site, results of the surveys shall be submitted to CDFG and/or USFWS, as appropriate, and to the County prior to . . ." Line 10: replace "CDFG and USFWS" with "the appropriate agency".	45-29 CONT.
4.8-31	*Mitigation Measure 4.8.4:* The first bullet item in this section should be deleted from the DEIR. The grasslands on the project site are currently dominated by non-native species, and the proposed mitigation requirements are simply not feasible.	45-30
4.8-33	*Mitigation Measure 4.8.7:* Please see comment regarding Page 4.8-30 (Mitigation Measure 4.8.3), above.	45-31
4.10-12	*Mitigation Measure 4.10.4:* The phrase "prior to improvement plan approval for site development" should be revised to say: "prior to improvement plan approval for the village center and/or villages 1, 2, 3, 5 and/or 7." The remaining portions of the project site are not subject to Folsom Dam rupture inundation and therefore should not be subject to the evacuation plan requirement.	45-32
4.10-16	*Mitigation Measure 4.10.5c:* In light of mitigation measure 4.10.5a, Mitigation Measure 4.10.5c appears to be redundant. It should be deleted.	45-33
4.12-5	*Public Schools:* The second paragraph of this section indicates that an agreement was reached between PPI, the Rescue Union School District and the Buckeye School District to alter the existing boundary line between the two school districts. In fact, the parties decided to leave intact the existing district boundaries.	45-34

4.12-17	*Policies 5.8.1.1 and 5.8.1.5:* The DEIR indicates that the proposed project is inconsistent with General Plan policies 5.8.1.1 and 5.8.1.5 on the ground that "subsequent agreements" between the affected school districts and PPI "have yet to be formalized." However, neither policy mandates that such agreements be "formalized" prior to project approval. Rather, both policies allow the County to approve projects subject to a requirement that the applicant enter into school mitigation agreements with the affected school districts. Since Mitigation Meaasure 4.12.5 imposes just such a requirement, the proposed project is not inconsistent with the General Plan. The DEIR should be revised accordingly.	45-35
4.12-18	*Policy 5.8.2.2:* Please see comment regarding Page 4.12-17, above.	45-36
4.12-26	*Mitigation Measure 4.12.5:* Please see comment regarding Page 4.12-17, above. PPI's financial obligations under the required school mitigation agreements should be limited to payment of the standard, Countywide school impact fee and the reservation of the 10-acre elementary school site on the property. In addition, Mitigation Measure 4.12.5 should be revised to require that the parties enter into the required agreements prior to the approval of <u>final</u> subdivision maps, rather than at the time of tentative map approvals. This way, the mitigation for school impacts will occur closer in time to the actual creation of such impacts.	45-37
4.13-3	*Distribution Facilities:* The reference to a "one million gallon storage tank" should, consistent with Mitigation Measure 4.3.3.a, be changed to a "two million gallon storage tank."	45-38
4.13-12	*Section 4.13.2:* Please revise the title of this section to read: "Impacts and Mitigation Measures."	45-39

4.13-16	*Impact 4.13.2:* Please see comment regarding Page 4.13-3, above.	45-40
6-12	*Mitigation Measure 4.5.14:* Please see comments regarding Pages 4.5-29 and 32, above.	45-41
6-13	*Mitigation Measure 4.5.15:* Please see comment regarding Page 4.5-29, above.	45-42
6-18	*Mitigation Measure 4.8-7:* Please see comments regarding Pages 4.8-25 and 30, above.	45-43
6-29	*Impact 4.7.2:* Please see comment regarding Pages 4.7-11 to 15, above. *Impact 4.7.4:* Please see comment regarding Pages 4.7-19 to 23, above.	45-44

We very much appreciate this opportunity to comment on the Promontory Specific Plan DEIR. Please call me if you have any questions or would like further clarification of the comments in this letter.

Very truly yours,

DICKENSON, PEATMAN & FOGARTY

Linda Emerson

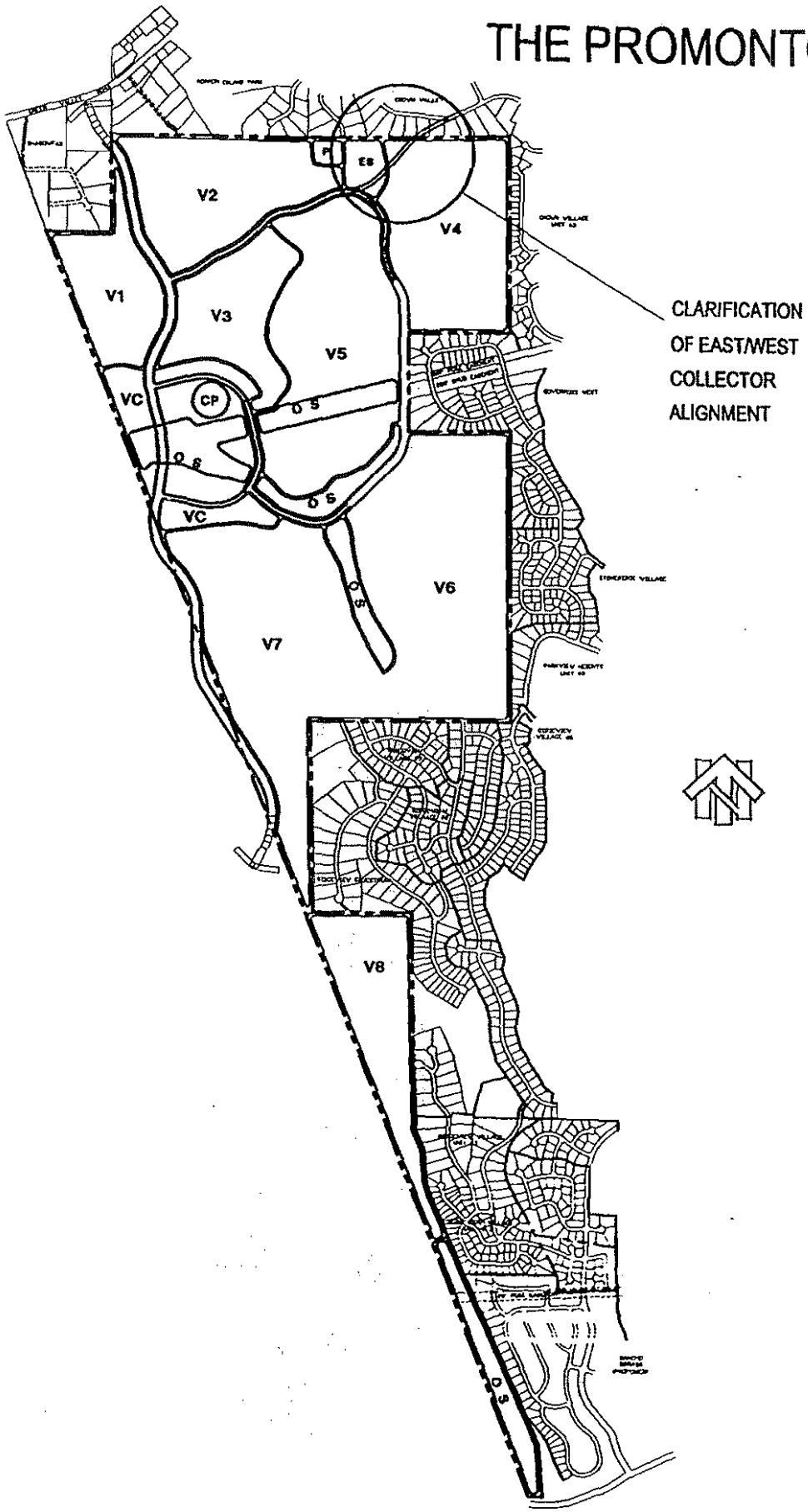
Linda Emerson

LE:cc
Attachments

cc: Stefan L. Manolakas

le\palisades\comment.lt4

THE PROMONTORY



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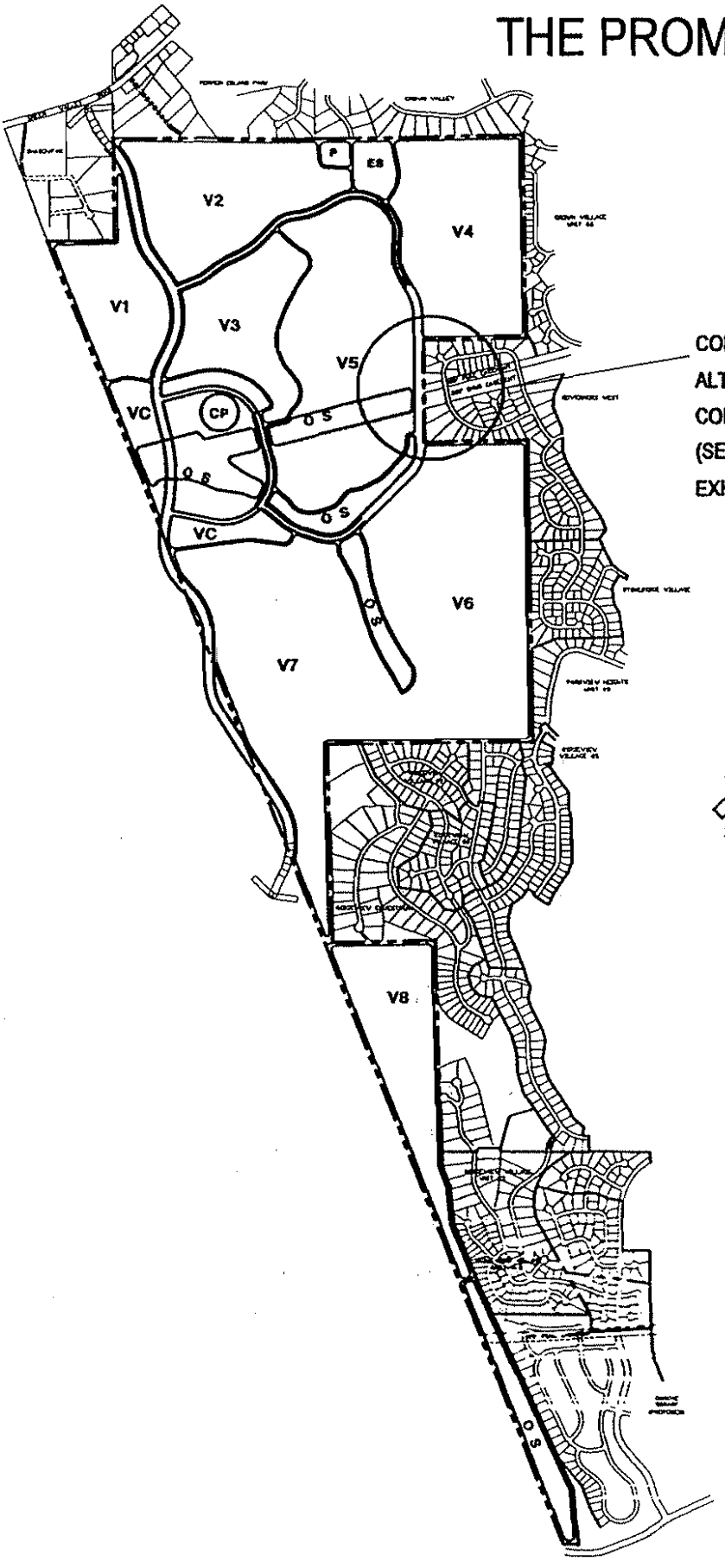
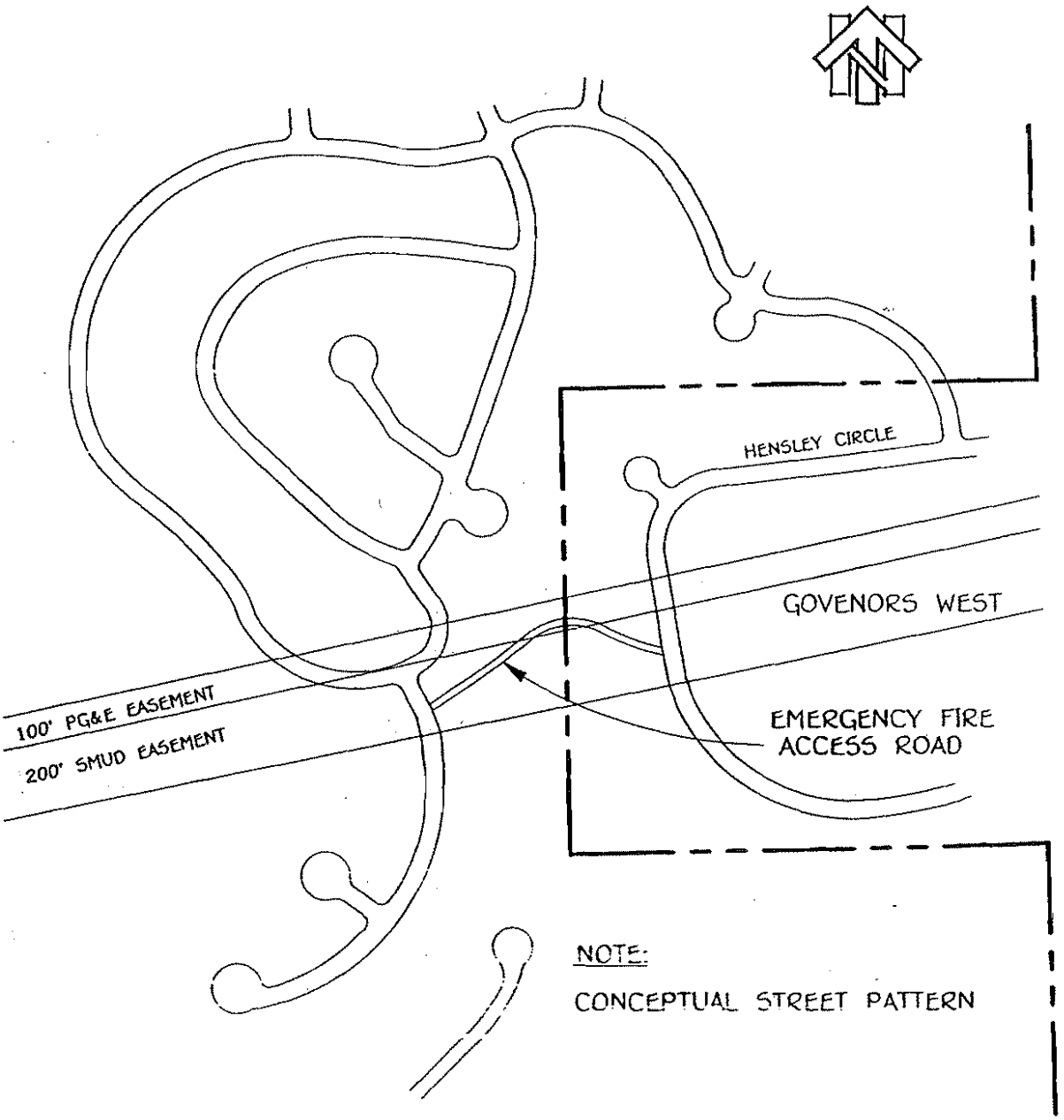


CONCEPTUAL ALTERNATIVE FOR COMMUNITY COLLECTOR (SEE ATTACHED EXHIBIT B)

EXHIBIT B

ALTERNATIVE TO HAVING A COMMUNITY COLLECTOR IN THE AREA ADJACENT TO HENSLEY CIRCLE IN GOVENORS WEST SUBDIVISION



45. LINDA EMERSON, ATTORNEY, DICKENSON, PEATMAN & FOGARTY

Response 45-1 The commentor's statements related to Public Resources Code Section 21083.3 are correct in reference to the relationship to the Draft EIR and the El Dorado County General Plan EIR. The Draft EIR does identify several impacts that were evaluated under the El Dorado County General Plan EIR, including the environmental issue areas of aesthetics, biological resources, air quality, noise, geology and soils, public services, and utilities and service systems. Mitigation measures identified for many of these impacts consist of General Plan policies, consistent with Public Resources Code Section 21083.3(c). However, there are several significant impacts in the environmental issue areas of land use, aesthetics, transportation and circulation, air quality, noise, biological resources, and hydrology and water quality that are "peculiar to the parcel or to the project" which were not addressed in the El Dorado County General Plan EIR. These impacts include 4.2.1, 4.3.1, 4.3.3, 4.3.6, 4.5.1, 4.5.2, 4.5.3, 4.5.4, 4.5.5, 4.5.6, 4.5.7, 4.5.8, 4.5.11, 4.5.12, 4.5.13, 4.5.14, 4.5.15, 4.6.6, 4.6.8, 4.7.1, 4.7.4, 4.8.4, 4.10.1, 4.10.2, 4.10.4, 4.10.5, 4.10.6, and 4.12.3.

Response 45-2 The following changes are made to the text of the Draft EIR to reflect revisions to the Promontory Specific Plan.

- Page 3-11, first paragraph, of the Draft EIR is revised to read:

  "The Land Use Plan designates a 10-acre elementary school site in the northern portion of the project site in order to serve the project and surrounding residential areas. This school site would be operated by the Rescue Unified School District. However, the developer is in discussion with the District for site relocation because the District is in need of a school site and the Crown Valley school site better suits their needs. If the elementary school site within the Crown Valley project is utilized for the construction of the elementary school, then the elementary school site within the proposed project will be designated for open space, park, roadway, and residential uses, consistent with the maximum dwelling units of 1,387."

Response 45-3 The following changes are made to the text of the Draft EIR to reflect revisions to the Promontory Specific Plan. These revisions also include changes to the discussion regarding maintenance of the private open space areas, which was not identified in this comment but is a revision of the Specific Plan.

- Page 3-17, last paragraph is revised to read:

"In order to reduce development impacts on the viewsheds and natural terrain of the uplands portion of the project site, the Specific Plan proposes to preserve approximately 184 acres of private open space as part of the site design of the residential villages and the application of the Specific Plan's Hillside Development Standards. Private open space would consist of restricted areas within residential lots that would not be allowed to be developed, landscaped, or otherwise altered. Fencing shall be permitted within the private open space areas, but shall be limited to open view fencing. These private open space areas would be placed in perpetual conservation easements and would be identified at the tentative map stage of residential villages. **Figure 3-9** illustrates the proposed use of conservation easements (private open space) to reduce adverse effects to the natural terrain as part of site development. Maintenance of private open space areas will be maintained by the property owner, a homeowners association ~~costs of private open space areas may be included in a lighting and landscaping assessment district~~ or some other form of property assessment."

Response 45-4 The commentor's statements in reference to CEQA Guidelines Section 15182 are correct in regards to subsequent residential projects consistent with an approved specific plan. However, it should be mentioned that County staff will perform an review of subsequent residential development applications for the project to determine the project's consistency with the specific plan and its associated conditions of approval.

Since the project applicant will provide development standards to protect private viewsheds in the revised Promontory Specific Plan, the following text changes are made to the Draft EIR. These changes also include clarifications from the project applicant on the development standards described in Comment 45-4.

- Page 4.3-12, first full paragraph is revised to read:

"This analysis evaluates the project's alteration of the visual character of the project from the sensitive viewsheds (i.e., City of Folsom, U.S. Highway 50, and the El Dorado Hills Area) identified above from public viewing areas. ~~No~~ Potential impacts to ~~analysis of~~ private viewsheds ~~was~~ were also considered ~~performed~~ as part of this analysis. ~~Subsequent tentative subdivision maps and other approvals are expected to address potential adverse effects to private views.~~"

- Page 2-13 (Table 2-1, Impact 4.3.4), page 4.3-18 (Impact 4.3.4), Impact 4.3.4 is revised to read:

  "4.3.4 As viewed from existing and planned residential areas in El Dorado Hills area adjacent to the project site, implementation of the proposed project could potentially obstruct ~~public~~ scenic views of Folsom Lake and the lower elevation areas of Sacramento County. This would be a less than significant impact."

- Page 4.3-19, under Impact 4.3.4, first paragraph, the last two sentences are revised to read:

  "~~As previously described, only adverse effects to public views was analyzed. However, subsequent tentative subdivision maps and other approvals are expected to address potential adverse effects to private views~~However, ultimate development of the project site could potentially obstruct scenic private views of residents adjacent to the project site in the El Dorado Hills area. This potential impact would be minimized by the following design standard set forth in the revised Promontory Specific Plan:

  "Where the project site abuts existing homes, residential lot lines within the project shall be staggered from residential lot lines outside of the project so as to minimize the viewshed impacts to existing homes. Where the project site abuts existing homes, the minimum residential lot size within the project shall be 30,000 square feet. This will allow homes to be situated on such lots so as to minimize the impact to views of existing homes. (McDougall, 1997)"

Response 45-5 The following changes are made to the text of the Draft EIR to reflect revisions to the Promontory Specific Plan. These changes also include clarifications from the project applicant on the development standards described in Comment 45-5.

- Page 4.3-13, items 6 and 8 are revised to read:

  "6. Restriction of the building envelope (consisting of all graded and ~~impermeable~~ surfaces) to ~~30,000~~15,000 square feet of the lot area."

  "8. Solid ~~Fencing~~ fencing is restricted to the development envelope and cannot exceed 6 feet in height. ~~Rear yard fencing shall be open view.~~"

Response 45-6 The following changes to the Promontory Specific Plan are incorporated into the text of the Draft EIR.

- Page 4.3-15, item 9 is revised to read:

"9. Building colors and materials shall consist of the following standards:

Roof Color:

a. Roofs shall be earth tones, with low or muted chrome.

b. Avoid brighter, higher chrome colors that will be visually prominent.

Roof Materials:

a. Tiles, shingles, slate, high quality raised composition/asphalt, and high quality simulated materials (e.g., concrete/fiberglass shakes) in natural colors are encouraged.

b. The roofing material must be consistent with the style of the house. Avoid "plastic" looking, reflective or glossy materials or other low quality materials.

c. Avoid metal or glass roofs that might reflect sunlight.

d. Roof vent pipes and roof fixtures should be painted a flat color to match the roof color.

Wall Color:

a. Wall surfaces shall utilize muted, warm earthtone colors. Medium values with low chroma are encouraged.

b. Avoid highly reflective, bright white stucco surfaces (e.g., refrigerator or "appliance" white).

c. Bright white may be used for window sash, door, trellis and trim color or for wood siding accents. (Emerson, 1997)

~~shall be earth tone. Roof colors shall be dark earth tones, while wall colors are to utilize muted, warm earth tone colors (Promontory Specific Plan, Palisades, 1997).~~"

Response 45-7 Mitigation Measure 4.3.1e is intended to cover all development situations where such fencing and/or walls may be used (e.g., residential development, commercial areas, parks, and major project roadways). The following text changes are made to the text of Mitigation Measure 4.3.1e in the Draft EIR.

- Page 2-12 (Mitigation Measure 4.3.1e), page 4.3-17 (Mitigation Measure 4.3.1e), page 6-8 (Mitigation Measure 4.3.1e), Mitigation Measure 4.3.1e is revised to read:

  "4.3.1e Project-wide solid fences and walls shall be avoided to the maximum extent feasible (except within individual residential building envelopes). If solid fences and walls are used, the color and material used will blend with the natural features of the project site. Continuous fences and walls shall be softened with landscaping."

Response 45-8 See response to Comment 45-4.

Response 45-9 See Response to Comment 31-4.

Response 45-10 Total daily trip generation resulting from the development of the elementary school site off the project site would reduce from 21,857 to about 21,615. This change is not expected to change the traffic impact analysis results contained in the Draft EIR. Since Table 4.5-6 identifies a "worst case" trip generation scenario, no changes are made to the Draft EIR.

Response 45-11 Under existing plus project conditions, all trips destined to and from areas south of Wilson Boulevard must travel through the El Dorado Hills Boulevard/Wilson Boulevard intersection. As a result, the intersection of El Dorado Hills Boulevard/Olson Lane only receives a portion of the project traffic that travels through the El Dorado Hills Boulevard/Wilson Boulevard intersection.

Response 45-12 The following text changes are made to the Draft EIR.

- Page 2-15 (Table 2-1, mitigation measures 4.5.2a, 4.5.2b, and 4.5.2c) and Page 4.5-29 (mitigation measures 4.5.2a, 4.5.2b, and 4.5.2c), mitigation measures 4.5.2a, 4.5.2b, and 4.5.2c are revised to read:

  "4.5.2a Widen Green Valley Road from two lanes to four lanes from El Dorado Hills Boulevard to the El Dorado County line ~~in El Dorado County to the East Natoma Street/Blue Ravine Road/Green Valley Road intersection in the City of Folsom.~~

4.5.2b Widen Green Valley road from two lanes to four lanes in the City of Folsom from the El Dorado County line to the East Natoma Street/Blue Ravine Road/Green Valley Road intersection.

4.5.2~~c~~b Construct a free-flow right-turn lane from westbound Green Valley Road to northbound East Natoma Street and widen northbound East Natoma Street to include two departing lanes for a minimum of 1,000 feet.

4.5.2d~~e~~ Widen southbound East Natoma Street to include dual left-turn lanes and one exclusive right-turn lane."

- Page 2-16 (Table 2-1, Mitigation Measure 4.5.3a) and Page 4.5-30 (Mitigation Measure 4.5.3a), Mitigation Measure 4.5.3a is revised to read:

"4.5.3a Implement m~~M~~itigation m~~M~~easures 4.5.2a and 4.5.2b."

- Page 2-17 (Table 2-1, Mitigation Measure 4.5.7a) and Page 4.5-33 (Mitigation Measure 4.5.7a), Mitigation Measure 4.5.7a is revised to read:

"4.5.7a Implement m~~M~~itigation m~~M~~easures 4.5.2a and 4.5.2b."

Discussion regarding the project applicant fair-share contribution to El Dorado Hills RIF and West Slope TIM programs is provided on page 4.5-29 of the Draft EIR. No further modifications to the Draft EIR are necessary.

Response 45-13 See Response to Comment 45-13.

Response 45-14 The following text changes are made to the Draft EIR.

- Page 4.5-32 (Mitigation Measure 4.5.5), the first paragraph after Mitigation Measure 4.5.5 is revised to read:

"The signalization of the intersection is included~~not currently~~ in the 1998 update El Dorado Hills RIF. These fees are typically paid concurrently with the issuance of building permits, although the project applicant may construct the improvements and be reimbursed by the County. ~~Should the intersection be added to the RIF program, and the applicant signalizes the intersection, the applicant may be eligible for reimbursement or credit towards the RIF~~. Implementation of this mitigation measure will reduce this impact to a less-than-significant level because the a.m. and p.m. peak-hour operations would improve to LOS "C" under existing plus project conditions."

Response 45-15 See Response to Comment 45-12.

Response 45-16 The following changes are made to the text of the Draft EIR:

- Page 4.5-34, Impact 4.5.8, the first paragraph is revised to read:

  "El Dorado County is completing a combined Project Study Report/Project Report (PSR/PR)~~PSR~~ for the design of interchange improvements that will alleviate existing problems and accommodate future traffic levels. The project applicant will contribute to the interchange improvement as stated in Mitigation Measure 4.5.8."

Response 45-17 Since the specific design of the barrier has yet to be established or reviewed by the El Dorado County of Transportation and the El Dorado Hills Fire Department, defining its specific location is considered premature at this time. Thus, no changes are made to the Draft EIR.

Response 45-18 See Response to Comment 45-12.

Response 45-19 The following changes are made to the text of the Draft EIR:

- Page 2-10 (Table 2-1, Mitigation Measure 4.6.1), page 4.6-10 (under Mitigation Measures), page 6-14 (below Mitigation Measure 4.6.9) the first sentence is revised to read:

  "4.6.1 Prior to the approval of improvement plans for subsequent development,..."

Response 45-20 Page 4.7-4 of the Draft EIR does identify that the General Plan does allow for a noise standard of 65 dB, L_{dn}/CNEL under certain circumstances. However, the following changes are made to the text of the Draft EIR.

- Page 4.7-4, Table 4.7-1 is revised to read:

TABLE 4.7-1
MAXIMUM ALLOWABLE NOISE EXPOSURE FOR TRANSPORTATION NOISE SOURCES

Land Use	Outdoor Activity Area /a/ L_{dn}/CNEL, dB	Interior Spaces	
		L_{dn}/CNEL, dB	L_{eq}, dB /b/
Residential	60 /c/	45	--
Transient Lodging	60 /c/	45	--
Hospitals, Nursing Homes	60 /c/	45	--
Theaters, Auditoriums, Music Halls	--	--	35
Churches, Meeting Halls, Schools	60 /c/	--	40
Office Buildings	--	--	45
Libraries, Museums	--	--	45
Playgrounds, Neighborhood Parks	70	--	--

~~/a/Note:~~ 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 L_{dn} shall be applied at the building facade, in addition to a 60 dB L_{dn} criterion at the outdoor activity area. In Rural Regions, an exterior noise level criterion of 60 dB L_{dn} shall be applied at a 100-foot radius from the residence unless it is within Platted Lands where the underlying land use designation is consistent with Community Region densities in which case the 65 dB L_{dn} may apply. The 100-foot radius applies to properties which are five acres and larger; the balance will fall under the property line requirement. ~~Refer to General Plan for detailed discussion regarding allowable noise exposure levels.~~

/b/ As determined for a typical worst-case hour during periods of use.

/c/ Where it is not possible to reduce noise in outdoor activity areas to 60 dB L_{dn} /CNEL or less using a practical application of the best-available noise reduction measures, an exterior noise level of up to 65 dB L_{dn} /CNEL may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.

SOURCE: El Dorado County, 1996.

Response 45-21 The following changes are made to the text of the Draft EIR.

- Page 4.7-9, third paragraph, the last two sentences are revised to read:

"~~Therefore, noise~~ Noise impacts were evaluated against exterior noise ~~standards~~ significance criteria in this EIR. If the exterior noise standards under the El Dorado County General Plan is met for a residence (60 dBA, L_{dn}, and under certain circumstances, 65 DBA, L_{dn}), it is assumed that the interior noise level is similarly met."

Response 45-22 The significance criteria in Section 4.7, Noise, in the Draft EIR was based on the general noise standards of the El Dorado County General Plan and the City of Folsom General Plan for residential areas (60 DBA under typical conditions), as well as substantial increases to existing noise levels. The 60 dBA significance criteria was used to evaluate a worst-case noise scenario for the CEQA analysis and does not include consideration of El Dorado County

General Plan provisions that allow 65 dB L_{dn} as the maximum noise level for residential areas.

Although significant noise impacts are identified in the Draft EIR, the proposed project would consistent with El Dorado County General Plan noise standards. As previously identified, 65 dB L_{dn} is the maximum noise level for residential land uses allowed under the General Plan. Thus, project noise impacts (impacts 4.7.2, 4.7.3, and 4.7.4) anticipated to residential areas along those roadways evaluated in the Draft EIR are not inconsistent with noise standards set forth in Table 6-1 of the General Plan. Project noise contributions to existing residential areas along El Dorado Hills Boulevard, Green Valley Road, and Francisco Drive that are currently exposed to noise levels exceeding standards set forth in Table 6-1 of the General Plan would not be inconsistent with the General Plan as identified in Policy 6.5.1.4.

The following text changes are made to the Draft EIR to clarify the noise impact analysis.

- Page 4.7-8, the bulleted text is revised to read:

  "A change in community noise exposure creating an adverse change in level of compatibility of surrounding land uses as generally defined in El Dorado County's Noise Element and the City of Folsom General Plan. Thus, a 60 dBA noise standard was used to evaluate impacts to residential areas. For example, if the project where to exceed 60 dBA~~the noise performance standards outlined in the County General Plan (**Table 4.7-1**)~~ as measured at the property line of an adjacent residential land use, project generated noise would be considered significant."

- Page 4.7-9, second paragraph, the second sentence is revised to read:

  "A change in noise level as a consequence of project implementation might not be considered significant when evaluated by **Table 4.7-4**, but may create a condition where the existing land use is exposed to noise levels beyond 60 dBA~~no longer compatible with the General Plan's noise performance standards as outlined in **Table 4.7-1**~~."

- Page 2-23 (Table 2-1, Impact 4.7.2), page 4.7-11, Impact 4.7.2 is revised to read:

  "4.7.2 Upon project buildout, subsequent local traffic increases would increase noise levels along local arterial roads. P.M. peak-hour noise levels would increase along segments of Green Valley

Road, Francisco Drive, East Natoma Street, and El Dorado Hills Boulevard, exposing existing residents to excessive noise levels~~noise levels exceeding the performance standards outlined in the El Dorado County General Plan Noise Element and the City of Folsom Noise Element where applicable~~. This would be a significant unavoidable impact."

- Page 4.7-14, second paragraph is revised to read:

"Predicted noise levels were compared to El Dorado County and City of Folsom general noise performance standards for residential land uses. Under both General Plan's, the normally acceptable noise exposure level is 60 dBA, L_{dn}. Impacts are evaluated against this criterion for road segments in both the City of Folsom and El Dorado County."

- Page 4.7-14, fourth paragraph is revised to read:

"Although only the road segment Wilson Boulevard to the West Bound Highway 50 On-ramp had a change in noise exposure of more than 1.5 dBA (this would only affect residences between the road segment center line and the existing 65 dBA contour), noise exposure can be significant if an existing residential receptor is subsequently exposed to noise levels exceeding the 60 dBA standard.~~General Plan's noise/land use compatibility standards~~. On all road segments, except Green Valley Road between East Natoma Street and the proposed Russell Ranch Boulevard and El Dorado Hills Boulevard between Francisco Drive and the proposed east/west collector, existing residential noise receptors closest Green Valley Road, Francisco Drive and El Dorado Hills Boulevard could potentially experience a change in noise exposure exceeding 60 dBA~~the performance standards outlined in the County and City's General Plan Noise Element and in **Table 4.7-1**~~ as a consequence of increased noise contour distances. This would be a significant unavoidable impact."

- Page 4.7-15, the fourth sentence is revised to read:

"However, on all road segments, existing residential noise receptors closest to Green Valley Road, Francisco Drive, East Natoma Street and El Dorado Hills Boulevard could potentially experience a change in noise exposure exceeding 60 dBA~~the performance standards outlined in the County and City's General Plan Noise Element and in **Table 4.7-1**~~ as a consequence of increased noise contour distances."

- Page 6-16, the first paragraph is revised to read:

  "Upon project buildout, subsequent local traffic increases would increase noise levels along local arterial roads. P.M. peak hour noise levels would increase along segments of Green Valley Road, Francisco Drive, East Natoma Street, and El Dorado Hills Boulevard, exposing existing residents to noise levels exceeding 60 dBA~~the performance standards outlined in the El Dorado County General Plan Noise Element and the City of Folsom Noise Element where applicable~~."

- Page 6-16, third paragraph, the fourth sentence is revised to read:

  "However, on all road segments, existing residential noise receptors closest to Green Valley Road, Francisco Drive, East Natoma Street and El Dorado Hills Boulevard could potentially experience a change in noise exposure exceeding 60 dBA~~the performance standards outlined in the County and City's General Plan Noise Element and in Table 4.7-1 (see Section 4.7, Noise)~~ as a consequence of increased noise contour distances."

- Page 2-23 (Table 2-1, Impact 4.7.3), and page 4.7-15, Impact 4.7.3 is revised to read:

  "4.7.3 Resultant traffic along the proposed Russell Ranch Boulevard extension would expose residents of the Shadowfax subdivision and Amys Lane to excessive noise levels ~~exceeding the performance standards of the El Dorado County Noise Element and Table 4.7-1~~. This would be a significant impact."

- Page 4.7-16, under "Existing", the first sentence is revised to read:

  "Increased ambient noise levels at Residence #4, as a consequence of project implementation, would exceed 60 dBA ~~create a condition of General Plan noise/land use incompatibility~~ resulting in a significant impact."

- Page 4.7-18, under "Cumulative", the first sentence is revised to read:

  "Increased ambient noise levels at Residence #1, as a consequence of project implementation, would exceed 60 dBA ~~create a condition of~~

~~General Plan noise/land use incompatibility~~ resulting in a significant impact."

- Page 6-16, the fourth paragraph is revised to read:

"Resultant traffic along the proposed Russell Ranch Boulevard extension would expose residents of the Shadowfax subdivision and Amys Lane to excessive noise levels ~~exceeding the performance standards of the El Dorado County Noise Element and **Table 4.7-1** (see Section 4.7, Noise)~~."

- Page 6-16, fifth paragraph, the first sentence is revised to read:

"Increased ambient noise levels at Residence #1(see Section 4.7, Noise), as a consequence of project implementation, exceed 60 dBA~~would create a condition of General Plan noise/land use incompatibility~~ resulting in a significant impact."

- Page 4.7-21, the first paragraph is revised to read:

"**Table 4.7-13** lists the road segment and associated residential receptors that would experience a significant noise impact under the existing and cumulative development conditions as a function of noise level change and exceedance of 60 dBA~~the County's noise standards~~."

Response 45-23 See Response to Comment 45-22.

Response 45-24 The comment is correct. Only two species, stinkbells and hoary navarretia have been identified as having high potential to occur within the project site. However, there are several species which have a varying degree of potential to occur at the project site. In order to clarify the issue of the potential for special status species occurrences at the project site, several edits have been made to Table 4.8-2 in the Draft EIR have been made to refine categories relating to "Potential for Occurrence" and do not reflect additional information or change in the level of significance.

- Table 4.8-2 (pages 4.8-15 through 4.8-19 of the Draft EIR) has been revised to read:

TABLE 4.8-2
SPECIAL STATUS SPECIES CONSIDERED IN THE EVALUATION OF THE PROJECT SITE

Species that are Listed, Proposed for Listing, or are Candidates for Listing

Scientific Name Common name	Listing Status USFWS/ CDFG/CNPS	General Habitat	Potential for Occurrence	Period of Identification
ANIMALS				
Birds				
Buteo swainsoni Swainson's hawk	FC/CT	Nests in oak savanna and open riparian forests.	**Medium Potential.** The project site provides foraging habitat. No known nesting pairs are known from the site or immediate area.	March-August
~~*Buteo swainsoni* Swainson's hawk~~	~~–/CT~~	~~Nests in large trees adjacent to grasslands~~	~~**Medium Potential.** The site provides only marginal habitat for this species.~~	~~March-August~~
Empidonax traillii Willow flycatcher	–/CE	Nests in dense riparian cover	**Low Potential.** The site provides only limited ~~does not support good~~ habitat for this species.	May-August
Haliaeetus leucocephalus Bald eagle	FT/CE	Ocean shorelines, lake margins, and river courses for both nesting and wintering.	**Potential Wintering Habitat.** The site does provides wintering habitat for this species.	May-August
Reptiles				
Thamnophis couchi gigas Giant garter snake	FC/CT	Marshes, streams, and sloughs of the Central Valley.	**Unlikely ~~Low Potential~~.** The site is located outside this species known range. The site does not provide suitable habitat.	Winter rains and March-April
Amphibians				
Ambystoma californiense California tiger salamander	FC/CSC	Wintering sites occur in grasslands occupied by burrowing mammals; breed in ponds and vernal pools	**Low Potential.** The site provides only limited ~~does not support good~~ habitat for this species.	Winter rains and March-April
Rana aurora draytonii California red-legged frog	FT/CSC	Breed in stock ponds, pools, and slow moving streams absent of bullfrog	**Low Potential.** Probably extirpated from the Central Valley. The project site provides only limited habitat.	May-August
Invertebrates				
Branchinecta lynchi Vernal pool fairy shrimp	FT/–	Life cycle within vernal pools and valley foothill grassland swales	**Unlikely.** No vernal pools occur on site.	winter rains
Desmocerus californicus dimorphus Valley elderberry longhorn beetle	FT/–	Valley elderberry throughout the Central Valley	**Unlikely ~~Low Potential~~.** No blue elderberry were located on site.	year-round (exit holes in shrub stems)
Lepidurus packardi Vernal pool tadpole shrimp	FE/–	Life cycle within vernal pools and valley foothill grassland swales	**Unlikely.** No vernal pools occur on site.	~~winter rains~~
Plants				
Ceanothus roderickii Pine Hill ceanothus	FE/CR/List 1B	Ultramafic soils within chaparral and woodland habitats.	**Unlikely.** No ultramafic soils occur on the project site.	May-June
Chamaesyce hooveri Hoover's spurge	FPT/–/List 1B	vernal pools	**Unlikely.** No vernal pools occur on site.	July

Scientific Name Common name	Listing Status USFWS/ CDFG/CNPS	General Habitat	Potential for Occurrence	Period of Identification
Chlorogalum grandiflorum Red Hills soaproot	FE/--/List 1B	Ultramafic soils within chaparral and woodland habitats.	**Unlikely.** No ultramafic soils occur on the project site.	May-June
Fremontodendron decumbens Pine Hill flannelbush	FE/CR/List 1B	Ultramafic soils within chaparral and woodland habitats.	**Unlikely.** No ultramafic soils occur on the project site.	April-June
Gratiola heterosepala Boggs Lake hedge-hyssop	--/CE/List 1B	vernal pools	**Unlikely.** No vernal pools occur on site.	April-June
Juncus leiospermus var. *ahartii* Ahart's dwarf rush	FC/--/List 1B	vernal pools	**Unlikely.** No vernal pools occur on site.	March-May
Orcuttia tenuis Slender orcutt grass	FPT/CE/List 1B	vernal pools	**Unlikely.** No vernal pools occur on site.	May-July
Orcuttia stricta Sacramento orcutt grass	FE/CE/List 1B	vernal pools	**Unlikely.** No vernal pools occur on site.	May-June
Senecio layneae Layne's butterweed	FPT/CR/List 1B	Ultramafic soils within chaparral, woodland and stream habitats.	**Unlikely.** No ultramafic soils occur on the project site.	April-July
Tuctoria greenei Green's tuctoria	FPE/CR/List 1B	vernal pools	**Unlikely.** No vernal pools occur on site.	May-July
Wyethia reticulata El Dorado County mule ears	FE/--/List 1B	Ultramafic soils within chaparral and woodland habitats.	**Unlikely.** No ultramafic soils occur on the project site.	May-July

Species that are Federal or State Species of Concern

Scientific Name Common name	Listing Status USFWS/ CDFG/CNPS	General Habitat	Project Site Occurrence	Period of Identification
ANIMALS				
Mammals				
Myotis ciliolabrum Small-footed myotis	FSC/CSC	Forages over grasslands and roosts in caves and rock crevices.	**Low Potential.** The project site does not provide suitable roosting habitat. Suitable foraging habitat present on the project site.	February-August
Myotis evotis Long-eared bat	FSC/CSC	Forages over grasslands and roosts in trees, caves and rock crevices.	**Potential Resident.** The project site provides suitable roosting habitat.	February-August
Myotis thysanodes Fringed bat	FSC/CSC	Forages over grasslands and roosts in trees, caves and rock crevices.	**Low Potential.** The project site does not provide suitable roosting habitat due to species known range.	February-August
Myotis volans Long-legged myotis	FSC/CSC	Forages over grasslands and roosts in trees, caves and rock crevices.	**Potential Resident.** The project site provides suitable roosting habitat.	February-August
Myotis yumanensis Yuma myotis	FSC/CSC	Forages over grasslands and roosts in trees, caves and rock crevices.	**Potential Resident.** The project site provides suitable roosting habitat.	February-August
Plecotus townsendii Pacific western big-eared bat	FSC/CSC	Mesic habitats, roosting in caves, mines, tunnels and buildings.	**Low Potential.** The project site does not provide suitable roosting habitat.	February-August

Scientific Name Common name	Listing Status USFWS/ CDFG/CNPS	General Habitat	Project Site Occurrence	Period of Identification
Birds				
Agelaius tricolor Tricolored blackbird	FSC/CSC	Nests in cattails or thistles, large enough to support a minimum of 50 pairs, adjacent to water.	Unlikely ~~Low Potential~~. The project site does not provide suitable habitat.	February-June
Accipiter cooperi Cooper's hawk	–/CSC	Nest in riparian areas and oak woodlands.	**Potential Resident.** Potential nesting habitat occurs throughout the site.	March-August
Accipiter striatus Sharp-shinned hawk	–/CSC	Nest in riparian areas and oak woodlands.	**Potential Resident.** Potential nesting habitat occurs throughout the site.	September-March
Aquila chrysaetos Golden eagle	BEPA/CSC	Nests on cliffs and tall trees on hillsides.	**Low Potential.** The project site does not provide suitable nesting habitat. Suitable foraging habitat is present at the project site.	February-June
Asio otus Long-eared owl	–/CSC	Nests in wet meadows and grasslands.	**Potential Resident.** Potential nesting habitat within the grassland areas.	March-July
Asio flammeus Short-eared owl	–/CSC	Nests in wet meadows and grasslands.	**Potential Resident.** Potential nesting habitat within the grassland areas.	March-July
Birds				
Buteo regalis Ferruginous hawk	FSC/CSC	Wintering grounds consist of open grasslands.	**Potential Winter Visitor.** The project site provides winter foraging habitat.	February-June
~~*Buteo swainsoni* Swainson's hawk~~	~~FC/CT~~	~~Nests in oak savanna and open riparian forests.~~	~~**Potential Foraging Habitat.** The project site provides foraging habitat. No known nesting pairs are known from the site or immediate area.~~	~~February-June~~
Circus cyaneus Northern harrier	–/CSC	Nests in wet meadows.	**Potential Resident.** Potential nesting habitat within the grassland areas.	year-round
Dendroica petechia Yellow warbler	–/CSC	Nests in dense riparian cover.	**Low Potential.** The site provides only marginal habitat.	April-August
Elanus leucurus White-tailed kite	–/3511	Nests in shrubs and trees adjacent to grasslands.	~~Medium~~ Potential Resident. Potential nesting habitat within the grassland areas. ~~The site provides marginal habitat.~~	year-round
Eremophila alpestris actia California horned lark	–/CSC	And grassland and sagebrush meadows.	**Medium Potential.** Potential nesting habitat within the grassland areas.	March-July
Icteria virens Yellow breasted chat	–/CSC	Nests in dense riparian cover.	**Low Potential.** The site provides only marginal habitat.	April-September

Scientific Name Common name	Listing Status USFWS/ CDFG/CNPS	General Habitat	Project Site Occurrence	Period of Identification
Lanius ludovicianus Loggerhead shrike	FSC/CSC	Scrub, open woodlands, and grasslands.	**Medium Potential.** Potential nesting habitat within the grassland areas	March-July
Speotyto cunicularia Burrowing owl	FSC/CSC	Nests in burrows in grassland areas where ground squirrels are present.	**Potential Resident.** Potential nesting habitat within the grassland areas.	March-July
Reptiles				
Clemmys marmorata marmorata Northwestern pond turtle	FSC/CSC	Rivers and streams with some canopy cover.	**Unlikely.** The site does not support suitable habitat.	May-September
Amphibians				
Scaphiopus hammondii Western spadefoot toad	–/CSC	Breed in vernal pools and seasonal wetlands.	**Low Potential.** The site provides only limited ~~does not support good~~ habitat for this species.	May-August
PLANTS				
Balsamorhiza macrolepis var. *macrolepis* Big-scale balsam root	–/–/List 1B	valley foothill grasslands on serpentine soils.	**Unlikely.** The project site does not contain suitable habitat.	March -June
Cordylanthus mollis ssp. *hispidus* Hispid bird's-beak	FSC/–/List 1B	alkaline meadows and playas	**Unlikely.** The project site does not contain suitable habitat.	June-September
Downingia pusilla Dwarf downingia	–/–/List 2	mesic valley foothill grasslands and vernal pools	**Low Potential.** No vernal pools occur on site.	March-May
Eryngium pinnatisectum Tuolumne button celery	FSC/–/List 4	vernal pools	**Low Potential.** No vernal pools occur on site.	June
Hibiscus lasiocarpus Rose mallow	–/–/List 2	freshwater marshlands	**Unlikely.** Potential habitat does not occur on-site.	August-September
Ivesia serioleuca Plumas ivesia	FSC/–/List 1B	meadows and vernal pools usually on volcanic soils	**Low Potential.** The site provides only limited ~~does not support good~~ habitat for this species.	May-September
Juncus leiospermus var. *leiospermus* Red Bluff dwarf rush	–/–/List 1B	valley foothill grasslands and vernal pools	**Low Potential.** No vernal pools occur on site.	March-May
Legenere limosa Legenere	FSC/–/List 1B	vernal pools	**Unlikely ~~Low Potential~~.** No vernal pools occur on site.	May-June
Sagittana sanfordii Sanford's arrowhead	FSC/List 1B	freshwater marsh	**Medium Potential.** This species could occur within the seasonal wetlands on-site.	May-August

Other Species (may or may not be considered "special status")

Scientific Name Common name	Listing Status USFWS/ CDFG/CNPS	General Habitat	Project Site Occurrence	Period of Identification
ANIMALS				
Ardea herodias Great blue heron	--/--/--	colonial nester in tall trees, cliffsides, and sequestered spots on marshes	**Low Potential.** This species is expected as an occasional visitor to the site. No suitable nesting habitat present on the project site.	February-June
Casmerodius albus Great egret	--/--/--	colonial nester in large trees	**Low Potential.** This species is expected as an occasional visitor to the site. No suitable nesting habitat present on the project site.	February-June
PLANTS				
Astragalus pauperculus Depauperate milk vetch	--/--/List 4	valley foothill grasslands, vernally mesic on volcanic soils	**Low Potential.** The site provides only limited ~~does not support good~~ habitat for this species.	March-May
Fritillaria agrestis Stinkbells	--/--/List 4	valley foothill grasslands on clay soils	**High Potential.** This species could occur within the grasslands and seasonal wetlands on-site.	March-April
Navarretia eriocephala Hoary navarretia	--/--/List 4	valley foothill grasslands	**High Potential.** This species could occur within the grasslands and seasonal wetlands on-site.	May-June

STATUS CODES:

FEDERAL: (U.S. Fish and Wildlife Service)

FE = Listed as Endangered by the Federal Government
FT = Listed as Threatened by the Federal Government
FPE = Proposed for Listing as Endangered
FPT = Proposed for Listing as Threatened
FC = Candidate for Federal listing
FSC = Federal Species of Special Concern

STATE: (California Department of Fish and Game)

CE = Listed as Endangered by the State of California
CT = Listed as Threatened by the State of California
CR = Listed as Rare by the State of California (plants only)
CSC = California species of special concern
3511 = Fully protected bird species

California Native Plant Society
List 1A = Plants believed extinct
List 1B = Plants rare, threatened, or endangered in California and elsewhere
List 2 = Plants rare, threatened, or endangered in California but more common elsewhere
List 3 = Plants about which more information is needed
List 4 = Plants of limited distribution

SOURCE: USFWS 1995 and 1996, Skinner and Pavlik, 1995, CNDDB 1996a.

Based on the changes listed above that were made to the Table 4.8-2, the "Potential for Occurrence" categories can be generally defined as follows:

Unlikely: The project site does not support suitable habitat for a particular species.

Low Potential: Project site only provides limited habitat for a particular species. In addition, the known range for a particular species may be outside of the project area.

Medium Potential: The project site provides suitable habitat for a particular species.

Potential Resident: The project site provides suitable habitat for a particular species. Additionally, the species has been known to occur in the area.

Potential Winter Resident: The project site provides suitable wintering foraging habitat for a particular species.

High Potential: The project site provides ideal habitat conditions for a particular species.

Species that have been observed in the vicinity of the project site include long-eared owl (foraging), Copper's hawk, sharp-shinned hawk, white-tailed kite, and Swainson's hawk (foraging) (ESA, 1991).

- Page 4.8-14. Second to last paragraph of the Draft EIR, last sentence has ~~been revised~~ to read:

  "Of the plants and animals in **Table 4.8-2,** several special status species ~~are highly likely~~ may potentially occur on the project site, based on a reconnaissance-level area assessment, existing information in the

California Natural Diversity Data Base, and sightings by ESA biologists in 1996."

Response 45-25 The following changes have been made to the text of the Draft EIR.

- Page 4.8-25, first sentence under Impact 4.8.1 has been revised to read:

  "Most of the land use areas proposed under the Specific Plan, with the exception of the village center and Villages 1 and 3, contain oak woodland (see **Table 4.8-1**)."

Response 45-26 Mitigation Measure 4.8.1 does identify that tree mitigation measures cover the entire project site rather than individual portions of the project. This mitigation measure would require its inclusion in the approval of subsequent project development, but still requires that lost tree canopy be replaced for the entire project site, consistent with General Plan Policy 7.4.4.4. No changes are made to the Draft EIR.

Response 45-27 The following changes have been made to the text of the Draft EIR.

- Page 2-26 (Table 2-1, second bulleted item) and page 4.8-28 (second bulleted item) the first sentence has been revised to read:

  "The Monitoring and Management Plan shall identify monitoring and management techniques for a recommended time ~~minimum~~ period (as determined during development of the Plan) ~~of ten years~~ following implementation."

- Page 6-19, third bulleted item, the first sentence has been revised to read:

  "The Monitoring and Management Plan shall identify monitoring and management techniques for a recommended time ~~minimum~~ period (as determined during development of the Plan) ~~of ten years~~ following implementation."

  The U.S. Army Corps of Engineers included a Special Condition in the Individual Section 404 Permit that was issued to the project applicant which required the creation of 14.1 acres of oak woodland buffer. These created woodlands would be subject to Special Condition #4 of the permit (listed on page 4.8-11 of the Draft EIR) which reads: "Monitoring of oak woodlands for ten years during years 1 through 4, 6, 8, and 10."

Response 45-28 The following changes have been made to the text of the Draft EIR.

- Page 4.8-29, First Paragraph under Impact 4.8.2 has been revised to read:

"Project development would result in the direct loss of 2.5 acres of seasonal wetland and 4.85 acres of unvegetated intermittent stream. A previous plan for the project has been authorized by the Corps under an Individual 404 Permit (Corps, 1994), and a Wetland Mitigation Plan (Zentner & Zentner) was developed for the required habitat mitigation, as discussed above in Section 4.8.1, which requires the project applicant to create 4.67 acres of seasonal wetlands, 6.25 acres of riparian woodland, and 14.1 acres of oak woodland buffer. The conditions of the 404 Permit and Wetland Mitigation Plan are required components which have been incorporated into the proposed project. This ~~The~~ mitigation additionally meets the requirements of El Dorado County General Plan Policies 7.3.3.1 and 7.3.3.2 regarding wetland protection."

Response 45-29 Results of surveys conducted under a formal species survey protocol (i.e., burrowing owl) would need to be submitted to the appropriate state resource agency(ies) regardless if special status species were found or not.

The commentor is referred to Response to Comment 45-24 which clarifies the classification system used to determine a species' "Potential for Occurrence" at the project site. The following changes have been made to the text of the Draft EIR to clarify Mitigation Measure 4.8.3:

- Table 2-1, page 2-27 and page 4.8-30, First Paragraph have been revised to read:

"4.8.3 The project applicant shall hire a biologist(s) approved by the County to conduct protocol surveys for the species listed in Table 4.8-2 as having a high potential to occur on the property or as being a "potential resident" of the property, which includes bald eagle (*haliaeetus leucocephalus*), long-eared bat (*myotis evotis*), long-legged myotis (*myotis volans*), yuma myotis (*myotis yumanensis*), cooper's hawk (*accipiter cooperi*), sharp-shinned hawk (*accipiter striatus*), long-eared owl (*asio otus*), short-eared owl (*asio flammeus*), ferruginous hawk (*buteo regalis*), northern harrier (*circus cyaneus*), white-tailed kite (*elanus leucurus*), and burrowing owl (*speotyto cunicularia*). In addition, the biologist(s) shall also conduct protocol surveys for any new special status species that may occur on the project site, which are listed by CDFG and/or USFWS subsequent to the certification of this EIR. Results of the protocol surveys shall be submitted to CDFG; and/or

USFWS, as required, and to the County prior to approval of subsequent tentative subdivision maps. If no sensitive species are located on-site, no further mitigation is necessary. If listed species are located on the property, the applicant and County shall enter into informal consultation with the appropriate resource agency ~~CDFG and USFWS~~ and begin preparation of a Biological Assessment or Habitat Conservation Plan, as applicable."

- Page 6-20, second complete paragraph has been revised to read:

"4.8.3 The project applicant shall hire a biologist(s) approved by the County to conduct protocol surveys for the species listed in Table 4.8-2 as having a high potential to occur on the property or as being a "potential resident" of the property, which includes bald eagle (*haliaeetus leucocephalus*), long-eared bat (*myotis evotis*), long-legged myotis (*myotis volans*), yuma myotis (*myotis yumanensis*), cooper's hawk (*accipiter cooperi*), sharp-shinned hawk (*accipiter striatus*), long-eared owl (*asio otus*), short-eared owl (*asio flammeus*), ferruginous hawk (*buteo regalis*), northern harrier (*circus cyaneus*), white-tailed kite (*elanus leucurus*), and burrowing owl (*speotyto cunicularia*). In addition, the biologist(s) shall also conduct protocol surveys for any new special status species that may occur on the project site, which are listed by CDFG and/or USFWS subsequent to the certification of this EIR. Results of the protocol surveys shall be submitted to CDFG~~,~~ and/or USFWS, as required, and to the County prior to approval of subsequent tentative subdivision maps. If no sensitive species are located on-site, no further mitigation is necessary. If listed species are located on the property, the applicant and County shall enter into informal consultation with the appropriate resource agency ~~CDFG and USFWS~~ and begin preparation of a Biological Assessment or Habitat Conservation Plan, as applicable."

Response 45-30 The El Dorado County Agriculture Commissioner's Office does not implement a weed free certification program for gravel and fill materials used for construction activities. As a result, this mitigation measure is considered infeasible. However, the EIR does acknowledge the importance of reducing the potential for introducing noxious and evasive exotic plant species. As such, project landscaping within and adjacent to public and private open space areas shall be in conformance with County and California Native Plant

Society guidelines. As a result of this comment, the following changes have been made to the text under Mitigation Measure 4.8.4:

- Table 2-1, pages 2-27 and 2-28 and page 4.8-31, First Bulleted Paragraph under Mitigation Measures have been deleted as follows:

"4.8.4 The objective of this mitigation measure is to reduce the potential for introduction or dispersal of non-native plant species to less-than-significant levels. The following measures will be performed:

~~All seeds and straw material shall be certified weed free by the California Department of Food and Agriculture (CDFA) seed laboratory. All gravel and fill material used during project construction and maintenance shall be certified weed free by the County Agriculture Commissioner's Office. The removal site for all fill materials shall be examined for the presence of noxious weeds by the local County Agriculture Commissioner's Office. Material transported between counties shall be approved by the local County Agriculture Commissioner's Office in the county receiving the materials.~~

Project landscaping shall conform to County and California Native Plant Society guidelines within and adjacent to public and private open space areas. Table 4.8-3 presents a list of species that should not be used for project landscaping."

- Pages 6-20 and 6-21, Mitigation Measure 4.8.4 discussion has been revised to read:

"4.8.4 The objective of this mitigation measure is to reduce the potential for introduction or dispersal of non-native plant species to less-than-significant levels. The following measures will be performed:

~~All seeds and straw material shall be certified weed free by the California Department of Food and Agriculture (CDFA) seed laboratory. All gravel and fill material used during project construction and maintenance shall be certified weed free by the County Agriculture Commissioner's Office. The removal site for all fill materials shall be examined for the presence of noxious weeds by the local County Agriculture Commissioner's Office. Material transported between counties~~

~~shall be approved by the local County Agriculture Commissioner's Office in the county receiving the materials.~~

Project landscaping shall conform to County and California Native Plant Society guidelines within and adjacent to public and private open space areas. Table 4.8-3 presents a list of species that should not be used for project landscaping."

Response 45-31 See Response to Comment 45-29.

Response 45-32 The following changes have been made to the text of the Draft EIR.

- Table 2-1, page 2-34 and page 4.10-12, First Paragraph under Mitigation Measure 4.10.4 have been revised to read:

"4.10.4 Prior to improvement plan approval for the village center and/or Villages 1, 2, 3, 5, and/or 7, ~~approval of improvement plans for site development~~, the project applicant, in coordination with the El Dorado County Office of Emergency Services and the U.S. Bureau of Reclamation, will develop an evacuation plan for the project site. The evacuation plan will include the establishment of protocol in the event of the failure of Mormon Island Dam and will be consistent with the El Dorado County Operation Area Multi-Hazard Functional Emergency Operations Plan."

Response 45-33 The following changes have been made to the text of the Draft EIR.

- Page 2-35 (Mitigation Measure 4.10.5c) and page 4.10-16 (Mitigation Measure 4.10.5c), Mitigation Measure 4.10.5c has been deleted as follows:

"~~4.10.5c Prior to County approval, the County shall submit project drainage plans to the City of Folsom for review and comment.~~

4.10.5d~~c~~ If the drainage plan described in Mitigation Measure 4.10.5b identifies 100-year flood plain on the project site, project development shall not occur in those areas identified, unless flood protection improvements approved by the County are implemented."

- Pages 6-22 and 6-23, Mitigation Measure 4.10.5 has been modified as follows:

~~"4.10.5c Prior to County approval, the County shall submit project drainage plans to the City of Folsom for review and comment.~~

4.10.5~~d~~c If the drainage plan described in Mitigation Measure 4.10.5b identifies 100-year flood plain on the project site, project development shall not occur in those areas identified, unless flood protection improvements approved by the County are implemented."

Response 45-34 The following changes are made to the text of the Draft EIR.

- Page 4.12-5, fourth paragraph, the paragraph is revised to read:

"The majority of the project site is located within the RUSD, with the remainder of the site within the BUSD. Preliminary talks were initiated in 1994 concerning a possible boundary line adjustment between the two districts so that the project site would fall entirely within the RUSD (Wright, 1994). The project applicant, RUSD, and BUSD decided to leave the school district boundaries intact (Emerson, 1997).~~In December of 1996, it was decided by the school districts and the project applicant to split the project site, using the proposed village borders as boundary lines between districts (Schwarzbach, 1996). Villages 6, 7, and 8 would be in the BUSD, with the remainder of the villages in the RUSD~~."

Response 45-35 The following changes are made to the text of the Draft EIR.

- Page 4.12-17, Table 4.12-5 is revised to read:

General Plan Goals, Policies, Objectives	Consistency With General Plan	Analysis
Policy 5.8.1.1	Yes~~No~~	The proposed project would provide a 10-acre elementary school site to serve new residents. In addition, development impact fees, as part of project development and subsequent agreements between the project applicant and the school districts, would be paid as well to reduce the impacts associated with the project's student generation. Implementation of Mitigation Measure 4.12.5 would ensure project consistency with this policy.~~However, these subsequent agreements have yet to be formalized.~~
Policy 5.8.1.3	Yes	The proposed elementary school site is located adjacent to a park to allow for joint use of facilities.
Policy 5.8.1.4	Yes	The Specific Plan includes a financing program that could consist of developing a Mello-Roos Community Facilities District to obtain funding for the construction of new school facilities or expansion of existing facilities that would be required to serve the project. However, financing for school facilities has not yet been identified.
Policy 5.8.1.5	Yes~~No~~	The proposed project would provide a 10-acre elementary school site to serve new

General Plan Goals, Policies, Objectives	Consistency With General Plan	Analysis
Policy 5.8.1.5	Yes~~No~~	The proposed project would provide a 10-acre elementary school site to serve new residents. In addition, development impact fees, as part of project development and subsequent agreements between the project applicant and the school districts, would be paid as well to reduce the impacts associated with the project's student generation. Implementation of Mitigation Measure 4.12.5 would ensure project consistency with this policy.~~However, these subsequent agreements have yet to be formalized.~~
Objective 5.8.2	Yes	The project site plan identifies a 10-acre elementary school site on the project site.
Policy 5.8.2.1	Yes	The project site plan identifies a 10-acre elementary school site in the northern portion of the project site to serve project students as well as the surrounding community.

Response 45-36 The following changes are made to the text of the Draft EIR.

- Page 4.12-18, Table 4.12-5 is revised to read:

General Plan Goals, Policies, Objectives	Consistency With General Plan	Analysis
Policy 5.8.2.2	Yes~~No~~	The proposed project would provide a 10-acre elementary school site to serve new residents. In addition, development impact fees, as part of project development and subsequent agreements between the project applicant and the school districts, would be paid as well to reduce the impacts associated with the project's student generation. Implementation of Mitigation Measure 4.12.5 would ensure project consistency with this policy.~~However, these subsequent agreements have yet to be formalized.~~
Policy 5.8.2.4	Yes	The proposed project includes the designation of a 10-acre elementary school site in the northern portion of the project area. In addition, development impact fees would be paid as part of the project.
Policy 5.9.1.2	Yes	Specific funding mechanisms for public services have not been determined for the project. The Specific Plan identifies special assessment districts and Mello-Roos Community Services Districts as potential sources of funding.
Goal 6.2	Yes	The hillside development standards for the proposed project includes the use of fuel modification zones for steep sloped areas. The proposed project would be subject to review by the El Dorado Hills Fire Department.
Objective 6.2.1	Yes	The hillside development standards for the proposed project includes the use of fuel modification zones for steep sloped areas. The proposed project would be subject to review by the El Dorado Hills Fire Department.
Policy 6.2.1.1	Yes	The hillside development standards for the proposed project includes the use of fuel modification zones for steep sloped areas. The proposed project would be subject to review by the El Dorado Hills Fire Department.
Objective 6.2.3	Yes	Additional firefighting personnel and equipment needed to serve the project would be funded through payment of development fees and property tax revenues. The El Dorado Hills Fire Department would maintain adequate service to existing developments within its service area.
Policy 6.2.3.1	Yes	Additional firefighting personnel and equipment needed to serve the project would be funded through payment of development fees and property tax revenues. Final alignment and design of project site would be subject to review by the El Dorado Hills Fire Department.
Policy 6.2.3.2	Yes	The proposed Circulation Plan identifies project access points and the circulation network. Final alignment and design of project accesses into the City of Folsom would be subject to review by the El Dorado Hills Fire Department.

General Plan Goals, Policies, Objectives	Consistency With General Plan	Analysis
Policy 7.6.1.1	Yes	The proposed project includes designation of 99.8 acres of public open space that would provide for preservation and enhancement of wetlands and natural habitat as well as a future trail system for passive recreation opportunities.
Policy 7.6.1.2	Yes	The proposed project would set aside 99.8 acres of public open space.

Response 45-37 Mitigation Measure 4.12.5 does not specifically require the project applicant to implement additional mitigation beyond the County-wide school impact fee or transfer of the proposed elementary school site to Rescue Union School District. However, the following text edits are made to clarify Mitigation Measure 4.12.5.

- Page 2-38 (Table 2-1, Mitigation Measure 4.12.5) and page 4.12-26 (Mitigation Measure 4.12.5), Mitigation Measure 4.12.5 is revised to read:

  "4.12.5 Prior to approval of the Specific Plan~~tentative subdivision maps~~, Rescue Union School District, Buckeye Union School District, El Dorado Union High School District, and the project applicant shall enter into a formal agreement regarding mitigation of project impacts on school facilities. This agreement shall specifically identify mechanisms (i.e., payment of County-wide school impact fees and transfer of the elementary school site) to construct new school facilities, coordination of timing of new school facilities and build-out of the project site, and construction of the project-proposed elementary school site (if ultimately utilized by the Rescue Union School District)."

  Implementation of Mitigation Measure 4.12.5 at final subdivision maps (as proposed by the commentor) would limit the time available for the school districts to appropriately plan and accommodate for project-generated students. No further changes are made to Mitigation Measure 4.12.5.

Response 45-38 The following text changes are made to the Draft EIR.

- Page 4.13-3, the last sentence is revised to read:

  "In addition, a two~~one~~ million gallon storage tank and a 16-inch water line are planned for the project area as part of the Phase 5 water facility improvements in the El Dorado Hills Master Facilities Plan (El Dorado Irrigation District, 1995)."

Response 45-39 The following text changes are made to the Draft EIR.

- Page 4.13-12, 4.13.2 Impacts and Mitigations is revised to read:

  "4.13.2 Impacts and Mitigations Measures"

Response 45-40 The following text changes are made to the Draft EIR.

- Page 4.13-16, Impact 4.13.2, first paragraph, the second sentence is revised to read:

  "The two ~~1~~-million-gallon storage tank and 16-inch water line planned for the project area as part of the Phase 5 water facility improvements in the El Dorado Hills Master Facilities Plan would be required to meet future demand at project buildout."

Response 45-41 See Response to Comment 45-14.

Response 45-42 See Response to Comment 45-12 and 45-14.

Response 45-43 See Response to Comment 45-25 and 45-29.

Response 45-44 See Response to Comment 45-22 and 45-23.

46

July 30, 1997

97 JUL 30 1 11:02

RECEIVED
PLANNING DEPARTMENT

Mr. Roger Trout
Project Planner
Planning Department
El Dorado County
2850 Fairlane Ct.
Placerville, CA 95667

Dear Mr. Trout,

I am exercising my right to comment to the EIR regarding the proposed development known as " The Promontory " (SP94-03).

I. Unsafe Traffic Patterns

A.) The existing neighborhood roads that would be used by the residents of " The Promontory " are currently unsafe. What will " The Promontory " developers and El Dorado County do to resolve the already unsafe conditions and make them safe for the major impact of the added residents of " The Promontory " ? 46-1

B.) What is the process, funding, and time frame that will guarantee that Russell Ranch Road will be built? Without Russell Ranch Road, the traffic brought on by " The Promontory " will be a nightmare for our neighborhood streets. 46-2

II. Water Resources

A.) What has " The Promontory " and El Dorado County done to secure water for this development? Are there contracts existing that will guarantee water to " The Promontory " and El Dorado Hills? If there are contracts for supplemental water, 1.) Are they at the current costs so that El Dorado Hills does not see outrageous price increases due to the added demands? 2.) Are the contracts set up for enough volume to meet the needs of El Dorado Hills without rationing concerns? 3.) If the supplemental water is routed through Folsom Dam, does El Dorado Irrigation District have any control over the water storage and how it is managed ? What, specifically can El Dorado Irrigation District do to insure that the Bureau of Reclamation does not overreact to runoff and rain, drain Folsom Dam in anticipation of the influx of water that does not come? 46-3

My personal opinion is that we are in a time where developers are too anxious to get cash flow going and the local governments are needy and become anxious to see the revenue come in from these developements with little or no regard to the impact that these developements have on the existing residents / taxpayers. I would love to be wrong about this. Any comments? 46-4

Thank you for the opportunity to address these concerns.

Sincerely,

Dan Millington
2964 Ridgeview Drive
El Dorado Hills, CA 95762
916 933-0167

CC. Mr. Sam Bradley, Board of Supervisors
Mr Doug Noble, Chairman, Planning Commission, El Dorado County

46. DAN MILLINGTON, RESIDENT

Response 46-1 See Response to Comment 7-1 and 7-3 through 7-12.

Response 46-2 Russell Ranch Boulevard alignment will cross both the City of Folsom and El Dorado County. The portion of Russell Ranch Boulevard that lies within El Dorado County is the responsibility of the El Dorado County Department of Transportation and the project applicant. As described in Section 4.5, Transportation and Circulation, of the Draft EIR, Russell Ranch Boulevard and the Russell Ranch Boulevard/U.S. Highway 50 Interchange in the City of Folsom are anticipated to be in place by the year 2015. However, neither the El Dorado County or the project applicant have jurisdiction or control over the development of roadways in the City of Folsom. If off-site portions of Russell Ranch Boulevard are not constructed when needed by the project, tentative maps will be conditioned such they cannot be finalized until that portion of Russell Ranch Boulevard is built. For more information regarding the development of Russell Ranch Boulevard in the City of Folsom, the commentor is referred to the City of Folsom Planning, Inspections, and Permitting Department. The commentor is also referred to Response to Comment 7-1 regarding the implementation of Mitigation Measure 4.5.1a and the new Mitigation Measure 4.5.1b.

Response 46-3 See Response to Comment 41-8 through 41-11. The requested information about costs of water supply sources pertains to economic impacts that are beyond the purview of an EIR under CEQA. CEQA Guidelines section 15131 provides: "economic or social effects of a project shall not be treated as significant effects on the environment." In addition, comments regarding the operation of the Folsom Reservoir by the Bureau of Reclamation does not pertain to the environmental impacts of the proposed project.

Response 46-4 The commentor's general statements regarding development and the relationship with County government is noted. No further response is required.

47

COVER SHEET FAX

To: Roger Trout
Fax #: 642-0508
Subject: Promontory SP DEIR Comments
Date: July 30, 1997
Pages: 7, including this cover sheet.

COMMENTS:

Please find the attached notes from several staff members who commented on the DEIR. A hard copy of the comments with be mailed to you.

From the desk of

Gail Furness de Pardo
Senior Planner
Planning, Inspections and Permitting
50 Natoma Street
Folsom, California 95630

(916) 355-7248
Fax: (916) 355-7274

4.5 TRANSPORTATION AND CIRCULATION

1. **Figure 4.5-1:** Inaccurate Figure

   a. This figure shows the future Russell Ranch Rd. intersecting E. Natoma St. in the proposed Russell Ranch project at a "T" intersection, with E. Natoma St. as the through street. Based on approved plans for this project, Russell Ranch Road is proposed as the through street at this intersection. 47-1

   b. The Final E.I.R. should acknowledge that the alignment of Russell Ranch Rd. north of this intersection is still being refined. 47-2

   c. The alignments of Broadstone Parkway, Greystone Parkway and Silberhorn Extension are not consistent with the most recent plans adopted by the City for roadways in this vicinity. Iron Point Road is now proposed to extend easterly parallel to US 50 and eventually intersecting Saratoga Way in El Dorado County. 47-3

   The F. E.I.R. should reflect the correct alignments for the roadways as discussed above, and address if these changes would affect the traffic projections and impacts contained in the D.E.I.R. 47-4

2. **Section 4.5.1, Top of Page 4.5-5:** Incomplete list. This list includes the intersections which were analyzed in the report for level of service impacts. This list includes only one existing intersection within the City of Folsom (Blue Ravine Rd./E. Natoma St.). Addtional intersections within Folsom, specifically along Blue Ravine Rd., Oak Avenue Parkway and East Bidwell St., should have been analyzed, particulary under the Existing Plus Project conditions. The Russell Ranch Rd. Interchange is not scheduled to be completed for several years, and until this interchange is completed it is likely these roadways will be significantly impacted by project traffic. 47-5

3. **Section 4.5.2, Bottom of Page 4.5-11, Item Five:** Changes to Significance Criteria for the City of Folsom. The significance criteria for the City of Folsom should be based on traffic projections from cumulative (with project) development. Further, the impact should be assumed to be significant if any deterioration to worse than LOS C results, regardless of whether the LOS without the project was determined to be C or better. The analysis appears to be based on this criteria, but this statement does not reflect this. 47-6

4 **Figure 4.5-8:** Inaccurate Figure. For Intersection #10, Blue Ravine Rd/E. Natoma St., the figure does not reflect the future extension of E. Natoma St. east of the intersection. This extension is consistent with the City's General Plan, and is currently under construction to the Russell Ranch project. 47-7

5. **Section 4.5.2, Page 4.5-20, Third Paragraph:** Inaccurate Statement Relating to Roadway Alignments. Same comment as 1.c above. 47-8

6. **Figure 4.5-9:** Inaccurate Figure. Same comment as 1.c above. 47-8 CONT.

7. **Section 4.5.2., Page 4.5-28, Mitigation Measure 4.5.2c:** Widening of Blue Ravine Rd./E. Natoma St. Intersection.. This additional widening has not previously been identified by the City as being necessary for future development, and consequently, a funding source has not been identified. The F.E.I.R. should identify a funding source for this improvement as well as a level of development of the project when this improvement will be needed. It should also be mentioned that until the ultimate circulation system is in place, increased, temporary impacts to the City's roadway system will result from project traffic. The F.E.I.R. should address these impacts, and propose appropriate mitigation measures. 47-9

8. **Section 4.5.2. Page 4.5-39, Mitigation Measure 4.5.12:** Deterioration in LOS at the Blue Ravine Road/E. Natoma Street Intersection. This states that an unacceptable LOS would result at this intersection because of an assumed reduction in the number of through lanes along Blue Ravine Rd. and Green Valley Rd. in Folsom by the City (from 6 to 4 lanes). However, the reduction in lanes should cause increased congestion along these roadways which may also cause a diversion of traffic to other roadways. Regardless, traffic volumes along these roadways as well as at the intersection of Blue Ravine Road/E. Natoma Street should not increase. If the same geometrics are assumed at the intersection as were assumed previously, no deterioration in LOS should occur. The same geometrics should be achievable even with the lane reductions along Blue Ravine Road and Green Valley Road by widening to create additional through lanes immediately upstream and downstream of the intersection. Also, since the intersection likely controls LOS and not the roadway segments, an overall reduction in LOS should not occur. Further analysis of this issue should be done, and this should be included in the F.E.I.R. 47-10

4.10 HYDROLOGY AND WATER QUALITY

1. **Section 4.10.1** 47-11

   a. **First paragraph:** The Willow Creek watershed has 8,760 acres.

   b. **Second paragraph:** A more accurate mean annual rainfall for a 24 hour storm would be 2.38 inches rather than 1.8 inches; for a 100 year, 24 hour storm, 4.9 inches and not 4.3 inches. 47-12

   c **Third paragraph, third sentence:** The Natomas Ditch does not flow into Willow Creek. Also, the major tributary to Willow Creek is Humbug Creek, a watershed of 3,470 acres draining from the Promontory development in El Dorado County to its confluence with Willow Creek at Blue Ravine Road. 47-13

   d **Fourth paragraph:** This is in response to the statement "... the proposed Russell Ranch development, which is expected to contribute significant runoff increases in the shed area." The Foothills project (formerly Russell Ranch) is providing extensive stormwater detention facilities and is not expected to contribute "significant runoff increases." Please refer to the Master Drainage Study for the Promontory Project, 47-14

prepared by Cooper Thorne & Associates, Inc. Also, drainage shed 1 of the Promontory project drains directly to Willow Creek. Your drainage sheds 2, 3, and 4 drain to Humbug Creek and then to Willow Creek, 3 miles downstream. 47-14 CONT.

2. Section 4.10.1, page 4.10-4.

a. **First paragraph**: The DEIR should use the most recent information available. In 1993 and 1994 Folsom surveyed and re-mapped the Willow and Humbug Creek floodplains. This major project is reported in Phase 2 Engineering Study, Humbug-Willow Creek Parkway, City of Folsom, Vail Engineering Corporation/Gill Water Resources Engineering, January 1994 and minor subsequent updates. The Parkway Project extends from the County line downstream to Lake Natoma. 47-15

These flood maps and creek channel profiles are the basis for new development analysis in Folsom. Also, a rainfall-runoff model of the Willow and Humbug Creek watersheds in continually updated with new projects and is being used to evaluate the propose Promontory development.

Humbug Creek upstream of Oak Avenue is being channeled into the parkway and wetlands of the Parkway at Blue Ravine development by that developer. A significant portion of this work is complete with planning completed for the remainder. Their design controls the projected 100-year runoff.

With The Foothills development, the 100-year runoff should be contained from El Dorado County to The Parkway at Blue Ravine wetlands. The DEIR mentions flooding locations downstream to Prairie City Road. There are possible problem locations downstream of Prairie City Road but no major situations upstream.

3. Page 4.10-7

a. **Last paragraph**: A memorandum of understanding (M.O.U.) Between the City of Folsom and El Dorado County is currently being drafted to address drainage and other mutual issues affecting the Foothills and Promontory projects. The M.O.U. will provide for some trading of mitigation, that is some drainage sheds will have detention in El Dorado County and some in Folsom. This will provide some flexibility and an overall better drainage system. 47-16

4. Page 4.10-11

a. Impact 4.10.2. Implementation of Mitigation Measure 4.10.1 is critical to prevent pollutants from Willow and Humbug Creeks downstream in Folsom. 47-17

5. **4.10.5, page 4.10-14**

a. **In the FEIR, please provide an explanation concerning your statement of "increased flooding" downstream as a significant impact as related to Folsom's Willow-Humbug Creek plans and the Promontory Drainage Plan. Also, the DEIR figures of runoff in the last paragraph do not appear accurate. Please also address this in the FEIR.** 47-18

In general the mitigation measures outlined in the draft EIR lack either quantifying standards, or specific methods of implementation to avoid and/or reduce environmental impacts. Presently, many of the mitigation measures are not adequate because there are no definitions, criterion, quantitative standards or clear mechanisms outlined to implement the intent of "mitigation". The mitigation measures read as "planning objectives" rather than methods to mitigate project impacts. The Final EIR should clearly state how the mitigation shall be implemented. Comments regarding several of the mitigation measures for the Promontory project are as follows: 47-19

Viewshed impacts/Aesthetics - The method of preserving oak trees and rock outcroppings is important to the City of Folsom in terms of minimizing visual impacts. Mitigation 4.3.1a lacks a mechanism to "avoid disturbing and/or removing rock outcroppings and oak trees to the maximum extent feasible". Does El Dorado County have a resource preservation ordinance that contains standard criteria to preserve or remove these natural resources? Does the Specific Plan contain Development Standards or Design Guidelines which the County will adopt and therefore be able to enforce the intent of this mitigation measure? Exactly how will this mitigation measure be realized? This clarification should be addressed in the Final EIR. 47-20

Mitigation 4.3.1b - How is "feasible" defined? Who decides what is feasible? Again, without clear criteria or identified standards, this mitigation measure is not adequate. This measure should be expanded and defined in the Final EIR. 47-21

Mitigation 4.3.1c - What assurance does the City of Folsom have that the structures will remain neutral in color? Where is the implementation tool, or in other words, the procedure to enforce this measure? These points should be addressed in the Final EIR. 47-22

Mitigation 4.3.6 - How will polished and reflecting building material be prohibited or allowed? What is the standard or required screening for allowing or prohibiting any type of building material in order to meet the intent of mitigation 4.3.6? The City of Folsom is currently impacted by glare and wants to be assured that similar building materials are not used. These issues should be addressed in the Final EIR. 47-23

With the absence of clear resource preservation, design criteria and grading standards as mitigation measures, Impact 4.3.8 is significant to the City of Folsom and should be addressed in the Final EIR accordingly. 47-24

Impact 4.4.3 indicates that the projected job-housing balance for the project is 0.07 This percentage is clearly impacting the County's current job deficit of 0.59 job-housing ratio. Identifying this additional jobs-housing imbalance as a less than significant impact is not logical and should be evaluated objectively in the Final EIR. 47-25

In regards to Mitigation 4.8.1, what authority approves the adequacy of the contents of the Tree Protection Plan? In the absence of the evaluating the Tree Protection Plan in the DEIR, how can the City of Folsom be assured that tree protection, revegetation and 47-26

compensation and monitoring is feasible and implementable? What replacement ratio will be required for tree removal? The language in the mitigation measure should also state that the Tree Protection Plan be implemented *during* ground clearing, grading and other construction activities. Additionally, the applicant should be responsible for paying the monitoring services of the project biologist. However, the County should assume responsibility for management of the work program of the selected biologist to maintain objectivity. These issues should be addressed in the Final EIR.

47-26
CONT.

Regarding impact 4.8.3, the EIR should include the survey for special status species in the Appendix. Deferring this analysis, and failing to address the potential impacts, is contrary to El Dorado's General Plan Objective 7.4.1. Additionally, the absence or presence of special status species may affect the County's decision on the type or intensity of land-use entitlements. Therefore, the survey should be prepared prior to the certification of the EIR. The mitigation measure currently states that the magnitude of the loss of special status species habitat is not "quantifiable" at this time. This statement is incorrect - the magnitude of loss is "quantifiable", it is only a matter that the proper studies have not been undertaken to date. The Final EIR should include the special status species survey, and conservations plans, if applicable.

47-27

47. GAIL FURNESS DE PARDO, SENIOR PLANNER, CITY OF FOLSOM - PLANNING, INSPECTIONS, AND PERMITTING

Response 47-1 Figure 4.5-1 as well as 4.5-9, 4.5-10, 4.5-11, 4.5-12, and 4.5-13 of the Draft EIR have been revised and attached to show the correct roadway alignment. These changes do not affect the traffic impact analysis results contained in the Draft EIR.

Response 47-2 The alignment of Russell Ranch Boulevard does not affect the traffic impact analysis results contained in the Draft EIR. Therefore, no changes are recommended.

Response 47-3 See Response to Comment 47-1.

Response 47-4 See Response to Comment 47-1. None of the corrections identified in Response to Comment 47-1 would affect the traffic impact analysis contained in the Draft EIR.

Response 47-5 Prior to the preparation of the Draft EIR, City staff were consulted and a meeting with City and County staff regarding the project was held on December 6, 1996. The traffic analysis and assumptions to be used in the traffic analysis were discussed and agreed to by City staff, which included the analysis of the Blue Ravine Road/Green Valley Road/East Natoma Street intersection and the Russell Ranch Boulevard/U.S. Highway 50 Interchange (cumulative conditions only). The City identified the Blue Ravine Road/Green Valley Road/East Natoma Street intersection as being the only critical intersection that needed to be evaluated. As described in the Draft EIR (Section 4.5, Transportation and Circulation), approximately 70 percent of the total traffic generated under existing plus project conditions would remain in the El Dorado Hills area. The most direct access for this traffic to U.S. Highway 50 would be the El Dorado Hills Boulevard/U.S. Highway 50 Interchange.

In addition, the "existing plus project" analysis is a worst-case traffic analysis that assumes buildout of the project under existing conditions without planned roadway improvements in place in El Dorado County and the City of Folsom. Buildout of the project site is anticipated to occur over a 20-year period, and it is unlikely that the project site would be developed quickly without future planned roadway improvements (e.g., Russell Ranch Boulevard) in place. The commentor is referred to Section 4.5, Transportation and Circulation, of the Draft EIR for a complete description of planned roadway improvements near the project site.

Traffic generated from future growth of the El Dorado Hills area was evaluated in the East Area Facilities Plan and EIR (State Clearinghouse No. 90020429) and future City roadway improvements and mitigation measures identified by the City for the East Area Facility Plan would accommodate traffic generated by the proposed project.

Response 47-6 Significance criteria for roadway impacts in the City of Folsom was based on Policy 17.17 of the *City of Folsom General Plan*. This is the same criteria used by the City of Folsom in environmental documents. Therefore, no changes are recommended.

Response 47-7 Figure 4.5-8 of the Draft EIR reflects existing plus project conditions. Since the extension of East Natoma Street does not currently exist, it was not included in Figure 4.5-8.

Response 47-8 The text on page 4.5-20 will be changed to matched the revised figures referred to in response 47-1. The specific change is as follows:

> "...are shown on Figure 4.5-1 and include Russell Ranch Boulevard (four to six lanes), Iron Point Road (four to six lanes), and a new interchange...."

Response 47-9 The commentor states that the City of Folsom has not previously identified widening of Green Valley Road to four lanes for future development or improvements to the East Natoma Street/Green Valley Road/Blue Ravine Road intersection. The adopted Findings of Fact for the East Area Facilities Plan Final EIR (Resolution No. 3798) identify that the City Council adopted Mitigation Measure 4.2.3a which consisted of widening Green Valley Road to four lanes to mitigate growth impacts of development in the Folsom East Area (City of Folsom, 1992). In addition, intersection geometrics for the East Natoma Street/Green Valley Road/Blue Ravine Road intersection for the year 2010 identified in the Russell Ranch Specific Plan EIR did include exclusive right-turn lanes for Green Valley Road and East Natoma Street approaches (City of Folsom, 1991). Thus, the City of Folsom has identified that widening of Green Valley Road is necessary for future development and improvements to the East Natoma Street/Green Valley Road/Blue Ravine Road intersection. In addition, the City of Folsom has yet to determine a final design for the East Natoma Street/Green Valley Road/Blue Ravine Road intersection. This intersection and its design is currently being evaluated by the City as part of the proposed convenience store on Blue Ravine Road.

In regards to implementation of mitigation measures 4.5.2a, 4.5.2b, and 4.5.2c, as described on pages 4.5-29 and 4.5-30 of the Draft EIR, El Dorado County can only recommend that the City of Folsom implement these mitigation measures, pursuant to CEQA Guidelines Section 15091(a)(2).

As described in Response to Comment 47-5, Buildout of the project site is anticipated to occur over a 20-year period and it is unlikely that the project site would be developed without future planned roadway improvements (e.g., Russell Ranch Boulevard) in place.

Response 47-10 The Russell Ranch Specific Plan EIR traffic analysis for the East Natoma Street/Green Valley Road/Blue Ravine Road intersection assumed that Green Valley Road would be six lanes, Russell Ranch Boulevard would be four lanes, Blue Ravine Road would be six lanes, and East Natoma Street would be six lanes, while the intersection geometrics would consist of the following (City of Folsom, 1991):

Green Valley Road Approach:	three through lanes, one left-turn lane, and one right-turn lane
Russell Ranch Boulevard Approach:	three through lanes, one left-turn lane, and one right-turn lane
Blue Ravine Road Approach:	three through lanes, one left-turn lane, and one right-turn lane
East Natoma Street Approach:	two through lanes, one left-turn lane, and one right-turn lane

However, based on consultations with City staff, the traffic analysis in the Promontory Specific Plan Draft EIR assumed that Green Valley Road would be four lanes, Russell Ranch Boulevard would be four lanes, Blue Ravine Road would be four lanes, and East Natoma Street would be four lanes. The intersection geometrics shown Figure 4.5-13 on page 4.5-26 of the Draft EIR, were identified by the City of Folsom as consistent with available right-of-way at this intersection but are substantially different than what was identified in the Russell Ranch Specific Plan traffic analysis. Improvements to the intersection that would improve its level of service to "C" under cumulative plus project conditions include the following:

Green Valley Road Approach:	three through lanes (extended a minimum of 1,000 feet prior to the intersection), two left-turn lanes, and one right-turn lane
Russell Ranch Boulevard Approach:	two through lanes, two left-turn lanes, and one right-turn lane

Blue Ravine Road Approach:	three through lanes (extended a minimum of 1,000 feet prior to the intersection), two left-turn lanes, and one right-turn lane
East Natoma Street Approach:	three through lanes (extended a minimum of 1,000 feet prior to the intersection), two left-turn lanes, and one right-turn lane

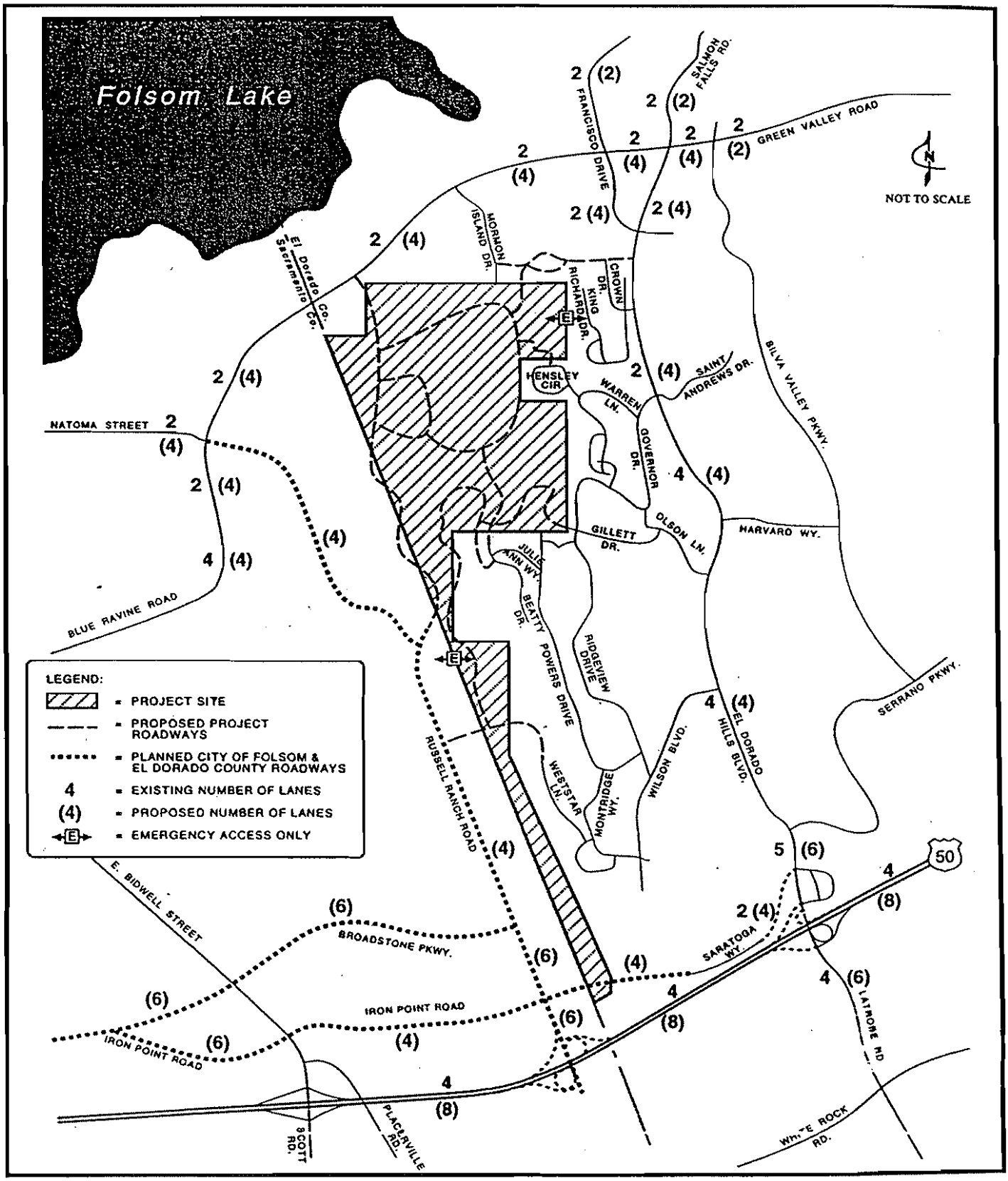
These intersection geometrics differ from those identified in the Russell Ranch Specific Plan EIR because the traffic modeling performed by the City in 1991 underestimated the effects of regional growth on traffic volumes in the City of Folsom.

The City of Folsom has identified that any further widening of this intersection beyond existing right-of-way would cause undesirable environmental impacts, which could potentially be avoided by realigning the intersection (Maguire, 1997). Thus, widening the intersection as mitigation was considered infeasible and not implementable by El Dorado County, pursuant to CEQA Guidelines Section 15091(a)(2).

Response 47-11 The following text changes are made to the Draft EIR.

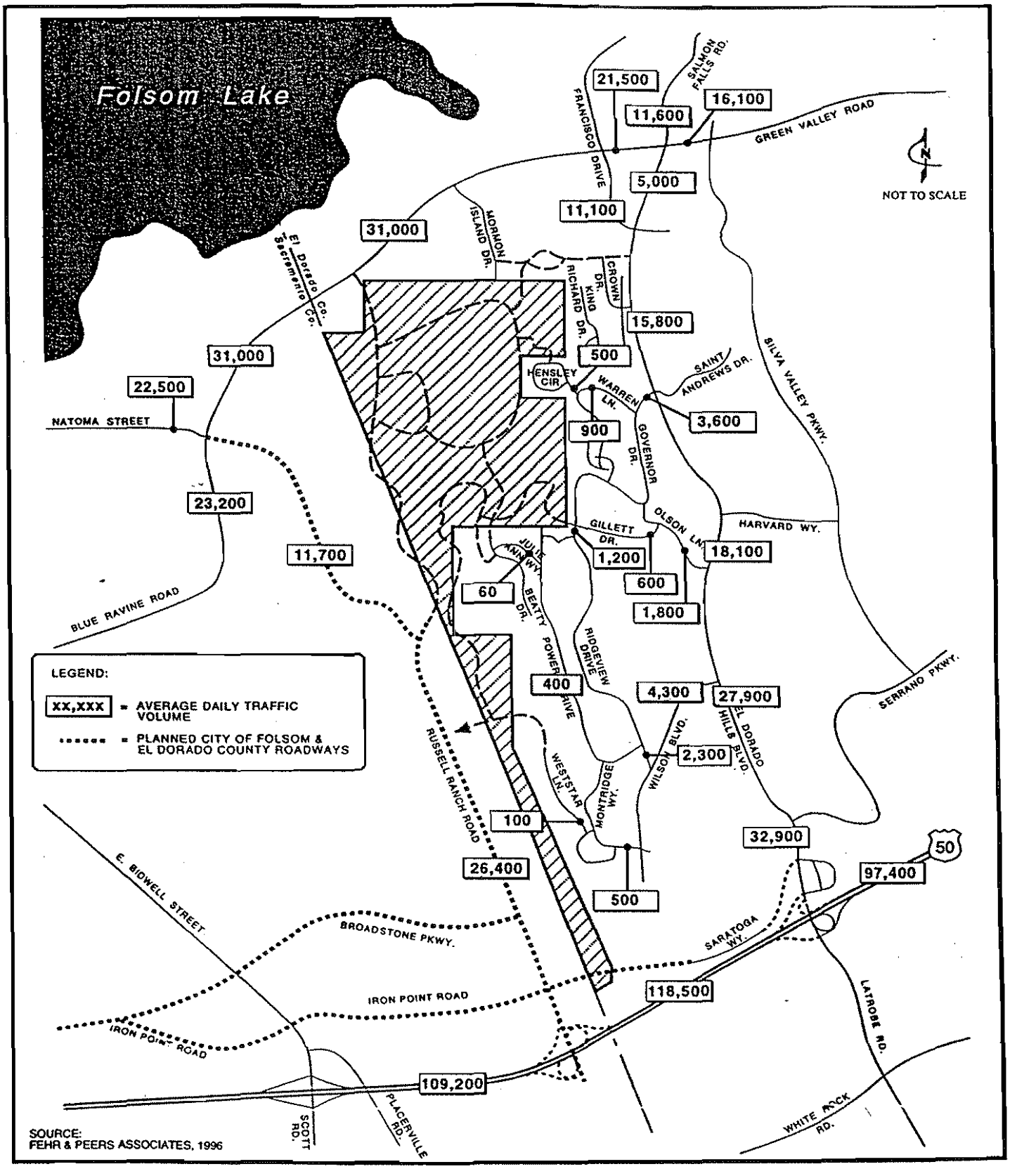
- Page 4.10-1, first paragraph, the last sentence is revised to read:

  "The total Willow Creek watershed encompasses approximately ~~8,200~~ 8,760 acres."



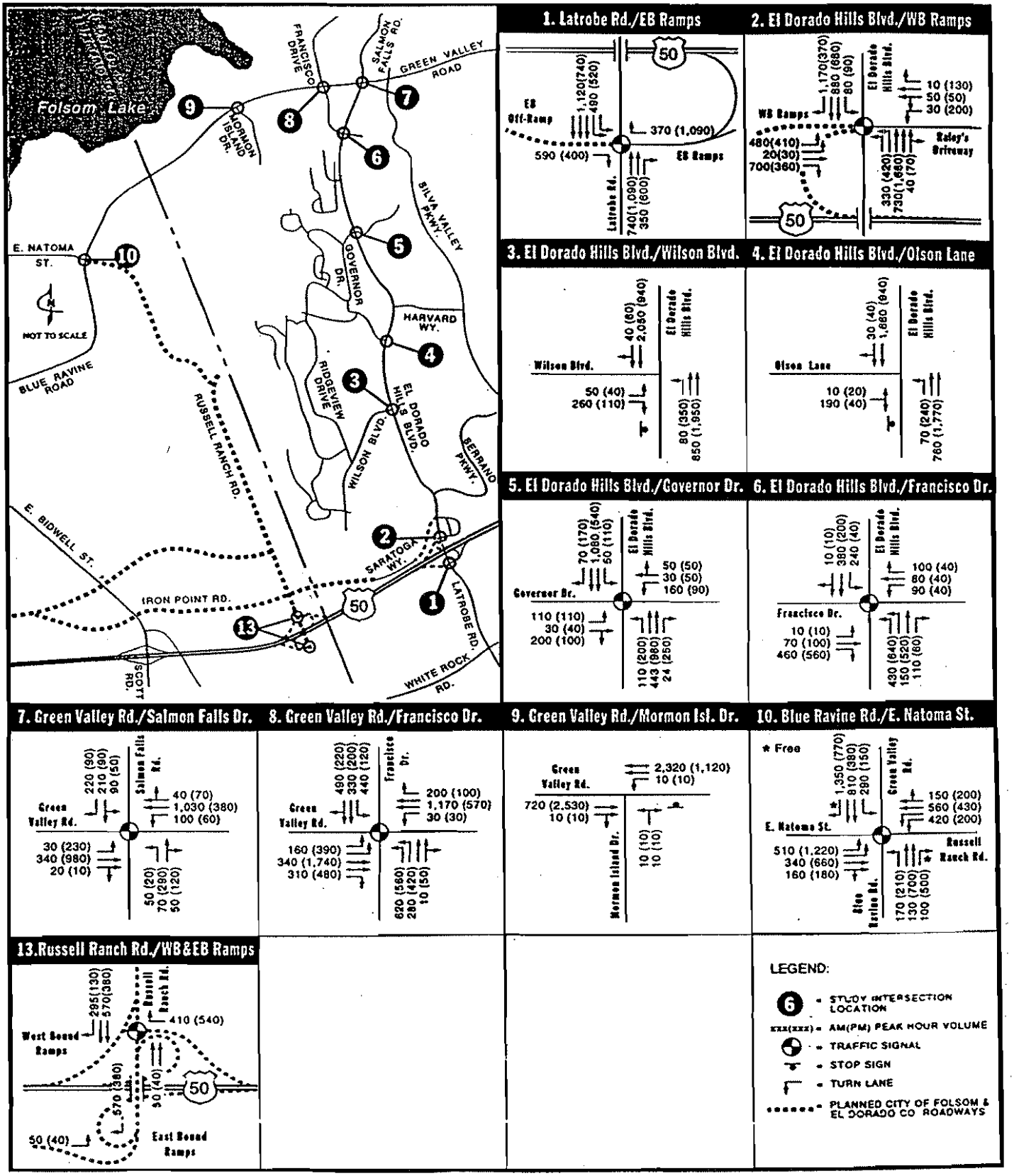
SOURCE: Fehr & Peers Associates, Inc., 1997

Figure 4.5-1
Existing, Planned, and Proposed Roadways



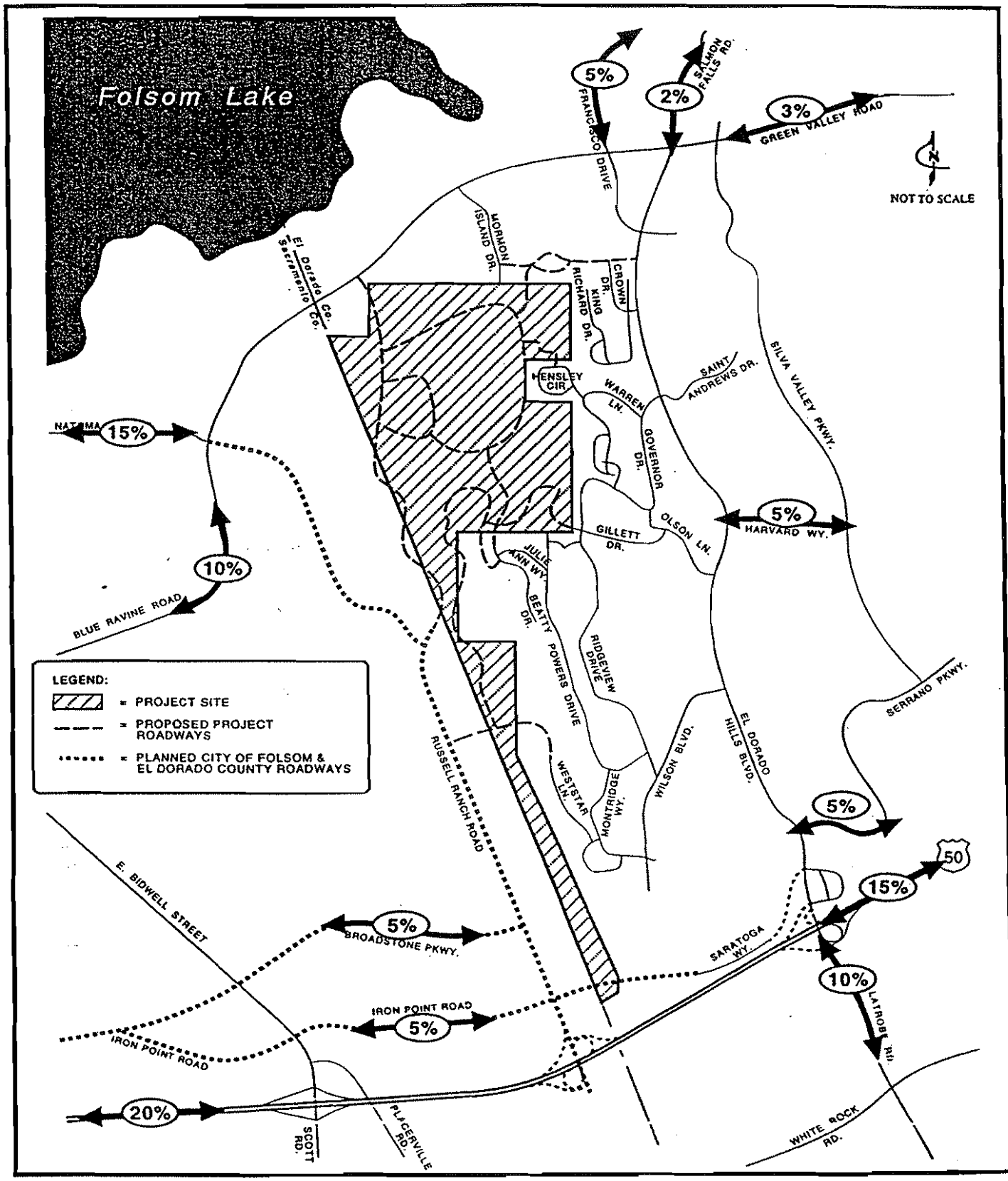
SOURCE: Fehr & Peers Associates, Inc., 1997

Figure 4.5-9
Cumulative No Project Average Daily Traffic Volumes



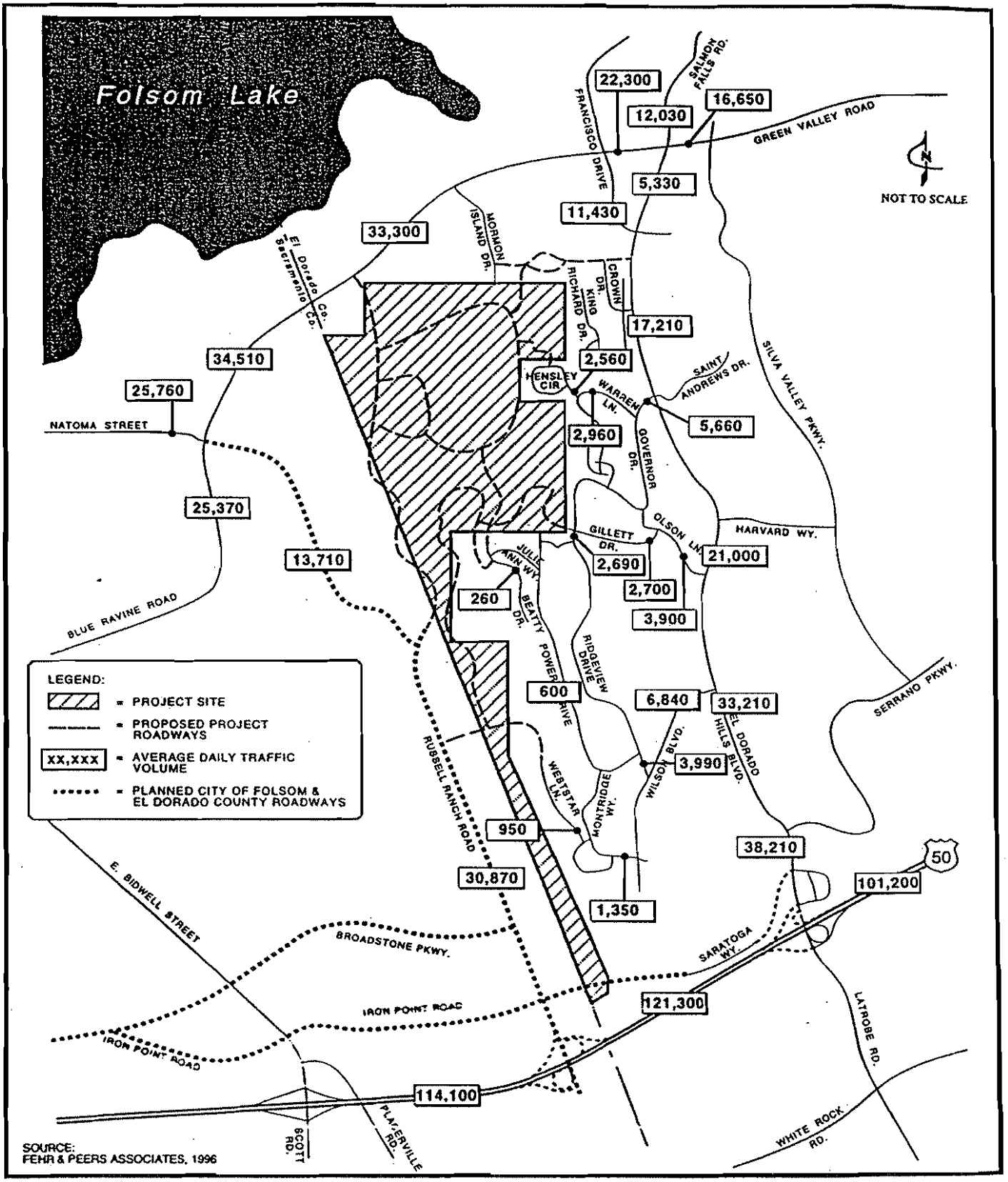
SOURCE: Fehr & Peers Associates, Inc., 1997

Figure 4.5-10
Cumulative No Project Conditions Intersection Peak Hour-Volumes and Geometrics



SOURCE: Fehr & Peers Associates, Inc., 1997

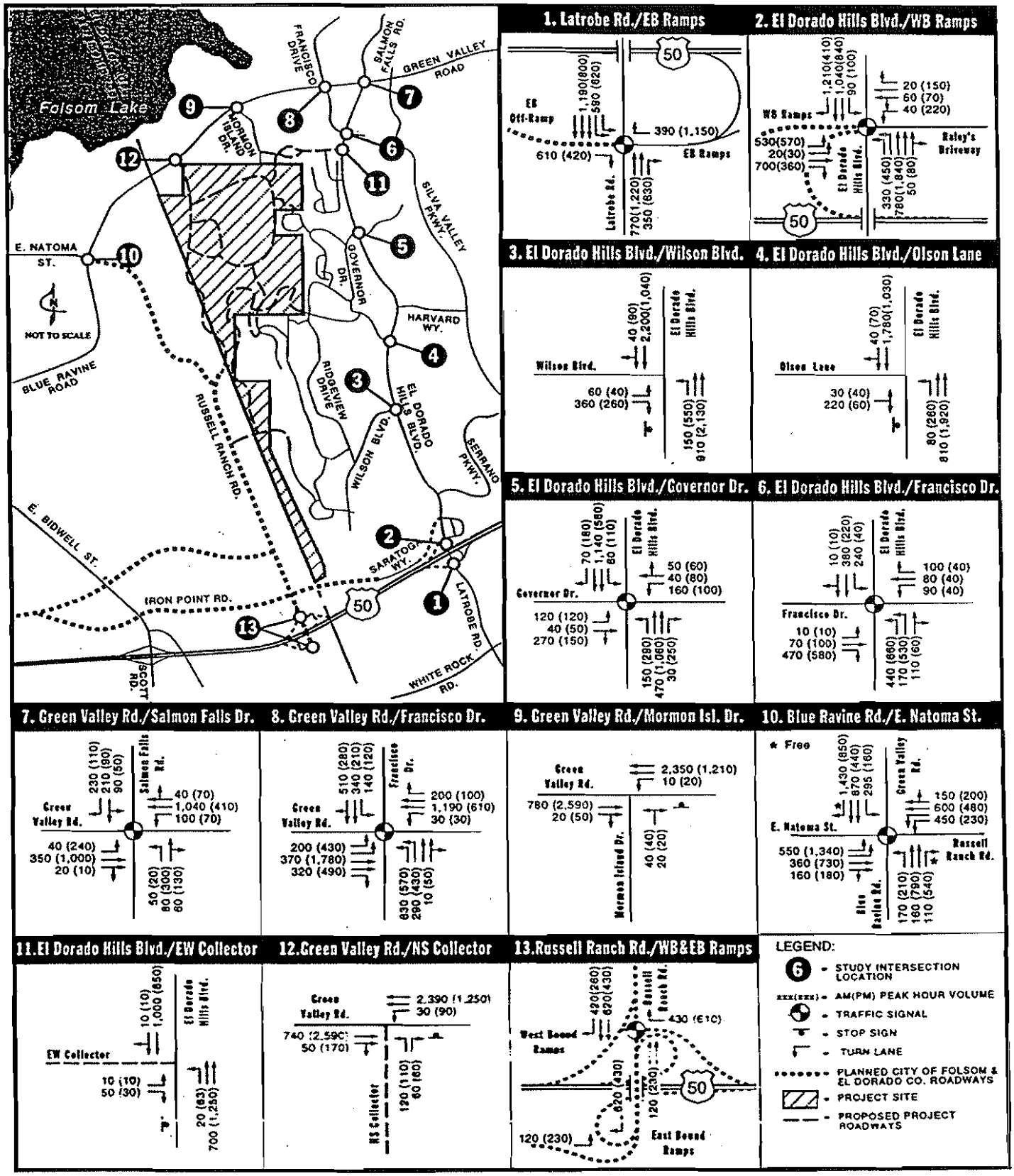
Figure 4.5-11
Project Trip Distribution Cumulative Plus Project Conditions



SOURCE: Fehr & Peers Associates, Inc., 1997

Figure 4.5-12

Cumulative Plus Project Average Daily Traffic Volumes



SOURCE: Fehr & Peers Associates, Inc., 1997

Figure 4.5-13
Cumulative Plus Project Conditions Intersection Peak Hour-Volumes and Geometrics

Response 47-12 The actual rainfall calculated in the Preliminary Engineering Report for The Promontory is 3.511 inches in a mean annual rainfall 24-hour storm, 4.977 inches for a 100-year, 24-hour storm (see Appendix B of this FEIR). The difference in the numbers used in the Draft EIR and the numbers herein reflects the modeling requirements as specified in the El Dorado County Drainage Manual. The following text changes are made to the Draft EIR.

- Page 4.10-1, the second paragraph is revised to read:

"Precipitation is the principal source of runoff from the project site. Mean annual precipitation is approximately 26 to 28 inches per year. Most of the annual rainfall arrives during the winter storm season from November through March. Annual rainfall may vary widely from year to year, with less than 15 inches in critically dry years such as 1976 and 1988 and over 50 inches in unusually wet seasons such as 1982 and 1983. The most significant storm expected in an average year is estimated to produce 3.511~~1.8~~ inches of rainfall in 24 hours. The 100-year storm (which has a 1 percent chance of happening in any given year) is estimated to produce 4.977~~4.3~~ inches of rainfall in a 24-hour period."

Response 47-13 The project applicant has completed the drainage study for The Promontory in accordance with the El Dorado Drainage Manual (see Response to Comment 9-1 and Appendix B of this FEIR). The drainage study has been submitted to the City of Folsom and preliminary accepted by El Dorado County. The MOU for drainage is expected to be approved by the JPA at their next meeting. The Promontory's drainage study addresses the location and extent to which the drainage crosses the County line, but it is the City of Folsom's consultant that will determine where the drainage ends up.

Response 47-14 The purpose of this discussion is to clarify that the Russell Ranch development will contribute a significant amount of runoff to the watershed, and the City of Folsom is requiring extensive drainage facilities to handle that significant runoff.

Response 47-15 The following text changes are made to the Draft EIR.

- Page 4.10-4, the first paragraph is revised to read:

"In 1993 and 1994, Folsom surveyed and re-mapped the Willow and Humbug Creek floodplains. This major project is reported in Phase 2 Engineering Study, Humbug-Willow Creek Parkway, City of Folsom, Vail Engineering Corporation/Gill Water Resources Engineering, January 1994, and minor subsequent updates. The Parkway Project extends from the County line downstream to Lake Natoma. The flood maps and creek

channels provided are the basis for new development analysis in Folsom. Also, a rainfall-runoff model of the Willow and Humbug Creek watersheds is continually updated with new projects and is being used to evaluate the proposed Promontory development in conjunction with the report titled, "Preliminary Drainage Report for The Promontory." The report is being prepared by The Promontory project applicants in accordance with the El Dorado County Drainage Manual.

Humbug Creek upstream of Oak Avenue is being channeled into the parkway and wetlands of the Parkway at Blue Ravine development by the developer. A significant portion of this work is complete with planning completed for the remainder. Their design controls the projected 100-year runoff. With the Foothills development, the 100-year runoff should be contained from El Dorado County to The Parkway at Blue Ravine wetlands.~~Evidence flooding and flood hazards downstream of the project site has been presented in the Humbug/Willow Creek Parkway Master Plan (Harland Bartholomew and Associates, 1991). Certain reaches of Humbug and Willow Creeks currently have restricted channel capacities and cannot pass 100-year flows. The locations experiencing flooding are Humbug Creek from near the El Dorado/Sacramento County Line to Oak Avenue and Willow Creek between the El Dorado/Sacramento County Line and Prairie City Road (Harland Bartholomew and Associates, 1991). The Humbug/Willow Creek Parkway Master Plan suggests channel modifications and maintenance on Humbug and Willow creeks to provide additional capacity.~~"

Response 47-16 The commentor is referred to Appendix B of this FEIR.

Response 47-17 See Response to Comment 47-15.

Response 47-18 Impact 4.10.5 states that potential cumulative flooding to downstream properties may occur without mitigation. However, in Mitigation Measures 4.10.5a, 4.10.5b, and 4.10.5c are provided to reduce the impact to less than significant. The commentor is also referred to Response to Comment 9-1 and Appendix B of this FEIR.

Response 47-19 The commentor states that mitigation measures identified in the Draft EIR lack quantification and/or methods of implementation, but does not specifically identify what mitigation measures are of concern. Mitigation measures identified in the Draft EIR do identify quantification (e.g., Mitigation Measure 4.5.1 identifies a 4,000 average daily trip standard) and methods of implementation (e.g., Mitigation Measure 4.2.1a requires that the location of construction staging areas be identified on project site

improvement plans that will be approved by the El Dorado County Department of Transportation).

As identified in the Draft EIR (Chapter 1.0, Introduction), the Draft EIR prepared is a Program EIR, pursuant to CEQA Guidelines Section 15168(a), which covers a wide range of subsequent projects related to the implementation of the Promontory Specific Plan. The ultimate timing and characteristics of some mitigation measures identified in the EIR will not be realized until site-specific development occurs. However, these mitigation measures contain performance standards which is considered adequate under CEQA. Implementation of mitigation measures will be identified in the mitigation monitoring and reporting program, pursuant to Public Resources Code Section 21081.6.

Response 47-20 Implementation of Mitigation Measure 4.3.1a would require the project applicant to identify specific areas of rock outcroppings and trees which can be avoided as part of site development in grading plans for the project site. These plans would be reviewed and approved by the El Dorado County Department of Transportation. Thus, determination of what areas are feasible to avoid and what areas are not will be made by the Department of Transportation as part of their of project site improvement plans. It should also be mentioned that implementation of Mitigation Measure 4.8.1 (tree protection and replacement) would also assist in reducing the visual impacts to the City of Folsom.

El Dorado County natural resource preservation standards are set forth in the El Dorado County General Plan, El Dorado County Zoning Ordinance, and the El Dorado County Grading, Erosion, and Sediment Control Ordinance. In addition, to these County standards, the Promontory Specific Plan includes development standards to minimize visual impacts to the City of Folsom, which are identified on pages 4.3-13, 4.3-15 and 4.3-16 of the Draft EIR (the commentor is also referred to Response to Comment 45-5 and 45-6).

Response 47-21 The term "feasible" is defined in Public Resource Code section 21061.1 as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social and technological factors."

Response 47-22 Future development of commercial buildings and residences will be required to submit plans and architectural renderings for design review with the El Dorado Hills Community Services District prior to the issuance of building permits, which will be the responsible agency for ensuring this mitigation measure is implemented. El Dorado County will not issue building permits without design approval of the El Dorado Hills Community Services District.

In addition, implementation of the Promontory Specific Plan will establish the Promontory Architectural Review Committee, which will also review applications for future site development for consistency with the Promontory Specific Plan and Design Guidelines prior to approval by the County. The commentor is referred to Response to Comment 45-6 for revisions to the design standards of the Promontory Specific Plan.

Response 47-23 As described in Response to Comment 47-22, future development of the project site will be required to submit plans and architectural renderings for design review with El Dorado Hills Community Services District (CSD). The CSD will be the responsible agency for ensuring future development does not result in glare impacts to the City of Folsom. In addition, implementation of the Promontory Specific Plan will establish the Promontory Architectural Review Committee, which will also review applications for future site development for consistency with the Promontory Specific Plan and Design Guidelines prior to approval by the County.

Response 47-24 As described in Table 4.3-1 on page 4.3-9 of the Draft EIR, the proposed project is consistent with the General Plan goals, objectives, and policies related visual and aesthetic considerations. Implementation of the proposed project would result in the designating of existing drainages as open space, consistent with General Plan goals, objectives, and policies related to the retention and conservation of vegetation and minimizing disturbance to natural watercourses. In addition, project proposed hillside development standards and grading plan would retain some natural landscape features of the project site as well as provide a residential density transition from existing residential development in the El Dorado Hills area and planned development in the City of Folsom, consistent with the General Plan.

Response 47-25 As described on pages 4.4-8 and 4.4-9 of the Draft EIR, the project's jobs and housing generation was generally included the County's overall jobs to employed resident ratio projections. Development of the proposed project would not substantially alter the County's 2010 anticipated jobs to employed resident ratio of 0.57 for the unincorporated area, but would not assist the County in improving this ratio either. Transportation and circulation, air quality, and noise impacts of project residents commuting for employment outside the County are discussed in the relevant sections of the Draft EIR.

Response 47-26 The County will have the authority to approve the contents of the Tree Protection Plan, per General Plan Policy 7.4.5.1 which states "A tree survey, preservation, and replacement plan shall be required to be filed to the County prior to issuance of a grading permit for discretionary permits on all high-density residential, multi-family residential, commercial and industrial

projects..." The County will not grant final subdivision maps and grading permits without an approved Tree Protection Plan.

The El Dorado County General Plan contains policies (Policy 7.4.4.2 through 7.4.4.5) which are designed to protect and conserve oak woodlands. Instead of applying specific tree replacement ratios (as the commentor suggested), Policy 7.4.4.4 applies tree canopy standards. For example, a parcel which has an existing canopy cover of 60 to 79 percent would need to retain or replace 70 percent of the existing canopy. As a result, different ratios and sizes of replacement trees could be utilized.

The language under Mitigation Measure 4.8.1 should be revised to indicate that the Tree Protection Plan be implemented during ground clearing, grading, and other construction activities. The following changes have been made to the text of the Draft EIR.

- Table 2-1, page 2-25 and page 4.8-27, Mitigation Measure 4.8.1, first bulleted paragraph, fifth sentence has been revised to read:

  "The Plan shall be implemented prior to ~~the initiation of~~ and during ground clearing, grading, or other construction activities that may impact oak trees."

- Page 6-19, Mitigation Measure 4.8.1, first bulleted paragraph, fifth sentence has been revised to read:

  "The Plan shall be implemented prior to ~~the initiation of~~ and during ground clearing, grading, or other construction activities that may impact oak trees."

  As stated in Mitigation Measure 4.8.1 (page 4.8-27 of Draft EIR), "The project applicant shall be responsible for reimbursing the County for all costs related to the compliance monitoring of the project."

  To address the City of Folsom's concern regarding objectivity of selected biological monitor, the following changes have been made to the text of the Draft EIR.

- Table 2-1. page 2-25 and page 4.8-27, Mitigation Measure 4.8.1, second bulleted paragraph has been revised to read:

  "The County or project applicant (with County approval) shall engage a qualified project biologist or equivalent professional to oversee all aspects

of construction monitoring that pertain to oak tree protection. The County would be responsible for reviewing the monitoring program. The project applicant shall be responsible for reimbursing the County for all costs related to the compliance monitoring of the project."

- Page 6-19, Mitigation Measure 4.8.1, first complete paragraph has been revised to read:

"The County or project applicant (with County approval) shall engage a qualified project biologist or equivalent professional to oversee all aspects of construction monitoring that pertain to oak tree protection. The County would be responsible for reviewing the monitoring program. The project applicant shall be responsible for reimbursing the County for all costs related to the compliance monitoring of the project."

Response 47-27 The commentor suggests that Mitigation Measure 4.8.3 is contrary to General Plan Objective 7.4.1. General Plan Objective 4.7.1 states:

"The County shall protect State and Federally recognized rare, threatened, or endangered species and their habitats consistent with Federal and State laws."

Mitigation Measure 4.8.3 would be consistent with General Plan Objective 7.4.1 because it would require that a County-approved biologist conduct special status species surveys prior to the approval of tentative subdivision maps and the subsequent implementation of all mitigation measures identified by the appropriate state and/or federal agencies (i.e., implementation of a Habitat Management Plan) to protect and mitigate any impacts to such species. In so doing, the County would ensure that, prior to any development of the project site, special status species and their habitats would be protected in accordance with state and federal law.

48

July 22, 1997

Mr. Doug Noble, Chairman
El Dorado County Planning Commission
2850 Fairlane Court
Placerville, CA 95667

RE: Promontory EIR, Public Comment

Dear Mr. Noble:

Mr. Crane has sent a letter to you outlining some of the concerns we have regarding the current traffic conditions that exist on Ridgeview Drive. These conditions also exist on some of the other streets such as Burnett and Governors. 48-1

Attached is a copy of the letter he sent to you. I am in support of his opinion.

Sincerely,

E. J. Salata
E J Salata

Ridgeview Drive is no longer a County Rural Road, it is a residential street and should be operated as such!! 48-2

48. E.J. AND B SALATA, RESIDENTS

Response 48-1 See Response to Comment 7-1 and 7-3 through 7-13.

Response 48-2 See Response to Comment 7-1 and 7-3 through 7-13.

49

July 22, 1997

Mr. Doug Noble, Chairman
El Dorado County Planning Commission
2850 Fairlane Court
Placerville, CA 95667

RE: Promontory EIR, Public Comment

Dear Mr. Noble:

Mr. Crane has sent a letter to you outlining some of the concerns we have regarding the current traffic conditions that exist on Ridgeview Drive. These conditions also exist on some of the other streets such as Burnett and Governors. 49-1

Attached is a copy of the letter he sent to you. I am in support of his opinion.

Sincerely,

Jack Stadler
1001 Sypline Ct.
El Dorado Hills CA
95762

J STADLER

49. JACK STADLER, RESIDENT

Response 49-1 See Response to Comment 7-1 and 7-3 through 7-13.

50

July 22, 1997

Mr. Doug Noble, Chairman
El Dorado County Planning Commission
2850 Fairlane Court
Placerville, CA 95667

RE: Promontory EIR, Public Comment

Dear Mr. Noble:

Mr. Crane has sent a letter to you outlining some of the concerns we have regarding the current traffic conditions that exist on Ridgeview Drive. These conditions also exist on some of the other streets such as Burnett and Governors. 50-1

Attached is a copy of the letter he sent to you. I am in support of his opinion.

Sincerely,

Troy D. Cassidy
Management Systems
2915 Ridgeview Dr.
E. Dorado, Ca. 95762

50. TROY AND MARGARET GANDY, RESIDENTS

Response 50-1 See Response to Comment 7-1 and 7-3 through 7-13.

51

Bruce & Victoria Bockie
2990 Ridgeview Dr.
El Dorado Hills, CA 95762
916-933-3048

July 23, 1997

Mr. Doug Noble, Chairman
El Dorado County Planning Commission
2850 Fairlane Court
Placerville, CA 95667

RE: Promontory EIR, Public Comment

Dear Mr. Noble:

As a resident of Parkview Heights, we are writing this letter to discuss our concerns regarding the extension of Gillette Drive to create access to the Promontory Development. We believe this will greatly increase traffic on Ridgeview Drive and Burnett Drive. We feel this is a safety issue and will undoubtedly impact our neighborhood in many ways.

Our home is located on the corner of Ridgeview and Burnett Drive. Currently, traffic is very heavy at certain times of the day at this corner. We have had our mail box taken out several times with people driving around the corner too fast and cutting the corner. We had a car roll down the hill on Ridgeview Dr. cut across our lawn, narrowly missing the front bedroom and hit our pick-up truck which was parked on the driveway. The truck was hit with such force it knocked it completely into the side year. A police report was filed. Cars seem to build up momentum coming down the hill on Ridgeview and take the turn at Burnett too fast. Many times we have narrowly escaped being hit while trying to back out of our driveway on to Ridgeview Drive. We start backing out and people are coming down Ridgeview so fast it's hard for them to slow down. Also, when people are making a right turn on to Ridgeview from Burnett they do not come to a complete stop at the stop sign. They look to the left down Ridgeview, then just go around the corner and there we are trying to back out of our driveway. Our corner is dangerous now, think what it will be like with the increased traffic flow. High School students use this route all the time to get to Oak Ridge High School. I am assuming any new residents in the Promontory Development with high school age children will be attending Oak Ridge. This alone will add to the traffic flow problem. 51-1

We feel that any increase in the traffic flow on Ridgeview Drive and Burnett Drive would greatly aggravate an already dangerous condition.

Sincerely,

Bruce Bockie Victoria Bockie

Bruce Bockie Victoria Bockie

E & VICTORIA BOCKIE
RIDGEVIEW DR

51. BRUCE AND VICTORIA BOCKIE, RESIDENTS

Response 51-1 See Response to Comment 7-1 and 7-3 through 7-13.

52

[illegible]

July 22, 1997

Mr. Doug Noble, Chairman
El Dorado County Planning Commission
2850 Fairlane Court
Placerville, CA 95667

RE: Promontory EIR, Public Comment

Dear Mr. Noble:

Mr. Crane has sent a letter to you outlining some of the concerns we have regarding the current traffic conditions that exist on Ridgeview Drive. These conditions also exist on some of the other streets such as Burnett and Governors. 52-1

Attached is a copy of the letter he sent to you. I am in support of his opinion.

Sincerely,

Varda Disho

VARDA DISHO & family
CARMEN DISHO
HELEN DISHO
VICTOR DISHO
MARIE DISHO
NATALIE DISHO

Residence of
3050 Ridgeview Dr.
El Dorado Hills CA.
95762

52. VARDA DISHO AND FAMILY, RESIDENTS

Response 52-1 See Response to Comment 7-1 and 7-3 through 7-13.

53

PLANNING DEPARTMENT

July 22, 1997

Mr. Doug Noble, Chairman
El Dorado County Planning Commission
2850 Fairlane Court
Placerville, CA 95667

RE: Promontory EIR, Public Comment

Dear Mr. Noble:

Mr. Crane has sent a letter to you outlining some of the concerns we have regarding the current traffic conditions that exist on Ridgeview Drive. These conditions also exist on some of the other streets such as Burnett and Governors. 53-1

Attached is a copy of the letter he sent to you. I am in support of his opinion.

Sincerely,

R V Worrall
Mary E Worrall
Lisa L Worrall

2940 Ridgeview Dr.
El Dorado Hills, CA. 95762

WORRALL, R.
MARY
LISA

53. R. MARY AND LISA WORRALL, RESIDENTS

Response 53-1 See Response to Comment 7-1 and 7-3 through 7-13.

54

97 AUG 7 AM 10:37
PLANNING DEPARTMENT

July 22, 1997

Mr. Doug Noble, Chairman
El Dorado County Planning Commission
2850 Fairlane Court
Placerville, CA 95667

RE: Promontory EIR, Public Comment

Dear Mr. Noble:

Mr. Crane has sent a letter to you outlining some of the concerns we have regarding the current traffic conditions that exist on Ridgeview Drive. These conditions also exist on some of the other streets such as Burnett and Governors. 54-1

Attached is a copy of the letter he sent to you. I am in support of his opinion.

Sincerely,

JEWBY, JOYCE

54. JOYCE NEWBY, RESIDENT

Response 54-1 See Response to Comment 7-1 and 7-3 through 7-13.

55

July 25, 1997

Mr Douglas Noble, Chairman
Eldorado County Planning Commission
2850 Fairlane Ct.
Placerville Calif 95667

RE Promontory EIR - Public Comment

Dear Mr Noble:

I reside at the intersection of Ridgeview Dr and Gillette. I do beleive the overall concept of the proposed development will benefit our Community. 55-1

However non of the existing streets in the area can safety handle existing traffic let alone added traffic unless mitigating measures are taken. 55-2

Streets in the area are narow, steep, with sharp curves and have no sidewalks or street lights. adding additional traffic to this already hazerdous situation would be very imprudent.

EIR approval should require new arterial streets (ie - Dan Russell Blvd ext) be in place to serve each phase of development before the phase is completed so additional traffic generated will not over burden existing roads. 55-3

Sincerly
Stanley W Johnson
3125 Ridgeview Dr
Eldorado Hills Calif 95762

55. STANLEY W. JOHNSON, RESIDENT

Response 55-1 No additional response is required.

Response 55-2 See Response to Comment 7-1 and 7-3 through 7-13.

Response 55-3 See Response to Comment 7-1, 7-3 through 7-13, and 12-7.

56

Mr. Doug Noble, Chairman
El Dorado County Planning Commission
2850 Fairlane Court
Placerville, CA. 95667
RE: Promontory EIR, Public Comment

7/25/97

Dear Mr. Noble:

The comments in this letter refer to the EIR for the Promontory Project in El Dorado Hills, which are open for public comment through July 31, 1997.
My concerns on the above project are as follows:

1. The study shows that the traffic on Ridgeview Drive will triple to over 6000 trips daily. This is an unacceptable increase to an area already burdened by the current traffic load which ignores the speed limits, and recklessly maneuvers steep(15%) gradient, and blind curves.
2. The area has no street lighting or sidewalks. In addition, there are no traffic speed signs, painted road dividers, or stop signs. It is literally a speedway, with most traffic going 40 to 50MPH.

56-1

I would suggest the following to ameliorate the potentially dangerous situation:
1. Open Gillette Drive as the principal access, there are no buildings on Gillette and it could be widened (if necessary) to accommodate increased traffic without disturbing existing structures.
2. Install Stop signs to slow traffic at Moonstone, Saffire Way, and Burnett. These are the areas of the steep gradient and poor visibility.
3. Paint lane markers on the roadway,as has been done on Olson, which is a much narrower roadway.
4. Clearly indicate the speed limit on Ridgeview, and consider the use of speed bumps or other similarly effective means to slow the traffic.
5. Create a diversion to force traffic to use Gillette, which has no steep gradient , poor visibility, or residential frontage . The current and proposed plan seriously endangers lives, increases traffic noise, and destroys the "village" principal which was the guiding force in the creation of El Dorado Hills.

56-2

I strongly urge that the EIR and the Planning Commission address the above comments.
I would also appreciate being notified of any future meetings of the Planning Board pertinent to this project and the EIR.

Sincerely

Mark Gottlieb
3032 Ridgeview Drive
El Dorado Hills. Ca. 95762

MG:hms

56. MARK GOTTLIEB, RESIDENT

Response 56-1 See Response to Comment 7-1 and 7-3 through 7-13.

Response 56-2 See Response to Comment 8-1.

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CHAPTER 4.0

MINOR CHANGES AND EDITS TO THE DRAFT ENVIRONMENTAL IMPACT REPORT

CHAPTER 4.0

MINOR CHANGES AND EDITS TO THE DRAFT ENVIRONMENTAL IMPACT REPORT

4.1 OVERVIEW

Changes to the text of the Draft EIR have been identified in the responses to comments (Chapter 3.0) with strikeout and underline revision marks. None of these changes constitute new significant information or result in any new significant impacts of the proposed project.

4.2 CHANGES AND EDITS TO THE DRAFT EIR

CHAPTER 2.0

The following minor changes were made to Chapter 3.0 (Executive Summary) of the Draft EIR.

- Page 2-1 (second bulleted item) is revised to read:

  "Develop and maintain safe and efficient transportation and circulation facilities to sufficiently serve the project site, while minimizing to the extent possible traffic impacts to existing residential roadways."

- Page 2-9 (Table 2-1, Mitigation Measure 4.2.1c), the following bullet is added to Mitigation Measure 4.2.1c:

  "Roadway closure shall not occur during the a.m. and p.m. peak-hour traffic periods."

- Page 2-10 (Table 2-1, Mitigation Measure 4.6.1) the first sentence is revised to read:

  "4.6.1 Prior to the approval of improvement plans for subsequent development,..."

- Page 2-12 (Impact 4.3.1), the following mitigation measure is added:

  "4.3.1f Project Design Guidelines shall include standards on the placement, height, and general visibility of outdoor antennas and satellite dishes throughout the project site."

- Page 2-12 (Mitigation Measure 4.3.3a), the following text changes are made to Mitigation Measure 4.3.3a:

"4.3.3a Prior to final water and sewer system approval, sewer and water improvement plans shall include details for screening sewer lift stations and the two million gallon water storage tank in a manner acceptable to the El Dorado Irrigation District. The screening details shall also be submitted to the El Dorado Hills Design Review Committee for review. Methods of screening may include, but are not limited to, the following:

1. Architectural design of facilities to blend with the surrounding natural features.

2. Screen facilities with native landscaping.

3. Place facilities partially or completely underground."

- Page 2-12 (Mitigation Measure 4.3.1e), Mitigation Measure 4.3.1e is revised to read:

"4.3.1e Project-wide ~~s~~Solid fences and walls shall be avoided to the maximum extent feasible (except within individual residential building envelopes). If solid fences and walls are used, the color and material used will blend with the natural features of the project site. Continuous fences and walls shall be softened with landscaping."

- Page 2-13 (Table 2-1, Impact 4.3.4), Impact 4.3.4 is revised to read:

"4.3.4 As viewed from existing and planned residential areas in El Dorado Hills area adjacent to the project site, implementation of the proposed project could potentially obstruct ~~public~~ scenic views of Folsom Lake and the lower elevation areas of Sacramento County. This would be a less than significant impact."

- Page 2-14 (Table 2-1, Impact 4.5.1) and Page 4.5-28 (Impact 4.5.1), the following revisions to Mitigation Measure 4.5.1 and new mitigation measure are added:

"4.5.1a During the review of tentative maps for each phase of the Promontory Specific Plan, a traffic study shall be performed to determine the amount of project traffic that will be added to the local streets in El Dorado Hills. If any local residential streets would experience a total daily volume in excess of 4,000 as a result of implementing a particular phase of the Promontory Specific Plan, then the tentative map for that phase shall not

be approved unless traffic circulation measures are implemented which will prevent the total daily traffic volume on local residential streets from reaching 4,000 average daily trips.

Traffic circulation measures would include, but are not limited to: additional connections to other local residential streets (temporarily or permanently); elimination of connections to local residential streets (temporarily or permanently); construction of Russell Ranch Boulevard Extension to Green Valley Road; construction of Russell Ranch Boulevard to the City of Folsom's East Natoma Street Extension (and/or connection to U.S. Highway 50); modification of project phasing; construction of new roads to serve the project site (through the Crown Valley, Ridgeview Village Unit 3, and/or Ridgeview Village Unit 9 approved tentative maps); delay of tentative map approval; and/or reduction in the number of dwelling units.

4.5.1b In order to minimize traffic impacts to existing residential roadways, the following general project and circulation phasing plan shall be implemented (see Figure 4.5-14).

Phase 1: Development of Village 6 with roadway access to Gillett Drive, Powers Drive, and Beatty Drive and construction of the Community Collector between Villages 5, 6 and 7.

Phase 2: Development of Village 1 with the construction of northern portion of Russell Ranch Boulevard from the Community Collector to Green Valley Road.

Phase 3: Development of Village 2 and 3 with the construction of a portion of the Community Collector north of Village 3.

Phase 4: Development of Village 5 with the construction of a portion of the Community Collector north of Village 5. Phase 5: Development of a portion of Village 7 and the Village Center with the construction of Russell Ranch Boulevard from the Village Center to the Community Collector.

Phase 6: Development of the remaining portions of Village 7 and the Village Center with the construction of a portion of the Community Collector north of Village 7 and the Village Center Collector.

Phase 7: Development of Village 4 with the construction of a portion of the Community Collector west of Village 4.

Phase 8: Development of Village 8 with the construction of accesses to Weststar Lane and the City of Folsom.

The above project and circulation phasing plan may be modified based on market and development constraints. However, no additional villages beyond Village 6 shall have access to existing residential roadways east of the project site (i.e., Suffolk Way, Gillett Drive, Powers Drive, Julie Ann Way, and Beatty Drive) until additional project accesses and roadways are developed."

- Page 2-15 (Table 2-1, mitigation measures 4.5.2a, 4.5.2b, and 4.5.2c), mitigation measures 4.5.2a, 4.5.2b, and 4.5.2c are revised to read:

"4.5.2a Widen Green Valley Road from two lanes to four lanes from El Dorado Hills Boulevard to the El Dorado County line~~,in El Dorado County to the East Natoma Street/Blue Ravine Road/Green Valley Road intersection in the City of Folsom.~~

4.5.2b Widen Green Valley road from two lanes to four lanes in the City of Folsom from the El Dorado County line to the East Natoma Street/Blue Ravine Road/Green Valley Road intersection.

4.5.2c~~b~~ Construct a free-flow right-turn lane from westbound Green Valley Road to northbound East Natoma Street and widen northbound East Natoma Street to include two departing lanes for a minimum of 1,000 feet.

4.5.2d~~c~~ Widen southbound East Natoma Street to include dual left-turn lanes and one exclusive right-turn lane."

- Page 2-16 (Table 2-1, Mitigation Measure 4.5.3a), Mitigation Measure 4.5.3a is revised to read:

"4.5.3a Implement m~~M~~itigation m~~M~~easures 4.5.2a and 4.5.2b."

- Page 2-17 (Table 2-1, Mitigation Measure 4.5.7a), Mitigation Measure 4.5.7a is revised to read:

"4.5.7a Implement m~~M~~itigation m~~M~~easures 4.5.2a and 4.5.2b."

- Page 2-18 (Table 2-1, Mitigation Measure 4.5.9), Mitigation Measure 4.5.9 is revised to read:

"4.5.9 The project applicant shall be responsible for their fair-share cost of bus turnouts and transit shelters located within the project site. Bus turnouts and transit shelters will be placed along the proposed Russell Ranch

Boulevard, community and village center collectors, as well as the village center. The specific location of these facilities shall be determined jointly by the El Dorado County DOT and El Dorado Transit Authority. The project applicant's fair-share cost shall be determined by the El Dorado County DOT. Construction of these improvements should occur when transit service is extended to the project. "

- Page 2-20 (Table 2-1, Mitigation Measure 4.6.1) the first sentence is revised to read:

  "4.6.1 Prior to the approval of improvement plans for subsequent development,..."

- Page 2-23 (Table 2-1, Impact 4.7.2), Impact 4.7.2 is revised to read:

  "4.7.2 Upon project buildout, subsequent local traffic increases would increase noise levels along local arterial roads. P.M. peak-hour noise levels would increase along segments of Green Valley Road, Francisco Drive, East Natoma Street, and El Dorado Hills Boulevard, exposing existing residents to excessive noise levels~~noise levels exceeding the performance standards outlined in the El Dorado County General Plan Noise Element and the City of Folsom Noise Element where applicable~~. This would be a significant unavoidable impact."

- Page 2-23 (Table 2-1, Impact 4.7.3), Impact 4.7.3 is revised to read:

  "4.7.3 Resultant traffic along the proposed Russell Ranch Boulevard extension would expose residents of the Shadowfax subdivision and Amys Lane to excessive noise levels~~exceeding the performance standards of the El Dorado County Noise Element and Table 4.7-1~~. This would be a significant impact."

- Page 2-25, Table 2-1, first paragraph, the first sentence has been revised to read:

  "...Plan Policy 7.4.4.4 ~~wherever possible~~."

- Table 2-1, Page 2-25, Mitigation Measure 4.8.1, first bulleted paragraph. fifth sentence has been revised to read:

  "The Plan shall be implemented prior to ~~the initiation of~~ and during ground clearing, grading, or other construction activities that may impact oak trees."

- Table 2-1, Page 2-25, Mitigation Measure 4.8.1, second bulleted paragraph has been revised to read:

"The County or project applicant (with County approval) shall engage a qualified project biologist or equivalent professional to oversee all aspects of construction monitoring that pertain to oak tree protection. The County would be responsible for reviewing the monitoring program. The project applicant shall be responsible for reimbursing the County for all costs related to the compliance monitoring of the project."

- Page 2-26 (Table 2-1, second bulleted item), the first sentence has been revised to read:

"The Monitoring and Management Plan shall identify monitoring and management techniques for a recommended time ~~minimum~~ period (as determined during development of the Plan) ~~of ten years~~ following implementation."

- Table 2-1, Page 2-27, First Paragraph have been revised to read:

"4.8.3 The project applicant shall hire a biologist(s) approved by the County to conduct protocol surveys for the species listed in Table 4.8-2 as having a high potential to occur on the property or as being a "potential resident" of the property, which includes bald eagle (*haliaeetus leucocephalus*), long-eared bat (*myotis evotis*), long-legged myotis (*myotis volans*), yuma myotis (*myotis yumanensis*), cooper's hawk (*accipiter cooperi*), sharp-shinned hawk (*accipiter striatus*), long-eared owl (*asio otus*), short-eared owl (*asio flammeus*), ferruginous hawk (*buteo regalis*), northern harrier (*circus cyaneus*), white-tailed kite (*elanus leucurus*), and burrowing owl (*speotyto cunicularia*). In addition, the biologist(s) shall also conduct protocol surveys for any new special status species that may occur on the project site, which are listed by CDFG and/or USFWS subsequent to the certification of this EIR. Results of the protocol surveys shall be submitted to CDFG, and/or USFWS, as required, and to the County prior to approval of subsequent tentative subdivision maps. If no sensitive species are located on-site, no further mitigation is necessary. If listed species are located on the property, the applicant and County shall enter into informal consultation with the appropriate resource agency ~~CDFG and USFWS~~ and begin preparation of a Biological Assessment or Habitat Conservation Plan, as applicable."

- Table 2-1, Pages 2-27 and 2-28, First Bulleted Paragraph under Mitigation Measures have been deleted as follows:

"4.8.4 The objective of this mitigation measure is to reduce the potential for introduction or dispersal of non-native plant species to less-than-significant levels. The following measures will be performed:

~~All seeds and straw material shall be certified weed free by the California Department of Food and Agriculture (CDFA) seed laboratory. All gravel and fill material used during project construction and maintenance shall be certified weed free by the County Agriculture Commissioner's Office. The removal site for all fill materials shall be examined for the presence of noxious weeds by the local County Agriculture Commissioner's Office. Material transported between counties shall be approved by the local County Agriculture Commissioner's Office in the county receiving the materials.~~

Project landscaping shall conform to County and California Native Plant Society guidelines within and adjacent to public and private open space areas. Table 4.8-3 presents a list of species that should not be used for project landscaping."

- Table 2-1, Page 2-29 has been revised to read:

"4.9 Geology and Soils"

- Page 2-30 (Table 2-1, Mitigation Measure 4.9.1c) Mitigation Measure 4.9.1c is revised to read:

"4.9.1c Prior to approval of the improvement plans for site development, the project applicant will submit an erosion control plan to the County. Erosion control measures will include techniques such as physical and vegetative stabilization measures and runoff diversion measures. Additionally the plan will specify measures for reuse or disposal of excavated material. If excavated material is suitable for use at the project site, the plan should minimize elapsed time between excavation and reuse and provide adequate stockpile coverage and protection from wind and water erosion during the entire storage period. If excavated material is unsuitable for reuse at the project site, the plan will include specific information regarding the eventual reuse or disposal site, transportation methods, disposal reuse management, and schedule. The plan will be consistent with the El Dorado County Grading, Erosion, and Sediment Control Ordinance and the El Dorado County Resource Conservation District's Erosion Sediment Control Guidelines~~Erosion and Sediment Control Plan~~."

- Page 2-31 (Table 2-1, Mitigation Measure 4.10.1), Mitigation Measure 4.10.1 is revised to read:

"4.10.1 Prior to approval of improvement plans for site development, the project applicant shall submit erosion control plans and hazardous materials control program to the County consistent with El Dorado County's Grading, Erosion, and Sediment Control Ordinance and El Dorado Resource Conservation District's Erosion Sediment Control Guidelines~~Erosion and Sediment Control Plan~~. The plan should include Best Management Practices to minimize and control pollutants in storm water runoff. Suggested water quality control practices should include the following:"

- Table 2-1, Page 2-34, First Paragraph under Mitigation Measure 4.10.4 have been revised to read:

"4.10.4 Prior to improvement plan approval for the Village Center and/or Villages 1, 2, 3, 5, and/or 7, ~~approval of improvement plans for site development~~, the project applicant, in coordination with the El Dorado County Office of Emergency Services and the U.S. Bureau of Reclamation, will develop an evacuation plan for the project site. The evacuation plan will include the establishment of protocol in the event of the failure of Mormon Island Dam and will be consistent with the El Dorado County Operation Area Multi-Hazard Functional Emergency Operations Plan."

- Page 2-34 (Table 2-1, Mitigation Measure 4.10.5a), Mitigation Measure 4.10.5a is revised to read:

"4.10.5a Prior to approval of improvement plans for site development, El Dorado County shall coordinate with the City of Folsom and the City of Folsom/El Dorado County Joint Powers Authority (JPA) in developing a formal drainage agreement identifying shared drainage facilities and volumes, pre- and post-development runoff volumes that maintain existing 100-year storm drainage flows, and a review process of future project-specific drainage plans. The JPA was formed to address development-related issues along the County line that affect both the City of Folsom and El Dorado County. Since a portion of the Promontory and neighboring developments in El Dorado County are at the headwaters to the Willow and Humbug Creeks in the City of Folsom, the JPA has the authority to coordinate the design of drainage facilities to ensure facilities are property planned. The drainage agreement shall be approved by both the City of Folsom and El Dorado County."

- Page 2-35 (Mitigation Measure 4.10.5c), Mitigation Measure 4.10.5c has been deleted as follows:

~~"4.10.5c Prior to County approval, the County shall submit project drainage plans to the City of Folsom for review and comment.~~

4.10.5d~~c~~ If the drainage plan described in Mitigation Measure 4.10.5b identifies 100-year flood plain on the project site, project development shall not occur in those areas identified, unless flood protection improvements approved by the County are implemented."

- Page 2-36 (Mitigation Measure 4.11.2), Mitigation Measure 4.11.2 is revised to read:

"4.11.2 The project applicant shall implement the following measures to minimize potential impacts to undiscovered cultural resources:

A. Prior to the approval of subsequent tentative subdivision maps for project development, the project applicant shall retain a qualified archaeologists to perform an archaeological survey for the tentative subdivision map area. The archaeological survey shall employ current field survey and record search methods and standards. Significant archaeological resources discovered shall be recorded and avoided and/or mitigated, pursuant to state and federal standards. The findings of the archaeological survey shall summarized in a report and submitted to the County prior to tentative subdivision map approval.

B. In the event that any prehistoric or historic subsurface cultural resources are discovered during construction-related earthmoving activities, all work within 20 meters of the resources shall be halted and the project applicant shall consult with a qualified archaeologist to assess the significance of the find. If any find were determined to be significant by the qualified archaeologist, then representatives of the project applicant, El Dorado County, and the qualified archaeologist would meet to determine the appropriate course of action. If the discovery includes human remains, Section VIII of CEQA Guidelines Appendix K would be followed, requiring coordination with the Native American Heritage Commission if the human remains are of Native American origin. All significant cultural materials recovered would be subject to scientific analysis, professional museum curation, and a report prepared by the qualified archaeologist according to current professional standards."

- Page 2-37 (Table 2-1, Mitigation Measure 4.12.3a) the text of Mitigation Measure 4.12.3a is revised to read:

  "4.12.3a Prior to approval of tentative subdivision maps and improvement plans, the project applicant shall submit project design plans to the El Dorado Hills Fire Department for review and approval to ensure that project site design meets Department standards. This would include, but is not limited to, providing at least two permanent access roads into the project site throughout project development. In addition, all project gates shall be designed to Department standards unless approved otherwise by the Department. All project roadways and access points shall be designed according to El Dorado Hills Fire Department and El Dorado County Department of Transportation standards to ensure adequate emergency access in accordance with General Plan Policies 5.7.1.1, 5.7.4.1, 6.2.3.1, and 6.2.3.2."

- Page 2-38 (Table 2-1, Mitigation Measure 4.12.5), Mitigation Measure 4.12.5 is revised to read:

  "4.12.5 Prior to approval of the Specific Plan~~tentative subdivision maps~~, Rescue Union School District, Buckeye Union School District, El Dorado Union High School District, and the project applicant shall enter into a formal agreement regarding mitigation of project impacts on school facilities. This agreement shall specifically identify mechanisms (i.e., payment of County-wide school impact fees and transfer of the elementary school site) to construct new school facilities, coordination of timing of new school facilities and build-out of the project site, and construction of the project-proposed elementary school site (if ultimately utilized by the Rescue Union School District)."

- Page 2-40 (Table 2-1, Impact 4.13.5), Impact 4.13.5 is revised to read:

  "4.13.5 Implementation of the proposed project would result in an increase in the amount of solid waste accepted by the Western El Dorado Recovery Systems~~at the Union Mine Disposal Site~~. This would be a less than significant impact."

CHAPTER 3.0

The following minor changes were made to Chapter 3.0 (Project Description) of the Draft EIR.

- Page 3-5 (second bulleted item) is revised to read:

"Develop and maintain safe and efficient transportation and circulation facilities to sufficiently serve the project site, while minimizing to the extent possible traffic impacts to existing residential roadways."

- Page 3-11, first paragraph, of the Draft EIR is revised to read:

"The Land Use Plan designates a 10-acre elementary school site in the northern portion of the project site in order to serve the project and surrounding residential areas. This school site would be operated by the Rescue Unified School District. However, the developer is in discussion with the District for site relocation because the District is in need of a school site and the Crown Valley school site better suits their needs. If the elementary school site within the Crown Valley project is utilized for the construction of the elementary school, then the elementary school site within the proposed project will be designated for open space, park, roadway, and residential uses, consistent with the maximum dwelling units of 1,387."

- Page 3-17, last paragraph is revised to read:

"In order to reduce development impacts on the viewsheds and natural terrain of the uplands portion of the project site, the Specific Plan proposes to preserve approximately 184 acres of private open space as part of the site design of the residential villages and the application of the Specific Plan's Hillside Development Standards. Private open space would consist of restricted areas within residential lots that would not be allowed to be developed, landscaped, or otherwise altered. Fencing shall be permitted within the private open space areas, but shall be limited to open view fencing. These private open space areas would be placed in perpetual conservation easements and would be identified at the tentative map stage of residential villages. Figure 3-9 illustrates the proposed use of conservation easements (private open space) to reduce adverse effects to the natural terrain as part of site development. Maintenance of private open space areas will be maintained by the property owner, a homeowners association ~~costs of private open space areas may be included in a lighting and landscaping assessment district~~ or some other form of property assessment."

SECTION 4.2

The following minor changes were made to Section 4.2 (Land Use) of the Draft EIR.

- Page 4.2-21 (Mitigation Measure 4.2.1c), the following bullet is added to Mitigation Measure 4.2.1c:

"Roadway closure shall not occur during the a.m. and p.m. peak-hour traffic periods."

SECTION 4.3

The following minor changes were made to Section 4.3 (Aesthetics) of the Draft EIR.

- Page 4.3-12, first full paragraph is revised to read:

  "This analysis evaluates the project's alteration of the visual character of the project from the sensitive viewsheds (i.e., City of Folsom, U.S. Highway 50, and the El Dorado Hills Area) identified above from public viewing areas. ~~No~~ Potential impacts to ~~analysis of~~ private viewsheds ~~was~~ were also considered ~~performed~~ as part of this analysis. ~~Subsequent tentative subdivision maps and other approvals are expected to address potential adverse effects to private views.~~"

- Page 4.3-13, items 6 and 8 are revised to read:

  "6. Restriction of the building envelope (consisting of all graded and impermeable surfaces) to ~~30,000~~15,000 square feet of the lot area."

  "8. Solid ~~Fencing~~ fencing is restricted to the development envelope and cannot exceed 6 feet in height. ~~Rear yard fencing shall be open view.~~"

- Page 4.3-15, item 9 is revised to read:

  "9. Building colors and materials shall consist of the following standards:

  Roof Color:

  a. Roofs shall be earth tones, with low or muted chrome.

  b. Avoid brighter, higher chrome colors that will be visually prominent.

  Roof Materials:

  a. Tiles, shingles, slate, high quality raised composition/asphalt, and high quality simulated materials (e.g., concrete/fiberglass shakes) in natural colors are encouraged.

  b. The roofing material must be consistent with the style of the house. Avoid "plastic" looking, reflective or glossy materials or other low quality materials.

  c. Avoid metal or glass roofs that might reflect sunlight.

d. Roof vent pipes and roof fixtures should be painted a flat color to match the roof color.

Wall Color:

a. Wall surfaces shall utilize muted, warm earthtone colors. Medium values with low chroma are encouraged.

b. Avoid highly reflective, bright white stucco surfaces (e.g., refrigerator or "appliance" white).

c. Bright white may be used for window sash, door, trellis and trim color or for wood siding accents. (Emerson, 1997)

~~shall be earth tone. Roof colors shall be dark earth tones, while wall colors are to utilize muted, warm earth tone colors (Promontory Specific Plan, Palisades, 1997)."~~

- Page 4.3-17 (Mitigation Measure 4.3.1e), Mitigation Measure 4.3.1e is revised to read:

"4.3.1e Project-wide ~~S~~solid fences and walls shall be avoided to the maximum extent feasible (except within individual residential building envelopes). If solid fences and walls are used, the color and material used will blend with the natural features of the project site. Continuous fences and walls shall be softened with landscaping."

- Page 4.3-17 (Impact 4.3.1), the following mitigation measure is added:

"4.3.1f Project Design Guidelines shall include standards on the placement, height, and general visibility of outdoor antennas and satellite dishes throughout the project site."

- Page 4.3-18 (Mitigation Measure 4.3.3a), the following text changes are made to Mitigation Measure 4.3.3a:

"4.3.3a Prior to final water and sewer system approval, sewer and water improvement plans shall include details for screening sewer lift stations and the two million gallon water storage tank in a manner acceptable to the El Dorado Irrigation District. The screening details shall also be submitted to the El Dorado Hills Design Review Committee for review. Methods of screening may include, but are not limited to, the following:

1. Architectural design of facilities to blend with the surrounding natural features.

2. Screen facilities with native landscaping.

3. Place facilities partially or completely underground."

- Page 4.3-18 (Impact 4.3.4), Impact 4.3.4 is revised to read:

"4.3.4 As viewed from existing and planned residential areas in El Dorado Hills area adjacent to the project site, implementation of the proposed project could potentially obstruct ~~public~~ scenic views of Folsom Lake and the lower elevation areas of Sacramento County. This would be a less than significant impact."

- Page 4.3-19, under Impact 4.3.4, first paragraph, the last two sentences are revised to read:

"~~As previously described, only adverse effects to public views was analyzed. However, subsequent tentative subdivision maps and other approvals are expected to address potential adverse effects to private views~~However, ultimate development of the project site could potentially obstruct scenic private views of residents adjacent to the project site in the El Dorado Hills area. This potential impact would be minimized by the following design standard set forth in the revised Promontory Specific Plan:

"Where the project site abuts existing homes, residential lot lines within the project shall be staggered from residential lot lines outside of the project so as to minimize the viewshed impacts to existing homes. Where the project site abuts existing homes, the minimum residential lot size within the project shall be 30,000 square feet. This will allow homes to be situated on such lots so as to minimize the impact to views of existing homes. (McDougall, 1997)"

SECTION 4.5

The following minor changes were made to Section 4.5 (Transportation and Circulation) of the Draft EIR.

- The text on page 4.5-20 will be changed to matched the revised figures referred to in response 47-1. The specific change is as follows:

"...are shown on Figure 4.5-1 and include Russell Ranch Road (four to six lanes), Iron Point Road (four to six lanes), and a new interchange...."

- Page 4.5-28 (Impact 4.5.1), the following revisions to Mitigation Measure 4.5.1 and new mitigation measure are added:

"4.5.1a During the review of tentative maps for each phase of the Promontory Specific Plan, a traffic study shall be performed to determine the amount of project traffic that will be added to the local streets in El Dorado Hills. If any local residential streets would experience a total daily volume in excess of 4,000 as a result of implementing a particular phase of the Promontory Specific Plan, then the tentative map for that phase shall not be approved unless traffic circulation measures are implemented which will prevent the total daily traffic volume on local residential streets from reaching 4,000 average daily trips.

Traffic circulation measures would include, but are not limited to: additional connections to other local residential streets (temporarily or permanently); elimination of connections to local residential streets (temporarily or permanently); construction of Russell Ranch Boulevard Extension to Green Valley Road; construction of Russell Ranch Boulevard to the City of Folsom's East Natoma Street Extension (and/or connection to U.S. Highway 50); modification of project phasing; construction of new roads to serve the project site (through the Crown Valley, Ridgeview Village Unit 3, and/or Ridgeview Village Unit 9 approved tentative maps); delay of tentative map approval; and/or reduction in the number of dwelling units.

4.5.1b In order to minimize traffic impacts to existing residential roadways, the following general project and circulation phasing plan shall be implemented (see Figure 4.5-14).

Phase 1: Development of Village 6 with roadway access to Gillett Drive, Powers Drive, and Beatty Drive and construction of the Community Collector between Villages 5, 6 and 7.

Phase 2: Development of Village 1 with the construction of northern portion of Russell Ranch Boulevard from the Community Collector to Green Valley Road.

Phase 3: Development of Village 2 and 3 with the construction of a portion of the Community Collector north of Village 3.

Phase 4: Development of Village 5 with the construction of a portion of the Community Collector north of Village 5.

Phase 5: Development of a portion of Village 7 and the Village Center with the construction of Russell Ranch Boulevard from the Village Center to the Community Collector.

Phase 6: Development of the remaining portions of Village 7 and the Village Center with the construction of a portion of the Community Collector north of Village 7 and the Village Center Collector.

Phase 7: Development of Village 4 with the construction of a portion of the Community Collector west of Village 4.

Phase 8: Development of Village 8 with the construction of accesses to Weststar Lane and the City of Folsom.

The above project and circulation phasing plan may be modified based on market and development constraints. However, no additional villages beyond Village 6 shall have access to existing residential roadways east of the project site (i.e., Suffolk Way, Gillett Drive, Powers Drive, Julie Ann Way, and Beatty Drive) until additional project accesses and roadways are developed."

- Page 4.5-29 (mitigation measures 4.5.2a, 4.5.2b, and 4.5.2c), mitigation measures 4.5.2a, 4.5.2b, and 4.5.2c are revised to read:

"4.5.2a Widen Green Valley Road from two lanes to four lanes from El Dorado Hills Boulevard to the El Dorado County line~~ in El Dorado County to the East Natoma Street/Blue Ravine Road/Green Valley Road intersection in the City of Folsom.~~

4.5.2b Widen Green Valley road from two lanes to four lanes in the City of Folsom from the El Dorado County line to the East Natoma Street/Blue Ravine Road/Green Valley Road intersection.

4.5.2c~~b~~ Construct a free-flow right-turn lane from westbound Green Valley Road to northbound East Natoma Street and widen northbound East Natoma Street to include two departing lanes for a minimum of 1,000 feet.

4.5.2d~~c~~ Widen southbound East Natoma Street to include dual left-turn lanes and one exclusive right-turn lane."

- Page 4.5-30 (Mitigation Measure 4.5.3a), Mitigation Measure 4.5.3a is revised to read:

"4.5.3a Implement m~~M~~itigation m~~M~~easures 4.5.2a and 4.5.2b."

- Page 4.5-32 (Mitigation Measure 4.5.5), the first paragraph after Mitigation Measure 4.5.5 is revised to read:

  "The signalization of the intersection is included~~not currently~~ in the 1998 update El Dorado Hills RIF. These fees are typically paid concurrently with the issuance of building permits, although the project applicant may construct the improvements and be reimbursed by the County.~~Should the intersection be added to the RIF program, and the applicant signalizes the intersection, the applicant may be eligible for reimbursement or credit towards the RIF~~. Implementation of this mitigation measure will reduce this impact to a less-than-significant level because the a.m. and p.m. peak-hour operations would improve to LOS "C" under existing plus project conditions."

- Page 4.5-33 (Mitigation Measure 4.5.7a), Mitigation Measure 4.5.7a is revised to read:

  "4.5.7a Implement m~~M~~itigation m~~M~~easures 4.5.2a and 4.5.2b."

- Page 4.5-34, Impact 4.5.8, the first paragraph is revised to read:

  "El Dorado County is completing a combined Project Study Report/Project Report (PSR/PR)~~PSR~~ for the design of interchange improvements that will alleviate existing problems and accommodate future traffic levels. The project applicant will contribute to the interchange improvement as stated in Mitigation Measure 4.5.8."

- Page 4.5-36 (Mitigation Measure 4.5.9), Mitigation Measure 4.5.9 is revised to read:

  "4.5.9 The project applicant shall be responsible for their fair-share cost of bus turnouts and transit shelters located within the project site. Bus turnouts and transit shelters will be placed along the proposed Russell Ranch Boulevard, community and village center collectors, as well as the village center. The specific location of these facilities shall be determined jointly by the El Dorado County DOT and El Dorado Transit Authority. The project applicant's fair-share cost shall be determined by the El Dorado County DOT. Construction of these improvements should occur when transit service is extended to the project. "

SECTION 4.6

The following minor changes were made to Section 4.6 (Air Quality) of the Draft EIR.

- Page 4.6-10 (under Mitigation Measures) the first sentence is revised to read:

"4.6.1 Prior to the approval of improvement plans for subsequent development,..."

SECTION 4.7

The following minor changes were made to Section 4.7 (Noise) of the Draft EIR.

- Page 4.7-4, Table 4.7-1 is revised to read:

TABLE 4.7-1
MAXIMUM ALLOWABLE NOISE EXPOSURE FOR TRANSPORTATION NOISE SOURCES

Land Use	Outdoor Activity Area /a/ L_{dn}/CNEL, dB	Interior Spaces	
		L_{dn}/CNEL, dB	L_{eq}, dB /b/
Residential	60 /c/	45	--
Transient Lodging	60 /c/	45	--
Hospitals, Nursing Homes	60 /c/	45	--
Theaters, Auditoriums, Music Halls	--	--	35
Churches, Meeting Halls, Schools	60 /c/	--	40
Office Buildings	--	--	45
Libraries, Museums	--	--	45
Playgrounds, Neighborhood Parks	70	--	--

/a/~~Note:~~ 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 L_{dn} shall be applied at the building facade, in addition to a 60 dB L_{dn} criterion at the outdoor activity area. In Rural Regions, an exterior noise level criterion of 60 dB L_{dn} shall be applied at a 100-foot radius from the residence unless it is within Platted Lands where the underlying land use designation is consistent with Community Region densities in which case the 65 dB L_{dn} may apply. The 100-foot radius applies to properties which are five acres and larger; the balance will fall under the property line requirement. ~~Refer to General Plan for detailed discussion regarding allowable noise exposure levels.~~

/b/ As determined for a typical worst-case hour during periods of use.

/c/ Where it is not possible to reduce noise in outdoor activity areas to 60 dB L_{dn} /CNEL or less using a practical application of the best-available noise reduction measures, an exterior noise level of up to 65 dB L_{dn} /CNEL may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.

SOURCE: El Dorado County, 1996.

- Page 4.7-8, the bulleted text is revised to read:

"A change in community noise exposure creating an adverse change in level of compatibility of surrounding land uses as generally defined in El Dorado County's Noise Element and the City of Folsom General Plan. ~~-~~Thus, a 60 dBA noise standard was used to evaluate impacts to residential areas. For example, if the project where

to exceed 60 dBA~~the noise performance standards outlined in the County General Plan (Table 4.7-1)~~ as measured at the property line of an adjacent residential land use, project generated noise would be considered significant."

- Page 4.7-9, second paragraph, the second sentence is revised to read:

"A change in noise level as a consequence of project implementation might not be considered significant when evaluated by Table 4.7-4, but may create a condition where the existing land use is exposed to noise levels beyond 60 dBA~~no longer compatible with the General Plan's noise performance standards as outlined in Table 4.7-1~~."

- Page 4.7-9, third paragraph, the last two sentences are revised to read:

"~~Therefore, noise~~ Noise impacts were evaluated against exterior noise ~~standards~~ significance criteria in this EIR. If the exterior noise standards under the El Dorado County General Plan is met for a residence (60 dBA, L_{dn}, and under certain circumstances, 65 DBA, L_{dn}), it is assumed that the interior noise level is similarly met."

- Page 4.7-11, Impact 4.7.2 is revised to read:

"4.7.2 Upon project buildout, subsequent local traffic increases would increase noise levels along local arterial roads. P.M. peak-hour noise levels would increase along segments of Green Valley Road, Francisco Drive, East Natoma Street, and El Dorado Hills Boulevard, exposing existing residents to excessive noise levels~~noise levels exceeding the performance standards outlined in the El Dorado County General Plan Noise Element and the City of Folsom Noise Element where applicable~~. This would be a significant unavoidable impact."

- Page 4.7-14, second paragraph is revised to read:

"Predicted noise levels were compared to El Dorado County and City of Folsom general noise performance standards for residential land uses. Under both General Plan's, the normally acceptable noise exposure level is 60 dBA, L_{dn}. Impacts are evaluated against this criterion for road segments in both the City of Folsom and El Dorado County."

- Page 4.7-14, fourth paragraph is revised to read:

"Although only the road segment Wilson Boulevard to the West Bound Highway 50 On-ramp had a change in noise exposure of more than 1.5 dBA (this would only

affect residences between the road segment center line and the existing 65 dBA contour), noise exposure can be significant if an existing residential receptor is subsequently exposed to noise levels exceeding the 60 dBA standard. ~~General Plan's noise/land use compatibility standards~~. On all road segments, except Green Valley Road between East Natoma Street and the proposed Russell Ranch Boulevard and El Dorado Hills Boulevard between Francisco Drive and the proposed east/west collector, existing residential noise receptors closest Green Valley Road, Francisco Drive and El Dorado Hills Boulevard could potentially experience a change in noise exposure ~~exceeding~~ 60 dBA~~the performance standards outlined in the County and City's General Plan Noise Element and in Table 4.7-1~~ as a consequence of increased noise contour distances. This would be a significant unavoidable impact."

- Page 4.7-15, the fourth sentence is revised to read:

"However, on all road segments, existing residential noise receptors closest to Green Valley Road, Francisco Drive, East Natoma Street and El Dorado Hills Boulevard could potentially experience a change in noise exposure exceeding 60 dBA~~the performance standards outlined in the County and City's General Plan Noise Element and in Table 4.7-1~~ as a consequence of increased noise contour distances."

- Page 4.7-15, Impact 4.7.3 is revised to read:

"4.7.3 Resultant traffic along the proposed Russell Ranch Boulevard extension would expose residents of the Shadowfax subdivision and Amys Lane to excessive noise levels ~~exceeding the performance standards of the El Dorado County Noise Element and Table 4.7-1~~. This would be a significant impact."

- Page 4.7-16, under "Existing", the first sentence is revised to read:

"Increased ambient noise levels at Residence #4, as a consequence of project implementation, would exceed 60 dBA ~~create a condition of General Plan noise/land use incompatibility~~ resulting in a significant impact."

- Page 4.7-18, under "Cumulative", the first sentence is revised to read:

"Increased ambient noise levels at Residence #1, as a consequence of project implementation, would exceed 60 dBA ~~create a condition of General Plan noise/land use incompatibility~~ resulting in a significant impact."

- Page 4.7-21, the first paragraph is revised to read:

"**Table 4.7-13** lists the road segment and associated residential receptors that would experience a significant noise impact under the existing and cumulative development conditions as a function of noise level change and exceedance of 60 dBA~~the County's noise standards~~."

SECTION 4.8

The following minor changes were made to Section 4.8 (Biological Resources) of the Draft EIR.

- Page 4.8-14, Second to last paragraph of the Draft EIR, last sentence has been revised to read:

  "Of the plants and animals in Table 4.8-2, several special status species ~~are highly likely~~ may potentially occur on the project site, based on a reconnaissance-level area assessment, existing information in the California Natural Diversity Data Base, and sightings by ESA biologists in 1996."

- Table 4.8-2 (Pages 4.8-15 through 4.8-19 of the Draft EIR) has been revised to read:

TABLE 4.8-2
SPECIAL STATUS SPECIES CONSIDERED IN THE EVALUATION OF THE PROJECT SITE

Species that are Listed, Proposed for Listing, or are Candidates for Listing

Scientific Name Common name	Listing Status USFWS/ CDFG/CNPS	General Habitat	Potential for Occurrence	Period of Identification
ANIMALS				
Birds				
Buteo swainsoni Swainson's hawk	FC/CT	Nests in oak savanna and open riparian forests.	**Medium Potential.** The project site provides foraging habitat. No known nesting pairs are known from the site or immediate area.	March-August
~~*Buteo swainsoni* Swainson's hawk~~	~~-/CT~~	~~Nests in large trees adjacent to grasslands~~	~~**Medium Potential.** The site provides only marginal habitat for this species.~~	~~March-August~~
Empidonax traillii Willow flycatcher	-/CE	Nests in dense riparian cover	**Low Potential.** The site provides only limited ~~does not support good~~ habitat for this species.	May-August
Haliaeetus leucocephalus Bald eagle	FT/CE	Ocean shorelines, lake margins, and river courses for both nesting and wintering.	**Potential Wintering Habitat.** The site does provides wintering habitat for this species.	May-August
Reptiles				
Thamnophis couchi gigas Giant garter snake	FC/CT	Marshes, streams, and sloughs of the Central Valley.	**Unlikely ~~Low Potential~~.** The site is located outside this species known range. The site does not provide suitable habitat.	Winter rains and March-April

Scientific Name Common name	Listing Status USFWS/ CDFG/CNPS	General Habitat	Potential for Occurrence	Period of Identification
Amphibians				
Ambystoma californiense California tiger salamander	FC/CSC	Wintering sites occur in grasslands occupied by burrowing mammals; breed in ponds and vernal pools	**Low Potential.** The site provides only limited ~~does not support good~~ habitat for this species.	Winter rains and March-April
Rana aurora draytonii California red-legged frog	FT/CSC	Breed in stock ponds, pools, and slow moving streams absent of bullfrog	**Low Potential.** Probably extirpated from the Central Valley. The project site provides only limited habitat.	May-August
Invertebrates				
Branchinecta lynchi Vernal pool fairy shrimp	FT/--	Life cycle within vernal pools and valley foothill grassland swales	**Unlikely.** No vernal pools occur on site.	winter rains
Desmocerus californicus dimorphus Valley elderberry longhorn beetle	FT/--	Valley elderberry throughout the Central Valley	**Unlikely ~~Low Potential~~.** No blue elderberry were located on site.	year-round (exit holes in shrub stems)
Lepidurus packardi Vernal pool tadpole shrimp	FE/--	Life cycle within vernal pools and valley foothill grassland swales	**Unlikely.** No vernal pools occur on site.	winter rains
Plants				
Ceanothus roderickii Pine Hill ceanothus	FE/CR/List 1B	Ultramafic soils within chaparral and woodland habitats.	**Unlikely.** No ultramafic soils occur on the project site.	May-June
Chamaesyce hooveri Hoover's spurge	FPT/--/List 1B	vernal pools	**Unlikely.** No vernal pools occur on site.	July
Chlorogalum grandiflorum Red Hills soaproot	FE/--/List 1B	Ultramafic soils within chaparral and woodland habitats.	**Unlikely.** No ultramafic soils occur on the project site.	May-June
Fremontodendron decumbens Pine Hill flannelbush	FE/CR/List 1B	Ultramafic soils within chaparral and woodland habitats.	**Unlikely.** No ultramafic soils occur on the project site.	April-June
Gratiola heterosepala Boggs Lake hedge-hyssop	--/CE/List 1B	vernal pools	**Unlikely.** No vernal pools occur on site.	April-June
Juncus leiospermus var. *ahartii* Ahart's dwarf rush	FC/--/List 1B	vernal pools	**Unlikely.** No vernal pools occur on site.	March-May
Orcuttia tenuis Slender orcutt grass	FPT/CE/List 1B	vernal pools	**Unlikely.** No vernal pools occur on site.	May-July
Orcuttia stricta Sacramento orcutt grass	FE/CE/List 1B	vernal pools	**Unlikely.** No vernal pools occur on site.	May-June
Senecio layneae Layne's butterweed	FPT/CR/List 1B	Ultramafic soils within chaparral, woodland and stream habitats.	**Unlikely.** No ultramafic soils occur on the project site.	April-July
Tuctoria greenei Green's tuctoria	FPE/CR/List 1B	vernal pools	**Unlikely.** No vernal pools occur on site.	May-July
Wyethia reticulata El Dorado County mule ears	FE/--/List 1B	Ultramafic soils within chaparral and woodland habitats.	**Unlikely.** No ultramafic soils occur on the project site.	May-July

Species that are Federal or State Species of Concern

Scientific Name Common name	Listing Status USFWS/ CDFG/CNPS	General Habitat	Project Site Occurrence	Period of Identification
ANIMALS				
Mammals				
Myotis ciliolabrum Small-footed myotis	FSC/CSC	Forages over grasslands and roosts in caves and rock crevices.	**Low Potential.** The project site does not provide suitable roosting habitat. Suitable foraging habitat present on the project site.	February-August
Myotis evotis Long-eared bat	FSC/CSC	Forages over grasslands and roosts in trees, caves and rock crevices.	**Potential Resident.** The project site provides suitable roosting habitat.	February-August
Myotis thysanodes Fringed bat	FSC/CSC	Forages over grasslands and roosts in trees, caves and rock crevices.	**Low Potential.** The project site does not provide suitable roosting habitat due to species known range.	February-August
Myotis volans Long-legged myotis	FSC/CSC	Forages over grasslands and roosts in trees, caves and rock crevices.	**Potential Resident.** The project site provides suitable roosting habitat.	February-August
Myotis yumanensis Yuma myotis	FSC/CSC	Forages over grasslands and roosts in trees, caves and rock crevices.	**Potential Resident.** The project site provides suitable roosting habitat.	February-August
Plecotus townsendii Pacific western big-eared bat	FSC/CSC	Mesic habitats, roosting in caves, mines, tunnels and buildings.	**Low Potential.** The project site does not provide suitable roosting habitat.	February-August
Birds				
Agelaius tricolor Tricolored blackbird	FSC/CSC	Nests in cattails or thistles, large enough to support a minimum of 50 pairs, adjacent to water.	**Unlikely ~~Low Potential~~.** The project site does not provide suitable habitat.	February-June
Accipiter cooperi Cooper's hawk	–/CSC	Nest in riparian areas and oak woodlands.	**Potential Resident.** Potential nesting habitat occurs throughout the site.	March-August
Accipiter striatus Sharp-shinned hawk	–/CSC	Nest in riparian areas and oak woodlands.	**Potential Resident.** Potential nesting habitat occurs throughout the site.	September-March
Aquila chrysaetos Golden eagle	BEPA/CSC	Nests on cliffs and tall trees on hillsides.	**Low Potential.** The project site does not provide suitable nesting habitat. Suitable foraging habitat is present at the project site.	February-June
Asio otus Long-eared owl	–/CSC	Nests in wet meadows and grasslands.	**Potential Resident.** Potential nesting habitat within the grassland areas.	March-July
Asio flammeus Short-eared owl	–/CSC	Nests in wet meadows and grasslands.	**Potential Resident.** Potential nesting habitat within the grassland areas.	March-July
~~Birds~~				
Buteo regalis Ferruginous hawk	FSC/CSC	Wintering grounds consist of open grasslands.	**Potential Winter Visitor.** The project site provides winter foraging habitat.	February-June

Scientific Name Common name	Listing Status USFWS/ CDFG/CNPS	General Habitat	Project Site Occurrence	Period of Identification
~~*Buteo swainsoni* Swainson's hawk~~	~~FC/CT~~	~~Nests in oak savanna and open riparian forests.~~	~~Potential Foraging Habitat. The project site provides foraging habitat. No known nesting pairs are known from the site or immediate area.~~	~~February-June~~
Circus cyaneus Northern harrier	–/CSC	Nests in wet meadows.	**Potential Resident.** Potential nesting habitat within the grassland areas.	year-round
Dendroica petechia Yellow warbler	–/CSC	Nests in dense riparian cover.	**Low Potential.** The site provides only marginal habitat.	April-August
Elanus leucurus White-tailed kite	–/3511	Nests in shrubs and trees adjacent to grasslands.	~~**Medium** Potential~~ Resident. Potential nesting habitat within the grassland areas. ~~The site provides marginal habitat.~~	year-round
Eremophila alpestris actia California horned lark	–/CSC	Arid grassland and sagebrush meadows.	**Medium Potential.** Potential nesting habitat within the grassland areas.	March-July
Icteria virens Yellow breasted chat	–/CSC	Nests in dense riparian cover.	**Low Potential.** The site provides only marginal habitat.	April-September
Lanius ludovicianus Loggerhead shrike	FSC/CSC	Scrub, open woodlands, and grasslands.	**Medium Potential.** Potential nesting habitat within the grassland areas	March-July
Speotyto cunicularia Burrowing owl	FSC/CSC	Nests in burrows in grassland areas where ground squirrels are present.	**Potential Resident.** Potential nesting habitat within the grassland areas.	March-July
Reptiles				
Clemmys marmorata marmorata Northwestern pond turtle	FSC/CSC	Rivers and streams with some canopy cover.	**Unlikely.** The site does not support suitable habitat.	May-September
Amphibians				
Scaphiopus hammondii Western spadefoot toad	–/CSC	Breed in vernal pools and seasonal wetlands.	**Low Potential.** The site provides only limited ~~does not support good~~ habitat for this species.	May-August
PLANTS				
Balsamorhiza macrolepis var. *macrolepis* Big-scale balsam root	–/–/List 1B	valley foothill grasslands on serpentine soils.	**Unlikely.** The project site does not contain suitable habitat.	March -June
Cordylanthus mollis ssp. *hispidus* Hispid bird's-beak	FSC/–/List 1B	alkaline meadows and playas	**Unlikely.** The project site does not contain suitable habitat.	June-September
Downingia pusilla Dwarf downingia	–/–/List 2	mesic valley foothill grasslands and vernal pools	**Low Potential.** No vernal pools occur on site.	March-May

Scientific Name Common name	Listing Status USFWS/ CDFG/CNPS	General Habitat	Project Site Occurrence	Period of Identification
Eryngium pinnatisectum Tuolumne button celery	FSC/--/List 4	vernal pools	**Low Potential.** No vernal pools occur on site.	June
Hibiscus lasiocarpus Rose mallow	--/--/List 2	freshwater marshlands	**Unlikely.** Potential habitat does not occur on-site.	August-September
Ivesia serioleuca Plumas ivesia	FSC/--/List 1B	meadows and vernal pools usually on volcanic soils	**Low Potential.** The site provides only limited ~~does not support good~~ habitat for this species.	May-September
Juncus leiospermus var. *leiospermus* Red Bluff dwarf rush	--/--/List 1B	valley foothill grasslands and vernal pools	**Low Potential.** No vernal pools occur on site.	March-May
Legenere limosa Legenere	FSC/--/List 1B	vernal pools	**Unlikely ~~Low Potential~~.** No vernal pools occur on site.	May-June
Sagittaria sanfordii Sanford's arrowhead	FSC/List 1B	freshwater marsh	**Medium Potential.** This species could occur within the seasonal wetlands on-site.	May-August

Other Species (may or may not be considered "special status")

Scientific Name Common name	Listing Status USFWS/ CDFG/CNPS	General Habitat	Project Site Occurrence	Period of Identification
ANIMALS				
Ardea herodias Great blue heron	--/--/--	colonial nester in tall trees, cliffsides, and sequestered spots on marshes	**Low Potential.** This species is expected as an occasional visitor to the site. No suitable nesting habitat present on the project site.	February-June
Casmerodius albus Great egret	--/--/--	colonial nester in large trees	**Low Potential.** This species is expected as an occasional visitor to the site. No suitable nesting habitat present on the project site.	February-June
PLANTS				
Astragalus pauperculus Depauperate milk vetch	--/--/List 4	valley foothill grasslands, vernally mesic on volcanic soils	**Low Potential.** The site provides only limited ~~does not support good~~ habitat for this species.	March-May
Fritillaria agrestis Stinkbells	--/--/List 4	valley foothill grasslands on clay soils	~~High Potential.~~ This species could occur within the grasslands and seasonal wetlands on-site.	March-April

Scientific Name Common name	Listing Status USFWS/ CDFG/CNPS	General Habitat	Project Site Occurrence	Period of Identification
Navarretia eriocephala Hoary navarretia	–/–/List 4	valley foothill grasslands	**High Potential.** This species could occur within the grasslands and seasonal wetlands on-site.	May-June

STATUS CODES:
FEDERAL: (U.S. Fish and Wildlife Service)
FE = Listed as Endangered by the Federal Government
FT = Listed as Threatened by the Federal Government
FPE = Proposed for Listing as Endangered
FPT = Proposed for Listing as Threatened
FC = Candidate for Federal listing
FSC = Federal Species of Special Concern

STATE: (California Department of Fish and Game)
CE = Listed as Endangered by the State of California
CT = Listed as Threatened by the State of California
CR = Listed as Rare by the State of California (plants only)
CSC = California species of special concern
3511 = Fully protected bird species

California Native Plant Society
List 1A = Plants believed extinct
List 1B = Plants rare, threatened, or endangered in California and elsewhere
List 2 = Plants rare, threatened, or endangered in California but more common elsewhere
List 3 = Plants about which more information is needed
List 4 = Plants of limited distribution

SOURCE: USFWS 1995 and 1996, Skinner and Pavlik, 1995, CNDDB 1996a.

- Page 4.8-25, first sentence under Impact 4.8.1 has been revised to read:

  "Most of the land use areas proposed under the Specific Plan, with the exception of the village center and villages 1 and 3, contain oak woodland (see **Table 4.8-1**)."

- Page 4.8-27, first bulleted paragraph, third sentence, Mitigation Measure 4.8.1, has been revised to read:

  "Canopy cover retention within oak woodlands shall meet the requirements of General Plan Policy 7.4.4.4 ~~wherever possible~~."

- Page 4.8-27, Mitigation Measure 4.8.1, First Bulleted Paragraph, Fifth Sentence has been revised to read:

"The Plan shall be implemented prior to ~~the initiation of~~ and during ground clearing, grading, or other construction activities that may impact oak trees."

- Page 4.8-27, Mitigation Measure 4.8.1, second bulleted paragraph has been revised to read:

"The County or project applicant (with County approval) shall engage a qualified project biologist or equivalent professional to oversee all aspects of construction monitoring that pertain to oak tree protection. The County would be responsible for reviewing the monitoring program. The project applicant shall be responsible for reimbursing the County for all costs related to the compliance monitoring of the project."

- Page 4.8-28 (second bulleted item) the first sentence has been revised to read:

"The Monitoring and Management Plan shall identify monitoring and management techniques for a recommended time ~~minimum~~ period (as determined during development of the Plan) ~~of ten years~~ following implementation."

- Page 4.8-29, First Paragraph under Impact 4.8.2 has been revised to read:

"Project development would result in the direct loss of 2.5 acres of seasonal wetland and 4.85 acres of unvegetated intermittent stream. A previous plan for the project has been authorized by the Corps under an Individual 404 Permit (Corps, 1994), and a Wetland Mitigation Plan (Zentner & Zentner) was developed for the required habitat mitigation, as discussed above in Section 4.8.1, which requires the project applicant to create 4.67 acres of seasonal wetlands, 6.25 acres of riparian woodland, and 14.1 acres of oak woodland buffer. The conditions of the 404 Permit and Wetland Mitigation Plan are required components which have been incorporated into the proposed project. This ~~The~~ mitigation additionally meets the requirements of El Dorado County General Plan Policies 7.3.3.1 and 7.3.3.2 regarding wetland protection."

- Page 4.8-30, First Paragraph have been revised to read:

"4.8.3 The project applicant shall hire a biologist(s) approved by the County to conduct protocol surveys for the species listed in Table 4.8-2 as having a high potential to occur on the property or as being a "potential resident" of the property, which includes bald eagle (*haliaeetus leucocephalus*), long-eared bat (*myotis evotis*), long-legged myotis (*myotis volans*), yuma myotis (*myotis yumanensis*), cooper's hawk (*accipiter cooperi*), sharp-shinned hawk (*accipiter striatus*), long-eared owl (*asio otus*), short-eared owl (*asio flammeus*), ferruginous hawk (*buteo regalis*), northern harrier

(*circus cyaneus*), white-tailed kite (*elanus leucurus*), and burrowing owl (*speotyto cunicularia*). In addition, the biologist(s) shall also conduct protocol surveys for any new special status species that may occur on the project site, which are listed by CDFG and/or USFWS subsequent to the certification of this EIR. Results of the protocol surveys shall be submitted to CDFG, and/or USFWS, as required, and to the County prior to approval of subsequent tentative subdivision maps. If no sensitive species are located on-site, no further mitigation is necessary. If listed species are located on the property, the applicant and County shall enter into informal consultation with the appropriate resource agency ~~CDFG and USFWS~~ and begin preparation of a Biological Assessment or Habitat Conservation Plan, as applicable."

- Page 4.8-31, First Bulleted Paragraph under Mitigation Measures have been deleted as follows:

"4.8.4 The objective of this mitigation measure is to reduce the potential for introduction or dispersal of non-native plant species to less-than-significant levels. The following measures will be performed:

~~All seeds and straw material shall be certified weed free by the California Department of Food and Agriculture (CDFA) seed laboratory. All gravel and fill material used during project construction and maintenance shall be certified weed free by the County Agriculture Commissioner's Office. The removal site for all fill materials shall be examined for the presence of noxious weeds by the local County Agriculture Commissioner's Office. Material transported between counties shall be approved by the local County Agriculture Commissioner's Office in the county receiving the materials.~~

Project landscaping shall conform to County and California Native Plant Society guidelines within and adjacent to public and private open space areas. Table 4.8-3 presents a list of species that should not be used for project landscaping."

SECTION 4.9

The following minor changes were made to Section 4.9 (Geology and Soils) of the Draft EIR.

- Page 4.9-7, the last paragraph is revised to read:

"The El Dorado County Resource Conservation District (RCD), a local division of the California Association of Resource Conservation Districts, published an Erosion

Sediment Control Guidelines (Sosa, 1997)~~Erosion and Sediment Control Plan~~. The Erosion Sediment Control Guidelines~~Erosion and Sediment Control Plan~~ prescribes measures for controlling erosion and sediment during all stages of construction. The Guidelines~~Plan~~ assists developers in implementing appropriate practices specific to the project site and time of year.~~ In addition, the Plan includes suggestions for estimating and subsequently mitigating the peak storm runoff flow and the total storm runoff volume that would result from development of a site.~~"

- Page 4.9-10 (Mitigation Measure 4.9.1c), Mitigation Measure 4.9.1c is revised to read:

"4.9.1c Prior to approval of the improvement plans for site development, the project applicant will submit an erosion control plan to the County. Erosion control measures will include techniques such as physical and vegetative stabilization measures and runoff diversion measures. Additionally the plan will specify measures for reuse or disposal of excavated material. If excavated material is suitable for use at the project site, the plan should minimize elapsed time between excavation and reuse and provide adequate stockpile coverage and protection from wind and water erosion during the entire storage period. If excavated material is unsuitable for reuse at the project site, the plan will include specific information regarding the eventual reuse or disposal site, transportation methods, disposal reuse management, and schedule. The plan will be consistent with the El Dorado County Grading, Erosion, and Sediment Control Ordinance and the El Dorado County Resource Conservation District's Erosion Sediment Control Guidelines~~Erosion and Sediment Control Plan~~."

SECTION 4.10

The following minor changes were made to Section 4.10 (Hydrology and Water Quality) of the Draft EIR.

- Page 4.10-1, first paragraph, the fourth sentence is revised to read:

"Willow Creek within the City of Folsom is generally perennial, while some of its ~~and its~~ tributaries are intermittent, flowing only during and immediately after the rainy season."

- Page 4.10-1, first paragraph, the last sentence is revised to read:

"The total Willow Creek watershed encompasses approximately ~~8,200~~ 8,760 acres."

- Page 4.10-1, the second paragraph is revised to read:

"Precipitation is the principal source of runoff from the project site. Mean annual precipitation is approximately 26 to 28 inches per year. Most of the annual rainfall arrives during the winter storm season from November through March. Annual rainfall may vary widely from year to year, with less than 15 inches in critically dry years such as 1976 and 1988 and over 50 inches in unusually wet seasons such as 1982 and 1983. The most significant storm expected in an average year is estimated to produce 3.511~~1.8~~ inches of rainfall in 24 hours. The 100-year storm (which has a 1 percent chance of happening in any given year) is estimated to produce 4.977~~4.3~~ inches of rainfall in a 24-hour period."

- Page 4.10-1, third paragraph, the third sentence is deleted:

~~"The natural channel of a north Willow Creek tributary appears to have been replaced by the Natomas Ditch, upstream of its confluence with the main channel of Willow Creek."~~

- Page 4.10-4, the first paragraph is revised to read:

"In 1993 and 1994, Folsom surveyed and re-mapped the Willow and Humbug Creek floodplains. This major project is reported in Phase 2 Engineering Study, Humbug-Willow Creek Parkway, City of Folsom, Vail Engineering Corporation/Gill Water Resources Engineering, January 1994, and minor subsequent updates. The Parkway Project extends from the County line downstream to Lake Natoma. The flood maps and creek channels provided are the basis for new development analysis in Folsom. Also, a rainfall-runoff model of the Willow and Humbug Creek watersheds is continually updated with new projects and is being used to evaluate the proposed Promontory development in conjunction with the report titled, "Preliminary Drainage Report for The Promontory." The report is being prepared by The Promontory project applicants in accordance with the El Dorado County Drainage Manual.

Humbug Creek upstream of Oak Avenue is being channeled into the parkway and wetlands of the Parkway at Blue Ravine development by the developer. A significant portion of this work is complete with planning completed for the remainder. Their design controls the projected 100-year runoff. With the Foothills development, the 100-year runoff should be contained from El Dorado County to The Parkway at Blue Ravine wetlands.~~Evidence flooding and flood hazards downstream of the project site has been presented in the Humbug/Willow Creek Parkway Master Plan (Harland Bartholomew and Associates, 1991). Certain reaches of Humbug and Willow Creeks currently have restricted channel capacities and cannot pass 100-year flows. The locations experiencing flooding are Humbug Creek from near the El Dorado/Sacramento County Line to Oak Avenue and Willow Creek~~

~~between the El Dorado/Sacramento County Line and Prairie City Road (Harland Bartholomew and Associates, 1991). The Humbug/Willow Creek Parkway Master Plan suggests channel modifications and maintenance on Humbug and Willow creeks to provide additional capacity.~~"

- Page 4.10-9 (Mitigation Measure 4.10.1), Mitigation Measure 4.10.1 is revised to read:

  "4.10.1 Prior to approval of improvement plans for site development, the project applicant shall submit erosion control plans and hazardous materials control program to the County consistent with El Dorado County's Grading, Erosion, and Sediment Control Ordinance and El Dorado Resource Conservation District's Erosion Sediment Control Guidelines~~Erosion and Sediment Control Plan~~. The plan should include Best Management Practices to minimize and control pollutants in storm water runoff. Suggested water quality control practices should include the following:"

- Page 4.10-15 (Mitigation Measure 4.10.5a), Mitigation Measure 4.10.5a is revised to read:

  "4.10.5a Prior to approval of improvement plans for site development, El Dorado County shall coordinate with the City of Folsom and the City of Folsom/El Dorado County Joint Powers Authority (JPA) in developing a formal drainage agreement identifying shared drainage facilities and volumes, pre- and post-development runoff volumes that maintain existing 100-year storm drainage flows, and a review process of future project-specific drainage plans. The JPA was formed to address development-related issues along the County line that affect both the City of Folsom and El Dorado County. Since a portion of the Promontory and neighboring developments in El Dorado County are at the headwaters to the Willow and Humbug Creeks in the City of Folsom, the JPA has the authority to coordinate the design of drainage facilities to ensure facilities are property planned. The drainage agreement shall be approved by both the City of Folsom and El Dorado County."

- Page 4.10-16 (Mitigation Measure 4.10.5c), Mitigation Measure 4.10.5c has been deleted as follows:

  ~~"4.10.5c Prior to County approval, the County shall submit project drainage plans to the City of Folsom for review and comment.~~

  4.10.5d~~c~~ If the drainage plan described in Mitigation Measure 4.10.5b identifies 100-year flood plain on the project site, project development shall not

occur in those areas identified, unless flood protection improvements approved by the County are implemented."

SECTION 4.11

The following minor changes were made to Section 4.11 (Cultural Resources) of the Draft EIR.

- Page 4.11-1, last paragraph, the second and fifth sentences are revised to read:

  "The survey conducted in 1980 indicated that the resource consisted of a midden mound of undetermined depth that included a habitation mound with apparent burials or cremations (Derr, 19<u>80</u>~~90~~). The resource was considered to be significant because it had the potential to yield important information on the native peoples of the area and their contact with Euro-Americans, especially since it is the only known Native American habitation site in this general area south of the American River (Derr, 19<u>80</u>~~90~~)."

- Page 4.11-2, first paragraph, the first sentence is revised to read:

  "On the basis of recommendations that resulted from the information obtained from the survey, a stabilization plan was proposed to protect the significance of this resource (Derr, 19<u>80</u>~~90~~)."

- Page 4.11-2, second paragraph, the last sentence is revised to read:

  "However, since these resources have been recorded, measured, and mapped; no further information is likely to be obtained from these resources (Derr, 19<u>80</u>~~90~~)."

- Page 4.11-2, the third paragraph is revised to read:

  "<u>Two historical sites (CA-ELD-455/H and CA-ELD-456/H) were identified and recorded on the project site (Derr, 1980). These sites generally consisted of stone walls and fire areas of recent origin. No cultural materials were found around any of them and it is unclear what these areas were used for (Derr, 1980). These sites are not considered significant cultural resources, but have been recorded, measured, and mapped in order to document their existence. There are no buildings or structures at the project site are currently listed on the National Register of Historic Places or the California Register of Historic Resources.</u> ~~No historical resources were identified as part of the record search (Russo, 1988). Thus, no buildings or structures at the project site are currently listed on the National Register of Historic Places or the California Register of Historic Resources.~~"

- Page 4.11-4, Impact 4.11.1, second paragraph, the third sentence is revised to read:

"The three other resources (CA-ELD-452, CA-ELD-453, and CA-ELD-454) are bedrock mortars and are considered durable and resist most adverse impacts (Derr, 198090)."

- Page 4.11-4 (Mitigation Measure 4.11.2), Mitigation Measure 4.11.2 is revised to read:

"4.11.2 The project applicant shall implement the following measures to minimize potential impacts to undiscovered cultural resources:

A. Prior to the approval of subsequent tentative subdivision maps for project development, the project applicant shall retain a qualified archaeologists to perform an archaeological survey for the tentative subdivision map area. The archaeological survey shall employ current field survey and record search methods and standards. Significant archaeological resources discovered shall be recorded and avoided and/or mitigated, pursuant to state and federal standards. The findings of the archaeological survey shall summarized in a report and submitted to the County prior to tentative subdivision map approval.

B. In the event that any prehistoric or historic subsurface cultural resources are discovered during construction-related earthmoving activities, all work within 20 meters of the resources shall be halted and the project applicant shall consult with a qualified archaeologist to assess the significance of the find. If any find were determined to be significant by the qualified archaeologist, then representatives of the project applicant, El Dorado County, and the qualified archaeologist would meet to determine the appropriate course of action. If the discovery includes human remains, Section VIII of CEQA Guidelines Appendix K would be followed, requiring coordination with the Native American Heritage Commission if the human remains are of Native American origin. All significant cultural materials recovered would be subject to scientific analysis, professional museum curation, and a report prepared by the qualified archaeologist according to current professional standards."

- Page 4.11-5 (Mitigation Measure 4.11.3), the first sentence after Mitigation Measure 4.11.3 is revised to read:

"Implementation of this mitigation measure would minimize impacts to the Mormon Island Relocated Cemetery and is considered feasible mitigation. However, because of the uncertainty of the County establishing the cemetery program, this impact was considered significant and unavoidable.~~is not considered feasible since the County has not established such a funding program.~~"

- Page 4.11-6 (References) and Page 7-4, the Derr reference is revised to read:

"Derr, 198~~0~~90. Derr, Eleanor H. Archaeological Study Center. An Archaeological Survey of the El Dorado Hills Project, El Dorado County, California. October, 198~~0~~90."

SECTION 4.12

The following minor changes were made to Section 4.12 (Public Services) of the Draft EIR.

- Page 4.12-5, first paragraph, the second sentence is revised to read:

"The current ratio of sworn officers to County residents is 0.9 per 1,000, which is ~~slightly~~ lower than the Department's goal of ~~1~~ 1.8 sworn officers to 1,000 residents."

- Page 4.12-5, fourth paragraph, the paragraph is revised to read:

"The majority of the project site is located within the RUSD, with the remainder of the site within the BUSD. Preliminary talks were initiated in 1994 concerning a possible boundary line adjustment between the two districts so that the project site would fall entirely within the RUSD (Wright, 1994). The project applicant, RUSD, and BUSD decided to leave the school district boundaries intact (Emerson, 1997).~~In December of 1996, it was decided by the school districts and the project applicant to split the project site, using the proposed village borders as boundary lines between districts (Schwarzbach, 1996). Villages 6, 7, and 8 would be in the BUSD, with the remainder of the villages in the RUSD.~~"

- Page 4.12-5, last paragraph, third sentence is revised to read:

"The District includes four elementary schools (Rescue, Green Valley, Jackson, and Lake Forest) and one middle school (Marina Village)."

- Page 4.12-6. Table 4.12-2 is revised to read:

TABLE 4.12-2
SCHOOL DISTRICT ENROLLMENT AND CAPACITY

District/School	Grades	Current Capacity	Current Enrollment	Remaining Capacity (Capacity Shortage)
Rescue School District /a/		**3,080**	**2,751**	**329**
Green Valley	K-6	696*	640	56
Jackson	K-6	522	478	44
Lake Forest	K-6	673*	539	134
Marina Village	7-8	638	608	30
Rescue	K-6	551	486	65
Buckeye School District /b/		**3,496**	**3,451**	**45**
Buckeye	K-6	712	664	48
Brooks	K-6	462	373	89
Blue Oak	K-6	727*	816	(89)
Silva Valley	K-6	711*	699	12
Camerado Springs	7-8	884	509	(15)
Rolling Hills**	7-8		390	
El Dorado Union High School District /c/		~~6,329~~4,342	~~6,027~~5,918	~~302~~(1,576)
El Dorado High School	9-12	~~1,904~~1,460	~~1,794~~1,750	~~110~~(290)
Oak Ridge High School	9-12	~~1,884~~1,492	~~1,839~~1,813	~~45~~(321)
Ponderosa High School	9-12	~~2,144~~1,128	~~2,020~~2,015	~~124~~(887)
~~Ponderado~~ Pondorado Alternative Education Center		~~150~~75	~~90~~77	~~60~~(2)
Independence High School		75	140	(75)
Independent ~~High School~~/Learning Center		~~247~~112	~~284~~123	~~(37)~~(11)

/a/ Rescue Union School District Facility Master Plan
/b/ Buckeye Union School District, School Facility Fee Justification Report & 1996 Ten Year School Facilities Plan
/c/ ~~El Dorado Union High School District Facilities Master Plan 1996/97 - 2000/01~~Wright, 1997
* Capacity is based on a 20% increase in traditional capacity due to space created by using a multi-track schedule.
** Rolling Hills Middle School shares existing facilities on the Camerado Springs site.

SOURCE: Rescue Union School District, 1995; Buckeye Union School District, 1996; ~~El Dorado Union High School District, 1996~~Wright, 1997

- Page 4.12-7, first paragraph under Buckeye School District, the second sentence is revised to read:

  "The District consists of four elementary schools (Buckeye, William Brooks, Blue Oaks, Silva Valley) and two middle schools (Camerado Springs and Rolling Hills)."

- Page 4.12-7, the fourth paragraph is revised to read:

  "The El Dorado Union High School District (EDUHSD) office is located in Placerville. EDUHSD includes three comprehensive high schools: El Dorado High School, Oak Ridge High School, and Ponderosa High School. The District also ~~contains two continuation/alternative institutions~~operates three alternative schools

(~~Ponderado~~ Pondorado Alternative Education Center, Independence High School, and Independent ~~High School~~/Learning Center) (El Dorado County, 1996b). Including the use of portable classrooms, District capacity for the 1996/97 school year ~~to 6,329~~is 5,918 students (Table 4.12-2) (~~El Dorado Union High School District, 1996~~Wright, 1997)."

- Page 4.12-7, last paragraph, the fourth sentence is revised to read:

"Site work drawings for El Dorado Township High School received final approval from the Division of the State Architect on November 4, 1994~~; however, construction has been postponed due to lack of funding~~. With the passage of a general obligation bond in June 3, 1997, the El Dorado Township High School is scheduled for construction over the next two years, for opening in the 1999/00 school year (Wright, 1997)."

- Page 4.12-8, second paragraph, the fifth sentence is revised to read:

"~~Currently~~As of July 1, 1997, ~~$7,797~~$8,288 per new residential development is collected by the County (~~Jackson, 1996~~Wright, 1997). Developments not subject to the County fee are subject to AB 2926 impact fees of $1.84 per square foot for residential and $0.30 per square foot for commercial/industrial development. Currently, over 90 percent of new developments in the County pay AB 2926 fees."

- Page 4.12-17, Table 4.12-5 is revised to read:

General Plan Goals, Policies, Objectives	Consistency With General Plan	Analysis
Policy 5.8.1.1	Yes~~No~~	The proposed project would provide a 10-acre elementary school site to serve new residents. In addition, development impact fees, as part of project development and subsequent agreements between the project applicant and the school districts, would be paid as well to reduce the impacts associated with the project's student generation. Implementation of Mitigation Measure 4.12.5 would ensure project consistency with this policy.~~However, these subsequent agreements have yet to be formalized.~~
Policy 5.8.1.3	Yes	The proposed elementary school site is located adjacent to a park to allow for joint use of facilities.
Policy 5.8.1.4	Yes	The Specific Plan includes a financing program that could consist of developing a Mello-Roos Community Facilities District to obtain funding for the construction of new school facilities or expansion of existing facilities that would be required to serve the project. However, financing for school facilities has not yet been identified.

Policy 5.8.1.5	Yes~~No~~	The proposed project would provide a 10-acre elementary school site to serve new residents. In addition, development impact fees, as part of project development and subsequent agreements between the project applicant and the school districts, would be paid as well to reduce the impacts associated with the project's student generation. Implementation of Mitigation Measure 4.12.5 would ensure project consistency with this policy.~~However, these subsequent agreements have yet to be formalized.~~
Objective 5.8.2	Yes	The project site plan identifies a 10-acre elementary school site on the project site.
Policy 5.8.2.1	Yes	The project site plan identifies a 10-acre elementary school site in the northern portion of the project site to serve project students as well as the surrounding community.

- Page 4.12-18, Table 4.12-5 is revised to read:

General Plan Goals, Policies, Objectives	Consistency With General Plan	Analysis
Policy 5.8.2.2	Yes~~No~~	The proposed project would provide a 10-acre elementary school site to serve new residents. In addition, development impact fees, as part of project development and subsequent agreements between the project applicant and the school districts, would be paid as well to reduce the impacts associated with the project's student generation. Implementation of Mitigation Measure 4.12.5 would ensure project consistency with this policy.~~However, these subsequent agreements have yet to be formalized.~~
Policy 5.8.2.4	Yes	The proposed project includes the designation of a 10-acre elementary school site in the northern portion of the project area. In addition, development impact fees would be paid as part of the project.
Policy 5.9.1.2	Yes	Specific funding mechanisms for public services have not been determined for the project. The Specific Plan identifies special assessment districts and Mello-Roos Community Services Districts as potential sources of funding.
Goal 6.2	Yes	The hillside development standards for the proposed project includes the use of fuel modification zones for steep sloped areas. The proposed project would be subject to review by the El Dorado Hills Fire Department.
Objective 6.2.1	Yes	The hillside development standards for the proposed project includes the use of fuel modification zones for steep sloped areas. The proposed project would be subject to review by the El Dorado Hills Fire Department.
Policy 6.2.1.1	Yes	The hillside development standards for the proposed project includes the use of fuel modification zones for steep sloped areas. The proposed project would be subject to review by the El Dorado Hills Fire Department.
Objective 6.2.3	Yes	Additional firefighting personnel and equipment needed to serve the project would be funded through payment of development fees and property tax revenues. The El Dorado Hills Fire Department would maintain adequate service to existing developments within its service area.
Policy 6.2.3.1	Yes	Additional firefighting personnel and equipment needed to serve the project would be funded through payment of development fees and property tax revenues. Final alignment and design of project site would be subject to review by the El Dorado Hills Fire Department.

Policy 6.2.3.2	Yes	The proposed Circulation Plan identifies project access points and the circulation network. Final alignment and design of project accesses into the City of Folsom would be subject to review by the El Dorado Hills Fire Department.
Policy 7.6.1.1	Yes	The proposed project includes designation of 99.8 acres of public open space that would provide for preservation and enhancement of wetlands and natural habitat as well as a future trail system for passive recreation opportunities.
Policy 7.6.1.2	Yes	The proposed project would set aside 99.8 acres of public open space.

- Pages 4.12-23 and 4.12-24 (Mitigation Measure 4.12.3a), the text of Mitigation Measure 4.12.3a is revised to read:

"4.12.3a Prior to approval of tentative subdivision maps and improvement plans, the project applicant shall submit project design plans to the El Dorado Hills Fire Department for review and approval to ensure that project site design meets Department standards. This would include, but is not limited to, providing at least two permanent access roads into the project site throughout project development. In addition, all project gates shall be designed to Department standards unless approved otherwise by the Department. All project roadways and access points shall be designed according to El Dorado Hills Fire Department and El Dorado County Department of Transportation standards to ensure adequate emergency access in accordance with General Plan Policies 5.7.1.1, 5.7.4.1, 6.2.3.1, and 6.2.3.2."

- Page 4.12-24, first paragraph under Impact 4.12.4:

"Implementation of the proposed project, at full buildout, would result in a population increase of almost 4,000 residents. Thus, development of the project site would result in an increased demand for law enforcement services from the County.~~In order to maintain the existing level of service in the County and provide adequate service to the project, four additional deputies would be required. This number would maintain the current goal of one sworn deputy per 1,000 residents.~~"

- Page 4.12-26 (Mitigation Measure 4.12.5), Mitigation Measure 4.12.5 is revised to read:

"4.12.5 Prior to approval of the Specific Plan~~tentative subdivision maps~~, Rescue Union School District, Buckeye Union School District, El Dorado Union High School District, and the project applicant shall enter into a formal agreement regarding mitigation of project impacts on school facilities. This agreement shall specifically identify mechanisms (i.e., payment of County-wide school impact fees and transfer of the elementary school site) to construct new school facilities, coordination of timing of new

school facilities and build-out of the project site, and construction of the project-proposed elementary school site (if ultimately utilized by the Rescue Union School District)."

- Page 4.12-26, third paragraph, the second sentence is revised to read:

"These fees, at the maximum rate of $8,288~~7,797~~ per residential unit for 1,387 units, would contribute approximately $11,5~~10.8~~ million towards construction of new school facilities."

SECTION 4.13

The following minor changes were made to Section 4.13 (Utilities and Service Systems) of the Draft EIR.

- Page 4.13-1, second paragraph, the first sentence is revised to read:

"El Dorado Irrigation District (EID) is the primary purveyor and supplier of domestic, agricultural, and industrial water to western El Dorado County, serving approximately 30,000~~60,000~~ customers~~people~~."

- Page 4.13-3, the first paragraph is revised to read:

"The EID has contracts with the United States Bureau of Reclamation (USBR) to receive 7,550 acre-feet of water per year from Folsom Lake to service the El Dorado Hills Service Area. However, EID's contract with USBR stipulates that a 25 percent reduction of contract water will be implemented during dry years. Based on this stipulation, EID limits the available water supply from Folsom Lake to 5,600 acre-feet per year.~~The 7,550 acre-feet is a contract yield, not a hydrological firm yield~~. At the beginning of 1996, the EID had a total of 4,900 acre-feet (8,166 EDUs) available for the El Dorado Hills Service Area. Currently there is approximately 4,700 acre-feet (7,845 EDUs) of water still available for use in EID's 12 service zones, including the El Dorado Hills Service Area~~the service area~~ (Fraser, 1996). There are several other pending or approved projects in the El Dorado Hills Service Area (see Figure 3-1 and Table 3-1). These projects, if fully built out, would place an additional 12,000 to 15,000 residential units in the service area. These units would increase demand in the El Dorado Hills Service Area by 7,000 to 9,000 acre-feet per year. The amount of demand created by buildout of these projects could vary depending on the final number of units constructed at each project."

- Page 4.13-3, the last sentence is revised to read:

"In addition, a ~~two~~one million gallon storage tank and a 16-inch water line are planned for the project area as part of the Phase 5 water facility improvements in the El Dorado Hills Master Facilities Plan (El Dorado Irrigation District, 1995)."

- Page 4.13-5, the third and fourth paragraphs are revised to read:

"The EDHWTP treats wastewater from approximately 4,300~~3,620~~ sewer connections in the El Dorado Hills area. The EDHWTP has a capacity of 1.6 million gallons per day (mgd) (6,667~~7,200~~ EDUs) average dry weather flow (ADWF) and is currently being upgraded. The expansion, scheduled to be complete by December 1998, will increase the EDHWTP capacity to 3.0 mgd (14,500 EDUs)."

"Two existing sewage lift stations are located to the north of the project site: the Marina lift station approximately 3,800 feet to the north; and Amy's Lane lift station, approximately 500 feet to the northwest. According to EID, these lift stations do not have adequate capacity to serve the project site. A new lift station, identified as Lift Station A of the Phase 1 wastewater improvements in the El Dorado Hills Master Facilities Plan, would be required south of the Marina lift station along Green Valley Road. In addition, the Amy's Lane lift station as well as the Marina lift station and force main must be upgraded if it is used to serve the project site."

- Page 4.13-6, the first sentence is revised to read:

"El Dorado Disposal provides curbside pick-up and transport of solid waste to the Diamond Springs Materials Recycling Facility and a Nevada landfill ~~until roads to the Union Mine Disposal site that were damaged by winter storms are repaired (El Dorado County, 1996)~~."

- Page 4.13-6, the discussion under "Disposal Facilities" is revised to read:

"Union Mine Disposal Site is a Class II landfill located at 5700 Union Mine Road in El Dorado owned by El Dorado County and operated under contract by El Dorado Landfill, Inc. (El Dorado County, 1996b). Landfills are assigned Class designations by the Regional Water Quality Control Board based on the types of wastes they are designed to accommodate and allowed to accept. Class II landfills are allowed to accept all designated wastes specified in the Waste Discharge Requirements (WDRs) for the landfills, as well as non-hazardous wastes. However, a Cease and Desist Order has been issued by the Central Valley Regional Water Quality Control Board for the Union Mine Disposal Site. The Union Mine Disposal Site is currently closed and is only accepting inert materials.

Solid waste is currently being processed, recycled, and transformed and/or disposed of through the materials recovery facility and solid waste transfer station operated by

Western El Dorado Recovery Systems (WEDRS). Solid waste accepted at the waste transfer station is currently transported to a landfill in Lockwood, Nevada. Currently, WEDRS is utilizing only 50 percent of its authorized disposal capacity under its existing solid waste facility permit (Dura, 1997).~~The Union Mine Disposal Site is the only active landfill in its service area, which consists of approximately 955,000 acres of western El Dorado County. The landfill serves an estimated population of 111,900 people and receives approximately 72,300 tons of solid waste per year, with an estimated capacity of 4,860,000 cubic yards (Dutra, 1996). The landfill has recently been expanded and converted to a bale fill system, extending its life expectancy from 5 to 7 years to 32 years, with additional land available for future expansions. The bale fill system removes recyclable material and then compacts the remaining trash. The resulting trash requires much less landfill space as well as requiring less cover material. The increased capacity of the Union Mine Disposal Site will allow the provision of service to the County to the year 2028 (Dutra, 1996).~~"

- Page 4.13-6, third paragraph, the last sentence is deleted:

  "~~Achieving the reduction and recycling goals set out in AB 939 would increase the life of the Union Mine Disposal Site.~~"

- Page 4.13-7, first paragraph under Telephone, the following sentence is added to the end of the paragraph:

  "Pacific Bell currently has a fiber optical inner office cable and easement on the project site located within the southern portion of the transmission lines bisecting the northern portion of the site."

- Page 4.13-10, Table 4.13-2, Analysis for Objective 5.5.2 is revised to read:

  "WEDRS is currently utilizing only 50 percent of its authorized disposal capacity under its solid waste facility permit. Therefore, adequate capacity remains under WEDRS existing permit to dispose of waste generated by the proposed project.~~The capacity of the Union Mine Disposal Site was recently expanded to extend the landfill's life expectancy to the year 2028. Additional land is available for future expansions. Therefore, the landfill has adequate capacity to serve the project.~~"

- Page 4.13-11, Analysis for Policy 5.5.2.1, is revised to read:

  "WEDRS is currently utilizing only 50 percent of its authorized disposal capacity under its solid waste facility permit. Therefore, adequate capacity remains under WEDRS existing permit to dispose of waste generated by the proposed project.~~The capacity of the Union Mine Disposal Site was recently expanded to extend the~~

~~landfill's life expectancy to the year 2028 to handle planned development in the County.~~ El Dorado Disposal offers a source reduction program that includes buy back centers, a curbside collection program, and newspaper and cardboard drop-off centers. In addition, El Dorado Disposal opened a new materials recovery facility in December 1996 to increase source reduction, recycling, and composting."

- Page 4.13-12, 4.13.2 Impacts and Mitigations is revised to read:

  "4.13.2 Impacts and Mitigations Measures"

- Page 4.13-14, second paragraph, the fourth sentence is revised to read:

  "The El Dorado Irrigation District currently has 7,845 EDUs of water available for use ~~in the El Dorado Hills Service Area~~."

- Page 4.13-16, Impact 4.13.2, first paragraph, the second sentence is revised to read:

  "The two ~~1~~-million-gallon storage tank and 16-inch water line planned for the project area as part of the Phase 5 water facility improvements in the El Dorado Hills Master Facilities Plan would be required to meet future demand at project buildout."

- Page 4.13-20 (Impact 4.13.5), Impact 4.13.5 is revised to read:

  "4.13.5 Implementation of the proposed project would result in an increase in the amount of solid waste accepted by the Western El Dorado Recovery Systems~~at the Union Mine Disposal Site~~. This would be a less than significant impact."

- Pages 4.13-20 and 4.13-21, under Impact 4.13.5, the discussion is revised to read:

  "The application of existing El Dorado Disposal source reduction programs to the project site could reduce the amount of waste sent to the landfill in Lockwood, Nevada. The Materials Recovery Facility (MRF) in Diamond Springs is planning to increase its capacity to process solid waste (Dutra, 1996). ~~The Union Mine Disposal Site has recently expanded, extending its life expectancy from 5 to 7 years to 32 years. Additionally, the disposal site has land available for future expansions. The~~ WEDRS's solid waste facility permit ~~MRF and the Union Mine Disposal Site~~ would provide adequate capacity for the processing, recycling, transformation, and disposal of solid waste generated on the project site, as required by El Dorado County General Plan Policy 5.5.2.1. The generation of solid waste on the project site would have a less than significant impact (Dutra, 199~~7~~6)."

- Page 4.13-21, last paragraph under Impact 4.13.7, the following sentence is added after the second sentence:

  "The project site would be connected with infrastructure in the surrounding subdivisions (Willard, 1996). A 12.5 public utility easement will generally be provided on both sides of each project roadway. Pacific Bell would..."

- Page 4.13-21, last paragraph under Impact 4.13.7, the following sentence is added after the fourth sentence:

  "Pacific Bell would install the necessary main line facilities that would be required to serve the site at buildout of the proposed project. Pacific Bell has indicated that three 20 by 20 foot private easements will be needed to house necessary electronic equipment per Pacific Bell's standards (Adams, 1997). Pacific Bell shall be ..."

CHAPTER 5.0

The following minor changes were made to Chapter 5.0 (Analysis of Alternatives) of the Draft EIR.

- Page 5-5, last paragraph, the last sentence is revised to read:

  "This alternative would generate 974 fewer students than the proposed project and would be within current capacities of Rescue School District, and Buckeye School District~~,~~. However, this alternative would still result in further impacts to student overcrowding in the El Dorado Union High School District~~and El Dorado High School District, resulting in a less than significant impact to public schools.~~"

- Page 5-9, fourth paragraph, the third sentence is revised to read:

  "This student generation would be beyond the capacities of ~~Rescue Union, and Buckeye Union school districts~~the project area school districts, resulting in a significant impact."

CHAPTER 6.0

The following minor changes were made to Chapter 6.0 (Other CEQA-Required Sections) of the Draft EIR.

- Page 6-8 (Mitigation Measure 4.3.1e), Mitigation Measure 4.3.1e is revised to read:

"4.3.1e Project-wide sSolid fences and walls shall be avoided to the maximum extent feasible, (except within individual residential building envelopes). If solid fences and walls are used, the color and material used will blend with the natural features of the project site. Continuous fences and walls shall be softened with landscaping."

- Page 6-8, the following mitigation measure is added:

"4.3.1f Project Design Guidelines shall include standards on the placement, height, and general visibility of outdoor antennas and satellite dishes throughout the project site."

- Page 6-8 (Mitigation Measure), the following text changes are made to Mitigation Measure 4.3.3a:

"4.3.3a Prior to final water and sewer system approval, sewer and water improvement plans shall include details for screening sewer lift stations and the two million gallon water storage tank in a manner acceptable to the El Dorado Irrigation District. The screening details shall also be submitted to the El Dorado Hills Design Review Committee for review. Methods of screening may include, but are not limited to, the following:

1. Architectural design of facilities to blend with the surrounding natural features.

2. Screen facilities with native landscaping.

3. Place facilities partially or completely underground."

- Page 6-9 (Mitigation Measure 4.5.11a), Mitigation Measure 4.5.11a is revised to read:

"4.5.11a The project applicant shall construct a barrier along the property line between Crown Valley and Mormon Island subdivisions to prevent private vehicle access to Mormon Island Drive. This barrier shall be passable by emergency vehicles only. The specific barrier design shall be determined by the El Dorado County DOT and El Dorado Hills Fire Department."

- Page 6-14 (below Mitigation Measure 4.6.9) the first sentence is revised to read:

"4.6.1 Prior to the approval of improvement plans for subsequent development,..."

- Page 6-16, the first paragraph is revised to read:

  "Upon project buildout, subsequent local traffic increases would increase noise levels along local arterial roads. P.M. peak hour noise levels would increase along segments of Green Valley Road, Francisco Drive, East Natoma Street, and El Dorado Hills Boulevard, exposing existing residents to noise levels exceeding 60 dBA~~the performance standards outlined in the El Dorado County General Plan Noise Element and the City of Folsom Noise Element where applicable~~."

- Page 6-16, third paragraph, the fourth sentence is revised to read:

  "However, on all road segments, existing residential noise receptors closest to Green Valley Road, Francisco Drive, East Natoma Street and El Dorado Hills Boulevard could potentially experience a change in noise exposure exceeding 60 dBA~~the performance standards outlined in the County and City's General Plan Noise Element and in Table 4.7-1 (see Section 4.7, Noise)~~ as a consequence of increased noise contour distances."

- Page 6-16, the fourth paragraph is revised to read:

  "Resultant traffic along the proposed Russell Ranch Boulevard extension would expose residents of the Shadowfax subdivision and Amys Lane to excessive noise levels ~~exceeding the performance standards of the El Dorado County Noise Element and Table 4.7-1 (see Section 4.7, Noise)~~."

- Page 6-16, fifth paragraph, the first sentence is revised to read:

  "Increased ambient noise levels at Residence #1(see Section 4.7, Noise), as a consequence of project implementation, exceed 60 dBA~~would create a condition of General Plan noise/land use incompatibility~~ resulting in a significant impact."

- Page 6-18, last bulleted paragraph, third sentence, Mitigation Measure 4.8.1 has been revised to read:

  "Canopy cover retention within oak woodlands shall meet the requirements of General Plan Policy 7.4.4.4 ~~wherever possible~~."

- Page 6-19, Mitigation Measure 4.8.1, first bulleted paragraph, fifth sentence has been revised to read:

  "The Plan shall be implemented prior to ~~the initiation of~~ and during ground clearing, grading, or other construction activities that may impact oak trees."

- Page 6-19, third bulleted item, the first sentence has been revised to read:

  "The Monitoring and Management Plan shall identify monitoring and management techniques for a recommended time ~~minimum~~ period (as determined during development of the Plan) ~~of ten years~~ following implementation."

- Page 6-19, Mitigation Measure 4.8.1, first complete paragraph has been revised to read:

  "The County or project applicant (with County approval) shall engage a qualified project biologist or equivalent professional to oversee all aspects of construction monitoring that pertain to oak tree protection. The County would be responsible for reviewing the monitoring program. The project applicant shall be responsible for reimbursing the County for all costs related to the compliance monitoring of the project."

- Page 6-20, second complete paragraph has been revised to read:

  "4.8.3 The project applicant shall hire a biologist(s) approved by the County to conduct protocol surveys for the species listed in Table 4.8-2 as having a high potential to occur on the property or as being a "potential resident" of the property, which includes bald eagle (*haliaeetus leucocephalus*), long-eared bat (*myotis evotis*), long-legged myotis (*myotis volans*), yuma myotis (*myotis yumanensis*), cooper's hawk (*accipiter cooperi*), sharp-shinned hawk (*accipiter striatus*), long-eared owl (*asio otus*), short-eared owl (*asio flammeus*), ferruginous hawk (*buteo regalis*), northern harrier (*circus cyaneus*), white-tailed kite (*elanus leucurus*), and burrowing owl (*speotyto cunicularia*). In addition, the biologist(s) shall also conduct protocol surveys for any new special status species that may occur on the project site, which are listed by CDFG and/or USFWS subsequent to the certification of this EIR. Results of the protocol surveys shall be submitted to CDFG, and/or USFWS, as required, and to the County prior to approval of subsequent tentative subdivision maps. If no sensitive species are located on-site, no further mitigation is necessary. If listed species are located on the property, the applicant and County shall enter into informal consultation with the appropriate resource agency ~~CDFG and USFWS~~ and begin preparation of a Biological Assessment or Habitat Conservation Plan, as applicable."

- Pages 6-20 and 6-21, Mitigation Measure 4.8.4 discussion has been revised to read:

"4.8.4 The objective of this mitigation measure is to reduce the potential for introduction or dispersal of non-native plant species to less-than-significant levels. The following measures will be performed:

~~All seeds and straw material shall be certified weed free by the California Department of Food and Agriculture (CDFA) seed laboratory. All gravel and fill material used during project construction and maintenance shall be certified weed free by the County Agriculture Commissioner's Office. The removal site for all fill materials shall be examined for the presence of noxious weeds by the local County Agriculture Commissioner's Office. Material transported between counties shall be approved by the local County Agriculture Commissioner's Office in the county receiving the materials.~~

Project landscaping shall conform to County and California Native Plant Society guidelines within and adjacent to public and private open space areas. Table 4.8-3 presents a list of species that should not be used for project landscaping."

- Page 6-22 (Mitigation Measure 4.10.5a), Mitigation Measure 4.10.5a is revised to read:

"4.10.5a Prior to approval of improvement plans for site development, El Dorado County shall coordinate with the City of Folsom and the City of Folsom/El Dorado County Joint Powers Authority (JPA) in developing a formal drainage agreement identifying shared drainage facilities and volumes, pre- and post-development runoff volumes that maintain existing 100-year storm drainage flows, and a review process of future project-specific drainage plans. The JPA was formed to address development-related issues along the County line that affect both the City of Folsom and El Dorado County. Since a portion of the Promontory and neighboring developments in El Dorado County are at the headwaters to the Willow and Humbug Creeks in the City of Folsom, the JPA has the authority to coordinate the design of drainage facilities to ensure facilities are property planned. The drainage agreement shall be approved by both the City of Folsom and El Dorado County."

- Pages 6-22 and 6-23, Mitigation Measure 4.10.5 has been modified as follows:

~~"4.10.5c Prior to County approval, the County shall submit project drainage plans to the City of Folsom for review and comment.~~

4.10.5~~d~~c If the drainage plan described in Mitigation Measure 4.10.5b identifies 100-year flood plain on the project site, project development shall not

occur in those areas identified, unless flood protection improvements approved by the County are implemented."

- Page 6-23 (Mitigation Measure 4.11.2), Mitigation Measure 4.11.2 is revised to read:

"4.11.2 The project applicant shall implement the following measures to minimize potential impacts to undiscovered cultural resources:

A. Prior to the approval of subsequent tentative subdivision maps for project development, the project applicant shall retain a qualified archaeologists to perform an archaeological survey for the tentative subdivision map area. The archaeological survey shall employ current field survey and record search methods and standards. Significant archaeological resources discovered shall be recorded and avoided and/or mitigated, pursuant to state and federal standards. The findings of the archaeological survey shall summarized in a report and submitted to the County prior to tentative subdivision map approval.

B. In the event that any prehistoric or historic subsurface cultural resources are discovered during construction-related earthmoving activities, all work within 20 meters of the resources shall be halted and the project applicant shall consult with a qualified archaeologist to assess the significance of the find. If any find were determined to be significant by the qualified archaeologist, then representatives of the project applicant, El Dorado County, and the qualified archaeologist would meet to determine the appropriate course of action. If the discovery includes human remains, Section VIII of CEQA Guidelines Appendix K would be followed, requiring coordination with the Native American Heritage Commission if the human remains are of Native American origin. All significant cultural materials recovered would be subject to scientific analysis, professional museum curation, and a report prepared by the qualified archaeologist according to current professional standards."

- Page 6-24 (Mitigation Measure 4.11.3), the paragraph after Mitigation Measure 4.11.3 is revised to read:

"Implementation of this mitigation measure would minimize impacts to the Mormon Island Relocated Cemetery and is considered feasible mitigation. However, because of the uncertainty of the County establishing the cemetery program, this impact was considered significant and unavoidable. ~~Implementation of this mitigation measure is~~

~~not considered feasible since the County has not established such a funding program. Therefore, this impact would remain significant and unavoidable.~~"

- Page 6-25, the first sentence is revised to read:

  "The El Dorado Irrigation District currently has 7,845 EDUs of water available for use ~~in the El Dorado Hills Service Area~~."

- Page 6-27, Solid Waste Disposal, the discussion under "Impacts" is revised to read:

  "The Materials Recovery Facility (MRF) in Diamond Springs is planning to increase its capacity to process solid waste (Dutra, 1996). ~~The Union Mine Disposal Site has recently expanded, extending its life expectancy from 5 to 7 years to 32 years. Additionally, the disposal site has land available for future expansions.~~ WEDRS's solid waste facility permit and future amendments to the permit would ~~The MRF and the Union Mine Disposal Site~~ provide adequate capacity for the processing, recycling, transformation, and disposal of solid waste generated on the project site and future County growth, as required by El Dorado County General Plan Policy 5.5.2.1. The cumulative generation of solid waste would be a less than significant impact."

CHAPTER 5.0

REPORT PREPARATION AND PERSONS CONSULTED

CHAPTER 5.0

REPORT PREPARATION AND PERSONS CONSULTED

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See (512(20)a,b) for General E.I.R.

AN ARCHEOLOGICAL SURVEY OF THE EL DORADO HILLS PROJECT, EL DORADO COUNTY, CALIFORNIA

by

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ABSTRACT

This report details the methods and results of a cultural resource survey and literature review pertinent to the proposed development of the El Dorado Hills Project in El Dorado County, California. Prehistoric cultural resources were found within the project area. These were evaluated as significant and specific recommendations are provided. Rock features of unknown origin and use are also present on the property. These were also evaluated and recommendations were made.

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enclosed fire rings. Dirt roads and a high-voltage transmission line cross the project region.

PREVIOUS ARCHEOLOGY

The only previous survey known to have been done on the property was performed by Ann Peak and Associates in 1979 for the construction of the electrical transmission line which traverses the property from east to west. No cultural resources were located in the vicinity at that time.

Most of the surrounding land shown on the U.S.G.S. quad is unsurveyed with no recorded sites, except for a parcel to the north of Green Valley Road done in 1979 when Daryl Noble of the Archeological Study Center surveyed for the Marina Village project. Only one site was located, CA-ElD-429, an historic rock wall in association with a homestead foundation from the early part of this century. No prehistoric materials were found.

Green Valley Road itself was surveyed by Jerald Johnson in 1973. Only one significant historical structure was located.

Prehistoric and historic sites were located where Folsom Lake now stands (CA-ElD-258 through 264 - Olsen 1977). The time period represented apparently extended from the historic back to approximately 1000 BC. These sites lie several miles north and west of the property in question.

ETHNOGRAPHIC BACKGROUND

The project area is located in the region which was occupied by the Nisenan ('nese, nan) or Southern Maidu, at the time of

Euro-American contact (Kroeber 1925, 1929; Beals 1933). The territory occupied by the Nisenan was comprised of the Yuba, Bear, Feather and American River drainages (Wilson and Towne 1978:387). This population formed the southern linguistic group of the Maidu.

Apparently some of the prime attractions in this area were the extensive groves of Live and Valley Oaks and the multitude of grass and other seeds which could be collected from the relatively open rolling terrain between the drainages. The Maidu settlement pattern generally consists of the location of either single or clusters of villages in the vicinity of concentrated natural resources necessary for the survival of the population. Availability of a water supply is of prime consideration, location of oak trees and suitable stone for grinding the acorns is of lesser importance. In addition, south-facing slopes were often preferred and some shelter from prevailing storms and winds was considered. In between the relatively permanent villages may be found scattered bedrock mortars which were most likely used by family-sized groups who spread out into the oak groves and grasslands during the nut and seed gathering seasons.

The Maidu patterned their subsistence around the seasonal gathering of a multitude of plant and animal resources. Food gathering was a social activity with sharing, trading, status, and ceremonial behavior prevalent during gathering and distribution processes (Wilson and Towne 1978). Plant food sources utilized consisted of acorns, buckeye, roots, grasses, herbs, berries,

wild plums, and grapes. Game animals taken by snare, net or arrow included deer, antelope, rabbit, elk, bird, salmon, sturgeon, and occasionally wildcat and mountain lion. The occasional grizzly bear on the valley floor was much feared and rarely hunted. Freshwater clams, and mussels and fish were collected from large rivers. Various insects gathered and roasted for food included grasshoppers, larvae and ants.

Like other Indian populations in northern and central California, the political organization of the Maidu was based upon ownership of particular territories. Each group resided in several different settlements while still referring to themselves as one distinct political unit. This political unit has been referred to as a tribelet (Bennyhoff 1977; Kroeber 1925). Each tribelet generally has one pricipal village and several allied subsidiary villages. Important village centers had as many as 500 persons or more residing in them (Kroeber 1925). Subsidiary villages were probably occupied by a population of 30 to 60 individuals who were under the leadership of a local headman.

Maidu structures varied. The dance house, located in major villages, was a semi-subterranean structure. A shallow pit was dug into the ground and a super-structure of heavy logs and poles was used to support a roof of bark, sticks, brush, and pine needles (Kroeber 1925:391-411). A smoke hole at the top allowed adequate ventilation. The entrance usually faced east (Beals 1933). Sweathouses were of similar construction, but smaller, usually accommodating approximately a half dozen men. It lacked a smoke hole and was used for purification processes (Wilson and Towne 1978).

Common houses were dome-shaped, 10 to 15 feet in diameter, and covered with brush, tule mats, grasses and earth. Simple brush shelters were also constructed for warm weather use (Kroeber 1925).

Material culture included such stone tools as knives, arrow and spear points, clubs, arrow straighteners, scrapers, pestles, mortars, pipes, and charmstones. Wood was used for many utilitarian products. Wooden sinew-backed bows were from two to three feet long. The use of skins, tule mats, cordage for netting, and balsa canoes were noted ethnographically. Baskets of high quality were made by the coil process.

Burial was either by interment or cremation with cremation more popular in the late prehistoric period. A mourning anniversary was held once a year, known as "he'i'pai'" among the Valley people and occured during the summer. It was of shorter duration than that held in the foothills, lasting only a day, during which clothing, baskets, and beads were burned and all cried. The Hill people also made images which were also burned (Kroeber 1929: 272). These sites, with their burned bead remains, are now known as "cry sites".

The area encompassing the general vicinity of the project may have been intensely used by the Valley Nisenan Maidu until their culture was overwhelmed by the Euro-American settlers and miners after 1848. Due to the population displacement and adverse impacts to subsistence resources which resulted from immigrant Euro-Americans, and the unfamiliarity informants had regarding surrounding areas, little settlement data were obtained for the Nisenan Maidu. The coming of the Gold Rush in the late 1840's

contributed greatly to the end of the Native American way of life (Dixon 1905; Kroeber 1925, 1929).

The Penutian-speaking Maidu are linguistically divided into several groups with each division having mutually unintelligible speech (Udall and Shipley 1966). Maidu have been estimated to have numbered about 9000 (Kroeber 1925). Nisenan Maidu culture is described by Beals (1933), Faye (1923), Gifford (1927), Kroeber (1925, 1929), and Littlejohn (1928).

HISTORIC BACKGROUND

As in the case of much of California the Spanish were the first Euro-Americans to enter Nisenan country. In 1808, Gabriel Moraga and his expedition reached the Sacramento River above its confluence with the Feather River. In 1817, Luis Arguello visited the region around present day Sacramento (Hoover, Rensch and Rensch 1966). In the winter of 1827-1828 the fur trapper Jedediah Smith explored the American River region (Morgan 1953). Captain John Sutter established New Helvetia at Sacramento in 1839 and became the first permanent settler in the lower Sacramento Valley (Gudde 1936). Another of Sutter's establishments (Sutter's Mill) was the site of the gold discovery that led to the California Gold Rush.

The Folsom Gold District was first settled in 1849 and was originally known as Negro Bar. By 1851 the miner's population was around 700 (Hoover, Rensch and Rensch 1966). The town of Folsom was laid out in 1855. Chinese mined the district from the 1860's to the 1890's. Bucket-line dredging was introduced in

1898 and became an important industry. Natomas Consolidated of California was the major dredging company in 1908. In 1916, two million in gold was taken from eleven active dredges. Dredging was carried on until 1960 with only a short respite during World War II when the work finally ceased due to depletion of the fields. Folsom was one of the largest dredging districts in California with a total output of 125 million dollars (Clark 1976).

RESEARCH METHODS

Literature Review

The following records and references were reviewed to determine if the proposed project would impact any known cultural resources:

1) National Register of Historic Places (1980), California Inventory of Historic Resources (1976), and California Historical Landmarks (1979).

2) Site map files, site records and the library of the Regional Office of the California Archeological Site Survey, California State University, Sacramento.

3) Published and unpublished references: Historic Spots in California (1966), Gold Districts of California (1976), and various reports housed in the Archeological Study Center library at California State University, Sacramento.

Field Work

Four days were spent in the field, using four to six people

walking transects of from 20 to 50 meters. More intensive coverage was used along drainages and on gentle slopes and ridge tops, with the lesser coverage on steeper slopes where cultural resource sensitivity is less. In addition, attempts were made to zig-zag between transect lines to better cover the entire area. The many rock outcroppings on the project were inspected for evidence of food grinding activities or petroglyphs.

RESULTS

Literature Review

The maps on file for El Dorado County in the Regional Office of the California Site Survey at California State University, Sacramento, indicate no previously recorded sites on the project area. Except for the one linear transmission line survey previously noted, none of the project area had been previously surveyed.

The published sources consulted for the project area were generally negative. However, California Inventory of Historic Resources (California, State of, 1976), California Historical Landmarks (California, State of, 1975), and Historic Spots in California listed four historical areas in close proximity to the project: 1) Mormon Island, the second main gold strike area in California and a town of 2500 population by 1853 (C.H.L. #569); 2) the Mormon Tavern-Overland Pony Express Route (C.H.L. #699) on the old Clarksville-White Rock Emigrant Road (1949); 3) Pleasant Grove House-Overland Pony Express Route (C.H.L. #703) on Green

Valley Road; 4) the Coloma Road which ran in part by way of Mormon Island and Green Valley Road to Rescue and Coloma. None of these sites will be impacted by the present project.

Field Work

Ground visibility ranged from 5% to 50%, due to grass cover over the entire project area. Heavy leaf cover occured under the same groves of oak trees. Disturbance to the area was minimal, with evidence of cattle grazing and possible attempts to clear some of the areas of stones.

Stones had been placed in low rows or walls and as circular enclosures, notably on the ridges of the southern portion of the land. The nature and age of these walls and enclosures is uncertain, although there is some evidence of fires in a number of them, apparently of recent origin. There were no cultural materials found around any of them, except for a few items of recent origin (tin can, plastic bottle, plastic bag). The lichen growth pattern on them suggests some time depth. There is a small rock dam near a spring in the east-central area where a small watering area had been provided for cattle. There are also several small rock rings along the drainage where bedrock mortars were found, but with no cultural materials in association except for one deposit of charcoal which looks recent.

A small structure, now demolished, had been built in the southern extension of the property near a spring, but the use of round nails indicates recent construction and there is no evidence to suggest any historical significance.

Four significant prehistoric sites were found and recorded on the property. This included a midden mound of undetermined depth with cultural materials indicating historic or proto-historic as well as prehistoric use. A bedrock mortar area station is also associated with the midden mound. The other three sites are bedrock mortar localities. These sites have been recorded and mapped and the records submitted to the Regional Office of the California Sites Survey, California State University, Sacramento, for permanent number assignment.

RECOMMENDATIONS

In order to assess the significance of sites, they must be interpreted relative to the values they represent. Only then can recommendations be posited with any certainty as to their adequacy. Since the most common flaw in significance determinations is the failure to treat all relevant types of significance, the guidelines presented by Schiffer and Gumerman (1977) will be used in evaluation. These guidelines include the scientific, historical, ethnic, public, and legal values of the resources in question.

An archeological site has scientific significance when its further study may be expected to help answer current research questions. This process can be further streamlined by the availability of a regional research design.

Historical significance can be demonstrated if the site provides:

> ...a typical or well-preserved example of a prehistoric culture, historic tribe, period of time, or category of human activity...(or) if they can be associated with a specific individual event or aspect of history or prehistory (Scovill, Gordon and Anderson 1972:19-20).

The concept of ethnic significance can be defined as an archeological entity, either material or non-material, which has religious, mythological, social or other special importance for a discrete population. Ethnic significance must be addressed cautiously as this determination can only be made by consultation with ethnic groups on or near the study area.

The area of public significance includes the use of cultural resources as educational tools, public exhibits, and practical application by industry or society.

Definitions of legal significance have not been clearly established by the California Environmental Quality Act (as amended January 1, 1978), so legal significance will be defined based on the guidelines established under the "Protection of Historic and Cultural Properties", 36 CFR Part 60:

> "The quality of significance in American History, architecture, archeology, and culture is present in districts, sites, buildings, structures, and objects of state and local importance that possess integrity of location, design, setting, materials, workmanship, feeling and association and:
>
> 1) That are associated with events that have made a significant contribution to the broad patterns of our history; or
> 2) That are associated with the lives of persons significant in our past; or
> 3) That embody the distinctive characteristics of a type, period, method of construction, or that possess high artistic values, or that represent a significant and distinguishable

entity whose components may lack individual distinction; or

4) That have yielded, or may be likely to yield information important in prehistory or history.

All recorded sites will be evaluated in terms of legal significance first, and in terms of other values as they apply.

Direct Impact

The stone walls and enclosures, Temp. No. 5 and 6, cannot be evaluated with certainty because of the lack of real evidence for their use and age. However, whether they were prehistoric or historic in origin and used as hunting blinds, a fortification in time of warfare, or a camping shelter, they represent a considerable amount of human activity and it would be preferable if they could be retained, both for interest and aesthetic value, as well as for possible future knowledge. Since they are also generally associated with large rock outcroppings and would thus be difficult to remove, it is feasible that they could be avoided by placement along the perimeters of the various lot parcels. If it is not desirable or feasible to retain these features, the present recording of them will have to be considered sufficient mitigation, since their origins are uncertain at the present time.

Temp. No. 1 - This is a habitation mound with apparent burials or cremations. Unfortunately, it has been extensively damaged by pot-hunters over at least several years. A bedrock mortar area is nearby, at the edge of a secondary drainage. A permanent spring is nearby. The midden depth is unknown, as is the time depth, but it appears that this site has the potential

to yield important information on the native peoples of this area and their contact with Euro-Americans, especially since it is the only known Native American habitation site in this general area south of the American River. Therefore, the site has archeological and historical significance. Ethnic significance may also be present because of the use of the site for historic or proto-historic burials. Because of these concerns and the high potential for increased information it is recommended that this site be avoided. Since portions of the drainage areas are to be left as green belts, this site could be included in one of those permanent open areas. The pit areas should be filled with soil obtained elsewhere and an additional top covering of soil of at least ½ meter depth applied. This should be done before the start of all construction activities to prevent its locality from being further advertised, and all heavy equipment must be directed to avoid the area, or disturbance through compaction may result.

If avoidance is not desired, then it is recommended that a test excavation be conducted with a minimum of six 1 x 1 meter units in order to provide sufficient data to fully evaluate the significance of the site.

The bedrock mortars, Temp. No. 2, 3, and 4, are significant in that they prove Native American use of the area and may indicate the type and amount of food preparation activities in the area. However, they are a common type of site type in Central California. Since they have been recorded, measured and mapped there is no further information to be obtained from them. In addition, they are quite durable and their position in the areas of the

creek generally designated as green belt should afford them adequate protection. No further recommendations are made.

Indirect Impact

Increased population in the area due to the residiential development will mean more access to these sites and greater likelyhood for disturbance. The bedrock mortars, as mentioned previously, are durable and will resist most adverse impact. They can have public significance in the forms of increased awareness of prehistoric peoples and their activities.

The midden deposit on the other hand is an extremely fragile type of site and has already been seriously disturbed. Protection of this site, if it is not to be adequately excavated under scientific methods, is vital. With adequate soil cover and restriction of the area to a light-to-moderate use as green belt, indirect impact should be avoidable.

CONCLUSIONS

Due to the grass and leaf cover and the nature of surface surveys there exists the possibility that buried cultural resources not evident on the surface may be discovered as work proceeds. If any archeological discovery is made, work should be halted within 20 meters of the find and a qualified professional archeologist consulted immediately in order to determine the significance of the find.

The goal of studies such as this is the identification of potentially significant cultural resources. In this way the

knowledge and heritage of California's past can be discovered and preserved.

It is to be expected that with increased population pressures on Northern California this general area will see much greater density in population in the next few years, resulting in greater likelyhood for both direct and indirect impact to the cultural resources. It is therefore, of some importance that as much information as possible be recorded for this area, before these fragile remains are lost forever.

Note: The contents of this report are not to be modified in any way except by the author.

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California Archeological Inventory

NORTH CENTRAL INFORMATION CENTER

YUBA
AMADOR
EL DORADO
NEVADA
PLACER
SACRAMENTO

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88-3955

June 21, 1988

Judy deReus
EDAW
1725 Montgomery St.
San Francisco, CA 94111

RE: RECORD SEARCH FOR THE RUSSELL RANCH PROJECT, SACRAMENTO AND EL DORADO COUNTIES (EDAW Project No. 8s171.01).

Dear Ms. deReus,

In response to your request of May 16, 1988, a record search for the above project location (USGS Clarkville 7.5' quad. T9N R8E Sections 3,4,9 & 10 and T10N R8E Sections 27, 28, 32, 33 & 34) revealed the following information:

PREHISTORIC RESOURCES: As a result of two large scale surveys, Derr 1980 and Archeo-tec 1986, 17 prehistoric sites were recorded within the project area. 13 are in Sacramento County (RR-1 thru 13) and CA-ELD-451, 452/H, 453 and 454 (4 sites) are located in El Dorado County. CA-ELD-452/H is a multi-component site with both prehistoric and historic remains. The sites in El Dorado County have been issued official State numbers as listed above. However, the Sacramento County sites have not because we only just received copies of the records a couple of weeks ago. All of these RR sites recorded by Archeo-tec are bedrock mortar only sites (13) and I believe you already have copies of the records so I will not go into further detail. The sites recorded in El Dorado county include a prehistoric village (occupation) site with numerous artifacts, cultural material and refuse, trade beads and some human bone (this may be the area that the land owner is familiar with!). The other three sites recorded in El Dorado Co. include only bedrock mortars. These sites were recorded in 1980 by E. Derr of the Archeological Study Center at CSUS. See site summary sheet for specifics (copies of the records will be made available to your archeological consultant or staff archeologist.

HISTORIC RESOURCES: Three historic archeological sites were recorded by Derr in El Dorado County. They consist of rock wall sections and enclosed areas of unknown age and function. See site summary sheet.

None of the reviewed historic landmark references mention any important historic features within 1/2 mile of the project area.

PREVIOUS ARCHEOLOGICAL INVESTIGATIONS: Almost the entire project area has been previously surveyed. The El Dorado Co. side was studied by Derr in 1980 and the Sacramento side by Archeo-tec 1986. An additional transect survey was done by Peak and Associates in 1979 (see map). Copies of Derr (report 620) and Peak (433) are attached. As mentioned above you have a copy of Archeo-tec's report. The only adjacent parcel for which we have a report on file is the Willow Creek Estates project to the west of the central portion of Russell Ranch. This report was also done by Archeo-tec in 1986. No sites were recorded in the area immediately adjacent to Russell Ranch during this survey. Copies of report # 620 and report #433 area attached.

SENSITIVITY AND RECOMMENDATIONS: Based upon the above information the sensitivity can be seen as two extremes. High sensitivity in the immediate area of the identified archeological sites (cultural resources) and low sensitivity for the remainder. Although there is always the possibility that something will be discovered during construction that was overlooked or hidden during the survey phase, this is not very likely to happen in this particular area because of the vegetation and soil conditions.

We recommend the following measures in order to adequately protect the cultural resources. Your archeological consultant should perform the following tasks.

1) The small unsurveyed portions shown in blue should be inspected for for any cultural resources that may occur there. They appear to be areas of rather low sensitivity so this should be accomplished rather quickly.

2) The location that the land-owner found "Indian beads" should be visited and recorded as applicable. As I mentioned in the section on Prehistoric Resources, this may already be recorded as CA-ELD-451. If this is the case proceed to step 3.

3) Site Evaluations:

a) El Dorado Co.: The consultant should revisit the El Dorado County sites to determine their current condition, verify or correct their map locations, update the site records as necessary and help you formulate protection and or mitigation plans as appropriate. CA-ELD-451 is "extremely" sensitive and cannot merely be avoided. Scientific value is high because there is an excavatable deposit that has the potential to yield a great deal of information about prehistoric life AND the presence of human burial remains means that the Native American Heritage Commission will want to be consulted. It is a felony to vandalize these remains and measures will have to be taken to protect the site from both direct impact due to construction and indirect impact from increased population to the area and the vandalism that will result.

b) Sacramento Co.: The thirteen recorded sites in the western portion of the project should be revisited to determine their validity. We recently became aware that a second cultural resource firm (Theodoratus Cultural Research) was retained to do a brief evalution of some of these sites. Their findings indicated that at least some of the sites are not archeological. They stated that some were merely geologic phenomenon. I spoke with Clinton Blout of that firm and he indicated that your company should have a copy of the letter. He said that you were welcome to call him if you had any questions or needed a copy of there letter. It is very important to have a third party give an opinion here, both for the accuracy of our records and for the expediency of the developer. We will hold off on assigning state numbers to these sites until we get confirmation from your consultant.

) The results of these tasks should be written up in a report with attached site record updates (as applicable, not all sites may warrent a formal update). A copy of this report and any attachments should be submitted to this office by the archeological consultant.

ITERATURE SEARCH: Reviewed were the official maps and records for archeological ites in Sacramento and El Dorado Counties, the National Register of Historic laces (March 3, 1987), the California Inventory of Historic Resources (1976), alifornia Historical Landmarks (1982 and Update), Gold Districts of California 1979), California Gold Camps (1975), California Place Names (1969) and Historic pots in California (1966).

s Indicated on the attached agreement form the charge for this record search s $154.70 . Payment instructions are included on the bottom of the form. lease sign where indicated and return the YELLOW copy with your check. If you ave any questions, please do not hesitate to call. Thank you and I apologize or the delay in completing your request.

incerely,

larianne L. Russo
ssistant Coordinator

A REPORT ON THE SALVAGE AND STABILIZATION WORK ON CA-ELD-451, THE RUSSEL RANCH SITE

Prepared for Mike McDougall
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Prepared by
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by Lawrence E. Weigel and Tammi Hardy

ABSTRACT

This report describes the salvage and stabilization efforts undertaken on Ca-Eld-451, the Russell Ranch Site. This effort was deemed necessary to counter the effects of previous illegal excavation and to reduce the potential for erosion until the site deposit could be capped with a layer of fill and seeded. The salvage effort was directed toward 1) determining the extent of the damage to the site deposit and 2)recovering some level of archaeological data on the characteristics of the deposit and its content. The various classes of recovered cultural material are described and observations and interpretations are offered. The results confirm that human remains are present at the site and that it was used as a habitation area and later used as the site of a mourning ceremony. Many of the artifacts associated with the mourning ceremony relate to a time period between the early 1800s to the early 1900s. All of the recovered material is to be reburied on site.

ACKNOWLEDGMENTS

The Archaeological Conservancy wishes to thank Mike McDougall for his dedication to insure that the archaeological resources in his project area were identified and properly conserved. The Archaeological Conservancy wishes to thank Larry Myers of the Native American Heritage Commission for help in guiding the proposal for the stabilization of the site and Commissioner Brown who participated in the restoration work.. The volunteers from the Sacramento Archaeological Society desreve a special thank you for providing their labor and enthusiasm. We also wish to thank John Foster of the Department of Parks and Recreation for his help and insights. We offer our gratitude to Lee Motz of the Department of Parks and Recreation for the anaylsis of the glass beads contained herein. We also want to thank Steve Grantham for his insites on the shell beads and Barbara Rose for her offer to monitor the site in order to guard against future disturbance.

The authors of this document wish to thank Lynn Dunbar of the Archaeological Conservancy for acting as the catalyst in this project by bringing all the interested parties together so that this stabilization project could take place.

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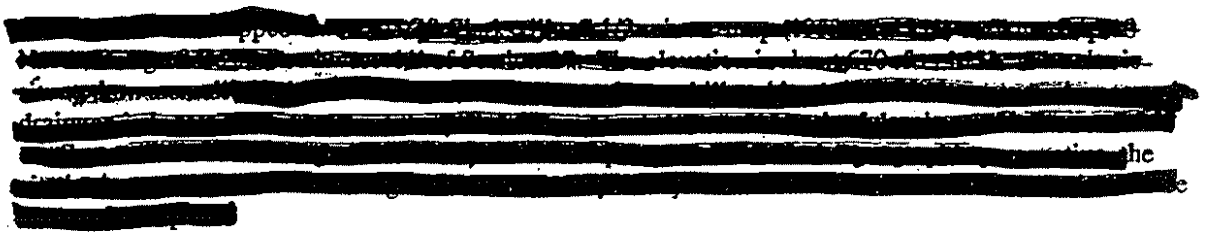
I INTRODUCTION

The Russell Ranch site (Ca-Eld-451) was first recorded by Eleanor Derr, Tammara Eckness, Ken McIvers and Keith Syda and reported in Derr (1980). The survey that resulted in the identification of the site was a result of an effort to identify historic resources prior to any proposed development of the Russel Ranch area. When plans were finalized for the area, Michael McDougall project manager for Palisades Development Inc. contacted Lynn Dunbar of the Archaeological Conservancy in his efforts to insure the protection of the site. An inspection of the site area revealed evidence of illegal artifact hunting and the Conservancy wanted to treat the damaged area prior to capping the entire site with fill and replanting it to reduce erosion. An on-site meeting was held with Lynn Dunbar, Michael McDougall, and Larry Weigel of the Sacramento Archaeological Society to determine what could be done and when. A stabilization plan was proposed and after consultation with the Native American Heritage Commission, was implemented.

The stabilization plan included the mapping of the damaged areas, screening of the soil removed by the vandals, cleaning up the sidewalls of the holes and profiling them, and filling the holes and placing a barrier to discourage further vandalism. This report presents the details of that work and the results of the analysis of the materials recovered from the vandalized area.

II SITE LOCATION AND DESCRIPTION



Derr (1980) characterizes the setting as transitional between the Great Central Valley and the Foothill Belt (Storer and Usinger 1963) by noting that floral and faunal species from both zones are present in the area surveyed. Her report lists several observed floral species that could have been exploited as food resources. Those include: Interior Live Oak (Quercus wislizenii), Gray Pine (Pinus sabiniana), Blue Oak (Quercus douglasii), California Buckeye (Aesculus californica), Blackberry (Rubus ursinus), California Grape (Vitus californica), and wild rose (Genus Rosa).

The general topography is one of rolling hills with wide ridges cut by intermittent drainages. Portions of the vicinity that were not grazed have a thick understory of brush while the grazed areas are open and vegetated with native and introduced grass species.

The site is situated on the edge of an open grassy area and consists of a dark brown midden surrounded by reddish-brown loam. A bedrock mortar complex consisting of five cups is located about 20 meters east of the edge of the midden. At the time the site was recorded (1980) the survey team noted the presence of human bone, tooth fragments, burned glass beads, and a button. They also noted numerous pits (some fresh, some grass covered) and concluded that artifact collectors had been digging in the deposit. Fourteen years later, when we met on the site, we observed the same situation indicating that the site continued to be vandalized. Derr (1980) estimated the depth of the midden deposit to be at least 50cm based on the depth of the holes but no additional testing was performed. Other artifacts noted by the recorders included two cores, numerous flakes, and burned mammal bone. They concluded that the observed evidence suggested that the site was used as a cremation/burial area and should be avoided by any proposed development. They recommended capping the site with soil and restricting the use of the area by including it in a green belt area.

III ETHNOGRAPHIC BACKGROUND

What is known historically of the region is that the major malaria epidemic in 1833 was so severe that it resulted in the abandonment of many large villages which is reflected in the archaeological record (Bennyhoff 1961). In 1844 a smallpox epidemic struck the Miwok (Cook 1943). Other diseases, including measles, pneumonia, and diptheria also took their tole as the human wave associated with the gold rush penetrated the formerly isolated creeks and canyons of the Sierra Foothills until the entire Indian population of the state had been reduced to about 100,000 persons (Cook 1943: 20).

The site is located in an area of the Sierra Foothills that was occupied by the Nisenan, also called the Southern Maidu, at the time of contact (Wilson and Towne in Heizer 1978). The Nisenan territory is described by Wilson and Towne (in Heizer 1978:387) as the drainages of the Yuba, Bear, and American Rivers along with the lower drainages of the Feather River.

> The western boundary was the west bank of the Sacramento River, a few miles upstream from the mouth of the Feather River southward to a few miles below the confluence of the American River. The northern boundary had not been clearly established due to the similarity of language to the neighboring groups (Kroeber 1925:393). The first true Nisenan was spoken in the drainage of the Yuba. The eastern boundary was the crest of the Sierra Nevada. The southern boundary was probably a few miles south of the American River with a large area between the American and Cosumnes rivers occupied by the Miwok to the south (Bennyhoff 1961:204-209).

Before considering the above to be the last word on where the linguistic boundaries were set, one is cautioned to refer to the discussion in Bennyhoff (1977: 122-123).

> Even by Powers' time there was no agreement as to whether the northern boundary which separated Miwok and Nisenan territory should be placed at the Cosumnes or American River. Despite conflicting reports, Powers (1877: 313-314), Powell (1891), Dixon (1905), Barrett (1908: 346-357), and Curtis (1924: 129) placed the boundary along the Cosumnes River. Merriam (1907: 348) presented tribelet or village names in support of a boundary between the American and Cosumnes Rivers, a placement which was modified but slightly by Kroeber (1925: 442-445). Data available to Beals (1933: 337-338) were in such disagreement that he mapped two alternative southern boundaries for the Nisenan: one agreed with that given by Merriam; the other, with reference to Map 2 herein, began just below Sacramento at Sama, crossed the Cosumnes River near Elk Grove as Sac-221, reached middle Dry Creek just north of Sjo-43, and continued up Dry Creek to the foothills south of Ione (Map 1d herein).
>
> In view of the disputed affiliation of Merriam's northernmost villages (Chapter 5), the weight of ethnographic evidence would seem to favor the Nisenan claim to at least the upper Cosumnes River. In contrast, the historical documents not only provide definite support for aboriginal Miwok occupation of the Cosumnes drainage, but pose the question as to whether the Valley Nisenan even controlled the South bank of the American River prior to Sutter. Unfortunately, no priest accompanied Moraga when he crossed the Cosumnes and American Rivers in 1808, and this soldier made no comment on village names pertinent to these rivers in his diary (Moraga 1957). Likewise the details recorded in 1837 by Belcher (1843) are so vague that several interpretations are possible.

The problem was further confounded by Grantham's analysis of the shell beads from CA-Sac-225 (Grantham 1993, 1994). The site in question is on the lower Cosumnes drainage on Deer Creek, an area most of the ethnographers believe to have been Miwok. Grantham (1993) after consultation with Bennyhoff, became convinced that some of the bead types and shell ornaments were characteristic of late period Nisenan sites. Bennyhoff began to question the compromise boundary he had accepted earlier (Bennyhoff 1961 and 1976) and suggested Grantham look at collections from other selected sites to look

for evidence of shifting boundaries. Grantham concluded that the evidence suggested a middle period Miwok expansion and a late period Nisenan expansion.

The information from the ethnographic and archaeological records leads us to conclude that assigning a particular site within the disputed region to a specific group without direct ethnographic, documentary information, or archaeological data, may be no more than speculation.

Although the Nisenan are linguistically linked to the Maidu and the Konkow to form a subgroup of the California Penutian linguistic family, their political structure reflected a different set of relationships. For example, the Valley Nisenan , Valley Patwin, and Northern Maidu seem to have shared a recognition of cultural similarity and a disposition toward economic cooperation and defense (Kroeber 1929;255-256). Could we, by analogy, posit the same relationships for the foothill peoples ? Linguistic typologies should be viewed in a proper perspective. One needs only to look to Northern California to find an example of diverse linguistic groups with a shared ritual and subsistence system participating in the World Renewal Ceremonies.

"The Maidu practiced an annual mourning ceremony in honor of the dead. It was held in early autumn , about September or October, often on a cemetery site or near it (Kroeber 1925; 429)."

"Cremation of the dead was usual but probably not universal practice of the Miwok. The annual mourning ceremony included dancing as well as wailing, culminated in a burning of property, and ended with a ritualistic washing of the mourners by people of the opposite totemic moiety (Kroeber 1925; 452)."

"The clowns, or *Wo'ochi*, who shout *woo*, appear in a number of ceremonies in an interlude named after them. They are painted white and evidently represent coyotes. The gluttonous, greedy, tricky, but also insensate nature which the California Indian attributes to this animal is the character which is portrayed in the actions also of the Maidu clown; but no avowed symbolic reference to the contemned canine has been reported from the latter people (Kroeber 1925 ; 450)."

The preceding are offered as examples of the similarities among the Miwok and their neighbors, the Southern Maidu. Without the ethnographic evidence for cultural differences, the archaeologist would be hard pressed to differentiate between the two on the basis of the evidence left behind from day to day living.
Fortunately some items have surfaced that seem to be consistent cultural markers. These are the shell bead and ornament types or styles associated with Sacramento valley, Bay, Delta, and Foothill sites.

IV THE SALVAGE AND RESTORATION

The archaeological investigation began with an examination of the site's surface and the preparation of a map of the midden area. The surface walk-over indicated the presence of three prominent areas of recent excavation as well as four additional shallow excavated areas with grass beginning to grow over them (Map 1). The mapping datum was a large buckeye shrub in the northern (uphill) portion of the site. The three most recently excavated depressions were mapped as hole 1, 2. and 3. Their dimensions are listed below.

Table 1, Hole Dimensions

Hole #	Length	Width	Depth	Volume
1	150 cm	60 cm	80 cm	.72 cu m
2	130 cm	100 cm	60 cm	.74 cu m
3	50 cm	50 cm	30 cm	.075 cu m
			Total Volume	2.23 cu m

In addition to the depressions and the fresh excavation holes several large pieces of fire stained and heat fractured rock were lying on the surface south of hole # 2. Some of those pieces had a calcareous crust on them indicating that they were probably buried in the deposit until recently. A close inspection of the area around hole #1 revealed a small flake of obsidian, a few pieces of small mammal bone, some fragments of fresh water clam shell, and some partially melted glass beads. A bedrock outcrop with two mortar cups was located at the eastern edge of the site

While the site map was being prepared a crew of volunteers was assigned to each of the three holes. They began removing the soil that had been thrown out of the holes and screening it through 3mm mesh. The recovered materials were bagged and labeled for each unit. Due to the certain loss of vertical stratigraphy attention was given only to the general horizontal location.

The sides of the holes were scraped to determine any visible stratigraphic features that could be profiled. That approach yielded results in holes 1 and 3 (figure - and -, profiles). After the holes were cleaned and profiled, a permeable geotextile was used to line the hole and the screened soil was shoveled in. Pieces of thick wire mesh were cut and laid over the holes and were fastened to the ground with 10 inch spikes.
Up to eight inches of sterile fill was then placed over the mesh. Finally, arrangements were made to monitor the site for any further evidence of vandalism.

V THE ARCHAEOLOGICAL ANALYSIS

Our monitor, Mr. George Brown, agreed to allow us to clean and examine the recovered materials prior to their reburial so that we might learn something from them. Toward that end, several volunteers agreed to provide what level of analysis they could given the condition, limited amount, and types of material recovered. The following section offers analytical observations made on recovered materials starting with the least numerous artifact class, shell beads, and proceeding to flaked stone, then to the most numerous class, glass trade beads.

SHELL BEADS

The following tables present the data from Steve Grantham's examination of the shell beads found in the backdirt of holes 1 and 2. The measurements that were taken reflect the approach of Bennyhoff and Fredrickson (1967) whose typology is used in the tables. All measurements are in millimeters .

Table 2, Shell Bead Data Unit 1

1, 2, 3, are all Small Clam Shell Finished Disk Beads

Specimen	1	2	3
Condition	Exfoliated	Exfoliated	Exfoliated
Type	Saxadomus (A1c)	Saxadomus (A1b)	Undetermined (A1b)
Diameter	7.5	6.57	6.51
Perforation	2.5	2.5	2.0
Perforation type	Biconical	Undetermined	Biconical
Comments	burned	burned	burned

According to Bennyhoff and Fredrickson (1967) these types were in circulation during Phase 2 (ca. A.D. 1500-1700) and were used continuously into the Historic Era (ca. Post A.D. 1800).

Table 3, Shell Bead Data Unit 2

1) Small Clam Shell Finished Disk, 2) Medium Clam Shell Finished Disk, 3) Large Spire Lopped

Specimen	1	2	3
Condition	Excellent	Heat affected	Burned and pitted
Type	Saxidomus (A1c)	Saxadomus (A2a)	Olivella biplicata (A1c)
Diameter	8.1	9.5	11.5
Thickness	2.1	2.5	N/A
Perforation	2.5	2.7	N/A
Perforation type	Biconical	Biconical	N/A
Comments	well ground	well ground	Temporally non-diagnostic

Specimens 1 and 2 relate to Phase 2 (ca. 1700 to Post 1800 A.D.) while the Large Spire lopped Olivella is found in Central and Southern California and has too long a span of use to be temporally diagnostic.

Conclusion

Using the bead types as chronological markers we note that all the identified bead types were in circulation from 1700 to post 1800 A.D. As cultural markers, we have one specimen identified as a potential Valley Nisenan marker, the A2a Clam shell Finished Disk (Bennyhoff, personal communication in Grantham 1993).

FLAKED STONE

Introduction

The following tables summarize the material recovered in the screening of the soil that had been removed from Holes 1,2,and 3. The debitage, defined as the "residual lithic material resulting from tool manufacture" by Crabtree (1972: 58), was separated by material type and examined under low magnification for technological attributes. Debitage is comprised of angular waste, flake fragments and flakes. By separating the material types and examining the debitage for evidence of various flaking techniques we attempted to derive behavioral inferences between and among the materials. Given the small number of flakes (a product of the small sample size) we realized our inferences, if any, would be tentative .

Material Types

The dominant material type is Sinter, a sediment of cilia or calcium carbonate originally deposited near the mouth of a mineral spring or geyser. The quality of the sinter is variable, ranging from glassy to mottled with intrusions. The colors of the material include white, green, brownish green, yellow-brown and red often mixed with intrusive veins of white. The second most common material is classed as CGM, an acronym for Course Grained Metamorphic. The material was well suited for use as chopping and rough cutting implements. The third most common tool material was quartzite, a tough material to flake but suitable for chopping tools and can be worked to provide a durable cutting edge. All three of the former materials are probably locally available. The rarer materials, obsidian and quartz crystal, can be worked to a fine cutting edge but were traded in (as with the obsidian) or were not abundant (as with large crystals of quartz).

Technological Observations

All nine of the obsidian pieces were pressure flakes. The sinter exhibited a mix of attributes from biface thinning to pressure flakes and had some evidence of pot lid fractures. Some of the pieces appear to have

retained a cortical surface. Many of the pieces were angular shatter and broken flakes. The CGM and Quartz retained no discernible technological attributes. The technological evidence suggests that obsidian was traded in as finished bifaces or points and was rejuvenated as needed. The Sinter was locally available but large, good quality pieces, were difficult to find and the material probably had to be heat treated to make it easier to work. The presence of cortical edges and flakes with multiple dorsal surface flake scars suggest that pieces were picked from the source and carried to the site and reduced there. Our sample suggests that Sinter was favored for most cutting tools and projectile point manufacture. The quartz and CGM were used to complete a task and probably discarded rather than being resharpened and reused. The CGM flakes were the largest of all the material types and appear to be the result of removing a few large flakes to produce a working edge.

Material Recovered

Table 4, General Surface

Flakes 5
  Sinter 3
  Quartz 1
  CGM 1
Misc
  charred paper 1 pc
Artifacts
  Glass trade beads 3 (2 white, 1 red)

Table 5, Hole #1

Flakes 133
  Sinter 85
  Quartz 12
  CGM 27
  Obsidian 9 (4 Napa, 5 northern sources)
Faunal
  Small mammal bone 9 pc (6 burned)
  Shell, Margaretiferia 13 pc (1 diagnostic hinge, 12 misc pcs)
Misc
  Historic Glass 2 (1 patinated, color unknown, 1 opaque green with bubbles)
Artifacts
  Projectile point, corner notched L=25mm W=16.6mm T=6.25mm, Scinter, incomplete
  Shell beads 3 (see table -)
  Glass trade beads 468 (205 red, 260 white, 1 faceted blue, 1 faceted clear, 1 transparent red)

Table 6, Hole #2

Flakes 71
  Sinter 46
  Quartz 11
  Quartz crystal 1
  CGM 13
Faunal
  Shell, Margaretifera 17 pcs (2 hinges, 15 fragments)
Floral
  Buckeye hull 5pcs

Misc
  Historic Glass 2 (1 light green, 1 light blue)
  Soapstone 1 small tabular piece
Artifacts
  Shell Beads 3 (1 olivella, 2 saxidomus, see table -)
  Glass trade beads 37 (8 red, 29 white)

Table 7, Hole #3

Flakes 45
  Sinter 29
  Quartz 5
  CGM 11
Floral
  Buckeye hull 1 pc
Artifacts
  Glass trade beads 7 (4 red, 3 white)
  Mano fragments 2

Comments

The large CGM flakes should reflect the presence of cobble choppers or other large cobble tools yet none were observed on the surface. However, the site record prepared in 1980 made reference to two "cores" that were illustrated as 1 and 2 in figure I (Derr 1980) and are precisely the type of tools one would expect to find. Given the apparent late period use of the site it was anticipated that historic glass may also have been worked and used. An examination of the small sample (4 pieces) we recovered failed to substantiate our anticipation.

RUSSEL RANCH GLASS BEADS

Introduction

This study was done at the request of the Archaeological Conservancy. The study is not an adequate archaeological analysis of the Russell Ranch glass bead collection but is only a limited study to determine the gross bead types, their temporal occurrences, and their source (s) of distribution.

Since their introduction to the New World in 1492, glass beads have been carried by countless explorers, trappers, and traders. Initially a token of friendship, they became a major item of barter and exchange between Europeans and the Indians. Although they were traded by many nationalities, most of the beads were manufactured in the glass factories of Murano, a small island off the coast of Venice.

In California the first attempt to distribute them was probably made by Juan Rodriguez Cabrillo in 1542, but extensive use of glass beads did not occur until the late eighteenth century. In the Sacramento Valley they were utilized by Spanish exploring parties and missionaries, by American and Hudson's Bay Company trappers, and by rancher-colonists like John Sutter. It is with these pre-gold rush sources of

distribution that the beads are popularly associated, but they were important articles of trade until considerably later.

Methods

A total of 433 glass beads and uncounted fragmented bead specimens are in the collection. The original shape and color of many of the specimens has been thermally altered and their surfaces have been eroded by the chemical reaction of the PH of the soil with the ingredients of the glass.

Typological assessment of these specimens is based primarily on the most obvious diagnostic characteristics (color, size, and shape). The beads were examined with the aid of 10x lens. Not all of the beads were measured. Only the type specimens that appeared to be the smallest and the largest were measured. The dimensions for the types indicate the length of the largest and smallest beads in the type and the diameter of the largest and smallest beads in the type. The dated are assigned to the bead types are based on their occurrence in other California sites.

Russel Ranch Bead Types

1) Crystal, frosty, translucent, multifaceted, hexagonal hollow-cane. The surface is clear with six facets. The core is a layer of white glass. One example, length 7.0mm, diameter 7.5mm.

This bead is similar to Sorensen and LeRoy's (1968:46) Type II-2 which they assign to "around 1840." This type also appears at CA-Ven-87 after 1850 (Gibson 1976:123, Type F5). Meighan (n.d.:n.p., Types 159 and 160) indicates that this bead type dates ca. 1850 - 1900 in California and was probably introduced by the Hudson's Bay Company. According to Woodward (1970: 18) these bead types date from the 1830s - 1870s.

2) Blue, translucent, multifaceted, heptagonal hollow-cane. Seven facets have been cut around each end leaving seven equatorial facets. One example, length 5.0mm, diameter 4.6mm.

The dating and introduction of this bead is the same as Type 1 above, similar to Meighan's Type 146 and 149.

3) White, lusterless, opaque, barrel-shaped to oblately spheriodal, with asymmetrical ends and perforations.
The surfaces are often chalky and have a gold patina. Two hundred and one examples, length 9.1 - 2.7mm, diameter 8.8 - 3.3mm.

Sorensen and LeRoy (1968:42, Type 1-3) indicate that this type of bead was involved with the early trade of the Hudson's Bay Company. This type occurs in California around 1830 and into the 1900s and probably was distributed by the Hudson's Bay Company and American traders (Meighan n.d.:n.p.). The Meighan glass bead type collection subdivides the Russell Ranch Type 3 beads into Types 179, 180, 184, 187, 234, 276, and 363 based upon the differences in size and color variation.

4) Red, opaque exterior, green translucent core, barrel-shaped to oblately spheroidal. The core appears black but on transillumination is green. Two hundred and twenty eight examples, length 6.7 - 2.2mm, diameter 9.4 - 3.0mm.

This type, according to Woodward (1970:22) is a variety of a bead that is also known as a Cornaline d'Allepo. The bead was "so named because it was associated in the Italian export business with the city of Aleppo in the Near East." The Cornaline d'Allepo types include beads with red exteriors and white or yellow centers.

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Sorensen and LeRoy (1968:42, Type 5) indicate that Cornaline d'Allepo types with green translucent centers date throughout North America from the 1600s to possibly as late as the early 1800s in some areas. According to Meighan, (n.d.:n.p.) beads of this type occur in California as early as the 1780s and were popular into the first decade of the twentieth century. Beads in this type are associated with the Hudson's Bay Company and American trappers/traders. The Meighan glass bead type collection subdivides the Russell Ranch Type 4 into Types 103, 104, and 105 based upon differences in size and the color variation.

5) Burgundy, glossy, translucent, oblate spheroid. The surface is pitted. One example, length 2.5mm, diameter 3.2mm.

Meighan (n.d.:n.p., Type 218) indicates that this type of bead occurs as early as 1850 and as late as 1900.

6) Red, opaque exterior, yellow opaque core. This example is too fragmented to determine it's shape and dimensions. Two fragments.

Meighan (n.d.:n.p.) lists five bead types with a red exterior and a yellow core (Types 19, 23, 108, 186, and 288). He has assigned dates of 1850 - 1870 to Types 19 and 288 and indicates that, although there is no direct dating evidence for Types 23, 108, and 186, typologically, all red beads with yellow centers date to the American period.

Conclusions

The glass trade bead types recovered from the Russell Ranch site date from the late eighteenth century (the 1780s) to the early twentieth century (ca 1910) and most likely derive from the Hudson's Bay Company and American trappers and traders. The thermal alteration of the surfaces and shapes of the beads indicates that the bead types were associated with cremations.

It is noteworthy that the Cornaline d'Allepo types with red exteriors and white interiors are not represented in the collection.

These bead types are recovered from all areas of the western United States and in all historic periods. They are one of the most widely distributed glass bead types in California. They were first distributed in the western states in the early 1840s however, in California, these types occur from the 1850s to the 1900s (Meighan n.d.:n.p., Types 60, 61, 98, 99, and 100; Sorensen and LeRoy 1968:44, Types 37, 38, 39, and 40;Woodward 1970: 21 and 22).

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ABSTRACT

The Archaeological Conservancy is the only national non-profit organization dedicated to preserving the most significant remaining archaeological sites in the United States. The only certain way to preserve archaeological data for future generations is to acquire culturally rich lands and to manage them carefully. The science of archaeology is dependent on context, and a site can not be reconstructed after it has been leveled or looted. Once a prehistoric site is destroyed, part of our heritage is erased forever.

The Archaeological Conservancy ~~is~~ hopes to acquire and preserve an archaeological deposit located at Russell Ranch in the foothills of the Sierra Nevada Mountains, El Dorado County.

The Russell Ranch site is significant to the science of archaeology because of the quality and extent of its resources. Managed under the principles of conservation archaeology, the information buried at Russell Ranch will allow scientists to explore our prehistoric past for many years to come. There is an urgent need to preserve these cultural resources.

With this proposal, The Archaeological Conservancy is requesting the fee simple donation of the Russell Ranch archaeological site from the Russell Ranch investors, to be dedicated as a permanent archaeological preserve. We believe that such a cooperative relationship between the developer and The Archaeological Conservancy will benefit the Russell Ranch archaeological resource, the new community which will surround it, and both parties to the donation.

The Russell Ranch developers should be commended for their commitment to preservation of cultural resources. Archaeologists, Native Americans, and thousands of others across the United States are interested in and concerned about our nation's prehistory. Contribution of the Russell Ranch site to The Archaeological Conservancy will provide a real public benefit.

The highest priority of The Archaeological Conservancy is the protection and management of those cultural resources under its control. A draft permanent management plan for the Russell Ranch archaeological site is included in this proposal. The Conservancy has a twelve year record of experience in managing similar sites, and can provide the effort and expertise required for long-term management of the Russell Ranch site.

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THE ARCHAEOLOGICAL CONSERVANCY

The Archaeological Conservancy was incorporated on August 3, 1979 to preserve the nation's most important remaining archaeological sites. Permanent protection is achieved by acquiring lands that contain significant endangered archaeological sites.

Founded by concerned preservationists, conservationists, and archaeologists, the Conservancy strives to permanently preserve the remains of past civilizations so that they can be studied and enjoyed by future generations. The Conservancy has helped to preserve the record of people living in America from as early 10,000 B.C. to the 1890's.

In many countries, including Italy, Mexico, Israel and Egypt, prehistoric ruins are protected by law. In the United States, however, private property rights allow landowners to control these sites largely as they see fit. As a result, irreplaceable parts of America's heritage are being destroyed at an alarming rate by urban development, modern agricultural practices, land leveling, commercial looters, and vandals.

In the 1880's the Bureau of Ethnology surveyed ancient moundbuilder sites in the Mississippi and Ohio River Valleys and found more than 20,000 sites of prehistoric occupation. Today it is estimated that only about 200 of these remain.

In the Southwest, commercial looters seeking artifacts for the thriving international market have damaged or destroyed many of the most spectacular ancient ruins.

Central California had one of the densest prehistoric populations of non-agricultural peoples in the world. Yet today, less that one in twenty of the region's ancient sites remains intact.

While a few of the nation's most important sites are protected as parks or university preserves, the majority of significant sites are located on private land. The only reliable way to insure their preservation is to acquire title to the land and actively protect it. This is the mission of The Archaeological Conservancy.

Method of Operation

The Archaeological Conservancy operates much like its model organizations, The Nature Conservancy and the Trust for Public Land, by targeting important unprotected sites and acquiring the land through donation or purchase.

The Conservancy maintains three regional offices: in the Southwest; the East; and now in the Western States, including California, Nevada, Idaho, Oregon, and Washington. In consultation with state historic preservation officers and local archaeologists, the director of each regional office compiles a master list of the most significant endangered sites in each state and actively attempts to acquire them.

Many factors are considered in targeting a site for acquisition. The site's intrinsic scientific potential is considered first. The Conservancy then weighs this potential according to the number of similar sites currently protected or available for protection. The degree to which a site is endangered is considered along with the likelihood of price inflation and the potential difficulty of preservation if acquisition is delayed. The financial impact and logistics of acquisition and management are also considered, as are the possibilities of ultimate transfer to public ownership.

Once a site has been targeted for acquisition, the staff of the Conservancy approach landowners and attempt to negotiate an agreement, explaining the tax benefits of outright donation of land or of a "bargain sale to charity". Often the Conservancy maintains close and friendly contact for many years before a landowner is willing to negotiate.

The Conservancy is careful to consider the impact of any acquisition on landowners, local people, organizations, and Native Americans. The Conservancy helps to create solutions where all parties benefit and the resource is ultimately preserved.

Once a site has been acquired by the Conservancy, staff develops a 100-year management plan to protect the cultural resource. A committee of local people, archaeologists specializing in the region and resource, Native Americans, and other interested individuals, is formed to advise the Conservancy Board of Directors.

Each site is unique, and the Conservancy is flexible in its management techniques. Concerns about scientific research, public access, interpretation of the resource, cultural values, artistic components, natural resources and wildlife, all must be taken into account. The Conservancy's role is to protect the resources while maximizing the other potential benefits of the site.

Education, Art and Culture

Some of the most spectacular Conservancy preserves are stabilized and interpreted for the general public. In 1986, for example, the Conservancy donated a ruin it had purchased to Petrified Forest National Park. By providing opportunities for people to enjoy and learn more about the past, the Conservancy hopes to encourage public interest in preserving what remains of our prehistoric heritage.

A visit to a Conservancy preserve provides people with the opportunity to understand the legacy of human occupation on the land. Artifacts can be related to the geography, geology, climate, water, plants, and wildlife of the region. Sometimes a visitor can observe archaeologists at work. And prehistory is often juxtaposed with historical structures and present day pursuits in interesting ways.

Knowledge about the past provides context and connectivity to people in a rapidly changing and unpredictable world. Recognition and experience of the history of a region helps its people, even newcomers, build and maintain a strong sense of culture and community.

For Native Americans, preservation often provides a rare chance to recreate and practice their cultures, and to educate their children, and other Americans, about a rich and lengthy heritage. In some instances, people who have been denied access to ancestral lands for many years are finally able to retrace the footsteps of their ancestors, gaze at ancient paintings, or dance to the rhythm of ancient drums, all on a Conservancy preserve.

Many Conservancy sites contain irreplaceable works of art: baskets, pottery, statuary, paintings and carvings. Some of these are functional objects, designed for use and pleasure in everyday life. Other works of art suggest no obvious function other than an expression of culture and of the human spirit. Some objects will someday be uncovered, studied, and protected in a museum setting, while others, carved or painted on a cliff face or constructed painstakingly in stone, must remain onsite in order to preserve their integrity. Context is an essential component of all art, because our perception of any form is so dependent upon our understanding of its origin. Our appreciation of a great masterpiece is much diminished if we know nothing about its creator, or the cultural and historical context of its creation.

In this sense, education, art and culture are all intertwined with the science of archaeology on a Conservancy preserve. The only clues to prehistoric context exist "in situ", in place, and thus provide a rationale for site preservation.

Conservation Archaeology

The Conservancy adheres to the principles of conservation archaeology: excavations and investigations by archaeologists are permitted, but a portion of the site must always remain unexcavated. The reason for this is simple — the science of archaeology is always advancing. Investigations 100 years from now will yield much more information than those of today, provided that there is raw data left to be examined and studied.

Modern archaeology makes use of many scientific techniques invented only in the past few decades. Discoveries like tree ring dating, Carbon 14, archaeomagnetism, pollen analysis, obsidian hydration, and trace element analysis have revolutionized our ability to learn from the past. New techniques often enable archaeologists to retrieve vital data while preserving a resource in context, through remote sensing, for example. The principles of conservation archaeology look to decades ahead, when techniques will be further refined. The Conservancy stresses the importance of maintaining raw data in situ, so sites will be available for study as new methods become available.

The Conservancy does not undertake any archaeological research itself. Instead, guided by the master plan, the Board of Directors may permit qualified institutions to conduct research on Conservancy sites. Archaeological excavation is an extremely costly and time-consuming process, and it is beyond the scope of the Conservancy to undertake this kind of program. When excavations do take place on Conservancy land, strict procedures must be followed, including publication of findings and permanent curation of recovered artifacts in a public repository.

In some cases, the Conservancy turns over title or gives a long term lease to the properties it acquires. Only public institutions, such as universities, museums, and governments, are eligible to receive the sites. The receiving institution must adhere to the Conservancy's master plan as a condition of property transfer. Placing curatorial responsibility with another organization frees Conservancy time and resources for additional acquisitions.

Conservancy Preserves

Across the United States, the Conservancy has acquired and preserved more than eighty archaeological sites in fifteen states since operations began in 1979.

Among the sites already acquired by the Conservancy are the Hopewell Mounds Group in Ohio, the ceremonial center of a civilization that flourished at about the time of Christ. Also in Ohio, the Conservancy has acquired Stackhouse Mound, the best preserved remaining Adena mound complex, which represents a civilization that flourished around 1000 B.C.; and the Dodge Site, a large Middle Woodland Culture ruin. In Michigan, the Butterfield Site, one of the best examples of an Early Late Woodland village, is now managed for the enjoyment of future generations.

In Arkansas, the Menard-Hodges Mounds, remnants of a village visited by De Soto in 1541 and the site of the original Arkansas Post, were acquired in 1980. In Missouri, the Conservancy owns a major Mississippian civic and ceremonial center and the largest known village of the Osage Indians.

In New Mexico the Conservancy preserves Pueblo San Marcos, probably the largest pueblo ruin in the Southwest, whose people are believed to have controlled the prehistoric turquoise mines. Other Conservancy preserves in the state include Castillo Pueblo, a Pueblo III ruin located on a bluff overlooking the Rio Grande; Fort Craig, a large frontier fort that was the site of the first major battle of the Civil War in the west; two important Spanish Colonial period sites; and an outlying village of the Chaco Canyon civilization, which dominated the Southwest from about A.D. 900 to 1150.

In southwestern Colorado, the Conservancy has acquired four Mesa Verde Anasazi culture preserves containing more rooms and kivas that all of the sites within Mesa Verde National Park.

In Arizona, the Conservancy has already acquired two well-preserved Sinagua ruins in the Verde Valley near Sedona; McCreery Pueblo adjacent to the Petrified Forest National Park; Mission Guevavi, Father Kino's first mission near Nogales; and 840 acres of the Sears Point Archaeological District between Yuma and Gila Bend.

In California, the Conservancy has purchased the Borax Lake - Hodges site near Clearlake. Excavations in 1938 at this late Ice Age campsite redefined our knowledge of prehistoric settlement of the West Coast by Siberian mammoth hunters 10,500 years ago. A recent Conservancy acquisition at Exeter Rocky Hill in Tulare County preserves hundreds of prehistoric Native American paintings and a 2,000 year old village mound.

Funding

The Archaeological Conservancy is publicly supported organization under Section 501(c)(3) of the Internal Revenue Service Code. Funding comes from foundation grants, government grants, private donations and memberships. There are three major funds that support the activities of the Conservancy.

The General Fund is unrestricted and is used for the operations of the Conservancy. The Preservation Fund is a revolving fund used for direct acquisition of property, with monies used over and over again. When local funds are raised for a specific acquisition, or when a property is resold to a government or other public agency for permanent curation, the Preservation Fund is repaid to be used for the next acquisition.

The Conservancy Board of Directors has established a permanent Endowment Fund. Earnings from this fund benefit the General Fund for operations. In 1987, the Conservancy surpassed a one million dollar goal set by the National Endowment for the Humanities, and was awarded a $250,000 challenge grant to benefit the Endowment Fund.

Foundations that have supported the work of the Conservancy include The Ford Foundation, Rockefeller Brothers Fund, George Gund Foundation, Kettering Family Foundation, Kress Foundation, Gates Foundation, Frost Foundation, Noble Foundation, Sarkeys Foundation, Meadows Foundation, Boettcher Foundation, Mead Foundation, Ahmanson Foundation and the Johnson Foundation.

The Conservancy has two types of memberships supporting the General Fund. Corporate Associates contribute from $1,000 to $10,000 annually and include such companies as Atlantic Richfield, Alcoa, Chevron USA, Santa Fe Railroad, and Phillips Petroleum, and Bank of America.

Since beginning operations in 1979, the Conservancy has attracted more than 11,000 individual donors. Individual memberships range from $25 to life membership at $1,000. As the membership continues to grow, it will provide a continuing and substantial source of annual income for the organization.

By the end of 1990, the net worth of properties owned by the Conservancy had reached approximately $3.5 million.

THE RUSSELL RANCH ARCHAEOLOGICAL SITE

In the foothills of the Sierra Nevada Mountains in Northern California, the most significant archaeological site at Russell Ranch [redacted] The abundance of water, the surrounding oak woodland, and suitable stone for grinding acorns provide an explanation for the nearby human occupation. Midden deposits, the debris left behind by prehistoric inhabitants, indicate that the site represents a relatively permanent village site of the Nisenan or Southern Maidu people.

According to anthropologists, the Nisenan people were organized in tribelets. Each tribelet was centered around a year-round village which may have been complemented by seasonal hunting, fishing and gathering camps and smaller villages. The site at Russell Ranch probably represents one of these smaller permanent encampments. The availability of acorns and other staple vegetable foods was important to the location of such villages, as was the proximity of fishing and hunting opportunities.

Very little contact between Europeans and the Nisenan people occurred prior to the gold rush, and by the early 1900's not much material evidence of traditional Nisenan culture remained in context. According to Derr, little ethnographic information was gathered about the settlement patterns and village locations of the Southern Maidu. Thus, most of the information we have about these people will depend upon the histories of living Native Americans and archaeological research at village sites such as the one located at Russell Ranch.

Significance

The Russell Ranch Archaeological site is significant to the science of archaeology because of the rarity of its cultural resources and because of its potential contribution to our understanding of prehistoric cultures..

Based on the archaeological survey by Eleanor H. Derr, and subsequent survey by archaeologist John Foster, the site is believed to be the only known Native American habitation site in this general area south of the American River. As the site is in a border area between the Southern Maidu and the Northern Miwok, it may yield information about the relationships among prehistoric tribes of differing language groups. And since the site contains artifacts from the period following contact with Gold Rush era settlers, it may provide important information on the relationship between native peoples and Euro-Americans.

This knowledge has value to the public as well as to science. Carefully managed, the Russell Ranch archaeological site will provide information which can contribute to public education programs.

Finally, careful management of the Russell Ranch Site is important in that the site is significant to Native Americans as a traditional cultural place. Derr has concluded that "Ethnic significance may be present because of the use of the site for historic or proto-historic burials."

Degree of Endangerment

Unfortunately, the Russell Ranch site has been heavily disturbed in recent years, and the great potential of the archaeological data contained within the site is threatened by continuing destruction. The site has been intentionally looted for artifacts over many years. As development around the site occurs, more people will have access to the open space as a passive recreational area. Although most of these casual visitors probably will not intentionally damage the cultural resources there, the accessibility of the site, public knowledge of the resources there as evidenced by the bedrock mortar sites, and the mere presence of so many people all contribute to the difficulties which future site managers will face.

The greatest threat to the site comes from serious collectors and looters. Over the years, looters have stripped artifacts from the midden deposits. It should be noted that it was not until very recently that people began to realize that such collecting, especially in a cremation or burial area, is inappropriate. Left in place, artifacts are of tremendous value to archaeologists in their efforts to reconstruct the past, and of great value to Native Americans in their attempts to recreate their prehistoric culture. However, once removed from their context in the deposit, most of their value is lost.

Derr concludes that "It is to be expected that with increased population pressures on Northern California this general area will see much greater density in population in the next few years, resulting in greater likelihood for both direct and indirect impact to the cultural resources. It is therefore of some importance that as much information as possible be recorded for this area, before these fragile remains are lost forever."

Rationale for Preservation

Because of the scientific significance of the deposits of cultural materials at Russell Ranch, a preservation program designed to protect the integrity of the deposits and to preserve the remaining portions of the site for future research is essential.

Management decisions for the site ought to be made in the context of the science of archaeology and the principles of conservation archaeology. Because so much of the site has already been disturbed, it is important that the remaining deposits be excavated only when such disturbance can be justified by compelling scientific research questions, and when research investigations can be accomplished by highly qualified institutions and individuals. In addition, portions of the site should remain unexcavated in anticipation of new archaeological techniques and technologies which may improve the quantity and quality of research results with less disturbance of resources.

The results of archaeological research are of great value to our society as a whole. Knowledge of prehistory provides a context for an understanding of our own history. The lifeways of prehistoric people allow us an opportunity for comparison with our own way of life. An understanding of the people who once lived rich and full lives near our communities provides us with a sense of place and time which is sadly lacking in our increasingly homogenous society.

Now, even Native Americans turn to archaeological research to rediscover their heritage and culture. But the loss of the living Native American culture which followed the gold rush has been mirrored by the loss of archaeological evidence caused by development, agriculture, and looting. If we are to save any of the complexity and diversity of the past, we must act now to carefully protect and manage the few remaining significant archaeological sites in California.

A decision by the developers to donate the Russell Ranch archaeological site to The Archaeological Conservancy, and to assist in its ongoing management, would allow us to provide this protection at Russell Ranch.

Community Outreach

Many Californians are unaware of their state's rich prehistoric past. We do not enjoy the clear and visible connection afforded by the spectacular pueblos of the southwest, or the golden legacy of moundbuilders in the east. Our histories reflect the eastern tribes associated with the discovery of America and the conquest of the frontier; California Indians are often mentioned only as people subject to the missions. Yet California was once the home of more than 300,000 Native Americans, a population density greater than anywhere in North America other than Mexico. Anthropologists estimate that the Maidu numbered nearly 10,000 people.

Only a handful of places in California offer an opportunity for people to experience what prehistoric life was like, and to directly perceive the undisturbed record of people who lived on this land many hundreds of years ago. The Russell Ranch archaeological site has the potential to be one of the best of those places. Public education programs are essential not only to increase public understanding of our prehistoric heritage, but also to foster respect for archaeological sites. It is only in the past 20 years that the public attention has been drawn to the value of preserving archaeological finds. Opportunity for community education programs focusing on continuing research and preservation at Russell Ranch will be an important consideration in any management plan.

One of the difficulties of archaeological outreach programs is that the location of the site must generally remain undisclosed. The Archaeological Conservancy can demonstrate a 12 year record of preserving the integrity of sites while maximizing their public education value. Conservancy members, local volunteers, colleges and universities, and Native Americans all provide support to Conservancy staff in furthering educational goals.

Benefits of Donation

The Archaeological Conservancy firmly believes that the fee-simple donation of the Russell Ranch Archaeological Site to the Conservancy is the best possible protection for the cultural resources on the site.

Donation will also provide additional benefits to both The Archaeological Conservancy and to the Russell Ranch Investors. We are convinced that a cooperative management effort with The Archaeological Conservancy to protect the site will provide a cost savings to the Russell Ranch developers and to the community services district. As a non-profit organization, The Conservancy can obtain materials through donation or at low cost, relies primarily on volunteer efforts for site stabilization and monitoring, and can obtain expert advice and assistance at little or no cost.

At the time of donation, The Archaeological Conservancy will acknowledge the creation of an archaeological preserve at Russell Ranch with a presentation by members of our Board of Directors to officers the Russell Ranch development group and El Dorado County. The donation will make The Russell Ranch Investors the first major development sponsor to the Conservancy in the Western Region. This landmark will be communicated to the Conservancy's 10,000 members nationwide, to archaeologists and avocationalists in California, and to state and national media. We have received excellent press coverage of such donations in other states.

Furthermore, the ongoing research and educational programs at the Russell Ranch archaeological preserve may be highlighted to Russell Ranch homeowners and to others who may be interested in the developer's foresight in preserving cultural resources.

Most important, however, is the additional protection that will be provided to the site. The highest priority of The Archaeological Conservancy is the protection and management of those cultural resources under its control. The Conservancy has a twelve year record of experience in managing similar sites, and can provide the effort and expertise required for long-term management of the Russell Ranch site.

SITE MANAGEMENT

Archaeological sites are acquired by The Archaeological Conservancy for the purpose of preserving them from damage and destruction, in order that through a long future they may be studied to increase our understanding of the lives of their occupants and of the past in general.

The Archaeological Conservancy has developed detailed management plans for more than 80 permanent archaeological preserves across the United States. Each management situation is unique, and careful attention is given to the impact of management decisions upon Native Americans, nearby residents, and the local community. A committee of local people, including archaeologists specializing in the region, Native Americans, and community leaders, advises the Conservancy regarding management issues. Management decisions are made by the Conservancy's Board of Directors, which includes experts in archaeological preservation with many years of hands-on experience.

With regard to the Russell Ranch site, the following specific concerns will need to be addressed within the management plan:

The following pages contain a draft management plan suggesting options and considerations for protection of the cultural resources on Russell Ranch.. The portions of the text shown in **bold** are policies required by The Archaeological Conservancy Board of Directors, and serve as the basis for protection of all Conservancy properties. Portions of the text not given in bold print are draft suggestions which might be modified by changing circumstances and through recommendation of the local site advisory committee.

Purposes

Archaeological and historical sites are acquired by The Archaeological Conservancy for the purpose of preserving them from damage and destruction, in order that through a long future they may be studied to increase our understanding of the lives of their occupants and of the past in general. To this end excavation or other research on the sites will be carefully controlled to assure minimum destruction and maximum increase in knowledge.

It is the intent of this plan to oversee future investigations of the Russell Ranch archaeological site and to see that they are conducted according to the highest standards of problem-oriented, scientific archaeolical research and to assure that much of the site will be protected for future generations to enjoy.

All Conservancy preserves are managed according to the general guidelines contained herein in bold type, which constitute the "Management Plan for Conservancy Property", adopted by the Board of Directors in July, 1982. This general plan is designed to be supplemented by specific elements included in a plan formulated and recommended to the Conservancy Board of Directors by a Site Management Advisory Committee consisting of a representative of The Archaeological Conservancy, an archaeologist specializing in the Russell Ranch region, a representative of the Russell Ranch developers or homeowners' association, a representative of the community services district, and a Native American representative. Such a committee assures flexibility in management in order to respond to changing circumstances affecting the site, and establishes lines of communication between local parties and the Conservancy Board of Directors, who remain in ultimate control of site management.

Site Mapping, Initial Research, and Backfilling

The highly disturbed situation at the site requires that the existing trenches, pits, and potholes be carefully mapped, recorded through photographs, and backfilled according to standard archaeological techniques as soon as possible, in order to discourage additional vandalism.

We agree with Derr's recommendations that the open pit areas "should be filled with soil obtained elsewhere and an additional top covering of soil of at least .5 meter depth applied. This should be done before the start of all construction activities to prevent its locality from being further advertised, and all heavy equipment must be directed to avoid the area, or disturbance through compaction may result."

During construction, all areas of archaeological significance should be flagged to prohibit entry, and all construction crews notified that these are prohibited areas, without notification that these represent archaeological sites. Representatives of the developer or The Archaeological Conservancy should carefully monitor the site during construction to assure that no disturbance occurs.

A permanent datum must be established on the site, so that the exact site dimensions and boundaries may be located following backfilling, capping, and erosion control measures.

Erosion Control

Provision will be made by The Archaeological Conservancy at all sites for adequate ground cover, minimum erosion and disturbance (from planting, mowing, grazing, etc.) and for fencing and supervision when appropriate and necessary. The President will consult with local farmers and with county agricultural agents as to suitable ground cover, methods of plowing and planting to avoid disturbance below the existing plow zone, and the best frequency of harvesting or mowing. In arid areas suitable measures will be taken to prevent or retard erosion.

Reintroduction of native plants to control erosion may be appropriate at the Russell Ranch Site, with the surface of the site revegetated by encouraging native grasses to grow on the backfilled soil.

Planting and growth of any plants when the developing root systems would disturb the stratigraphy and thus the scientific value of the site should be discouraged.

Natural Resources Management

The Conservancy takes special care to insure that natural resources on its properties are managed with the expert advice of biologists having special knowledge of the ecology of the area.

In the case of Russell Ranch, the natural values are high, and the existing ecology provides archaeologists with additional information about the kind of plant and animal communities which surrounded prehistoric life. Decisions made regarding the preservation of cultural resources and management of the site would take such factors into account.

Site Monitoring and Patrol

The site should be regularly monitored and photographed to record any additional disturbance.

The local law enforcement agency having jurisdiction over the site will be contacted and authorized to enter the property without notice for the purpose of arresting any individual or group vandalizing or disturbing the archaeological site. The Archaeological Conservancy will agree to prosecute any such violators of State or Federal laws protecting archaeological sites and places containing human remains.

If the developers provide security services for the Russell Ranch development, The Archaeological Conservancy will work with such security service to increase protection of the archaeological site.

Regular patrol of the site by law enforcement personnel whenever possible, and by volunteer site monitors as is customary on other Conservancy preserves, will be the active presence required to discourage vandalism of the site. The Conservancy would strive to develop a close working relationship with local law enforcement, the homeowners group, and the local community in order to encourage appropriate monitoring and response.

Homeowners and community members who volunteer to participate in such site monitoring programs will be encouraged by receiving complimentary memberships in the Conservancy, invitations to visit other Conservancy preserves, subscriptions to the Conservancy's quarterly site preservation newsletter, and special educational opportunities.

Signage

Archaeological Conservancy preserves are marked with appropriate signage to notify trespassers that vandals will be prosecuted to the full extent of the law, when such signage is appropriate. The Conservancy attempts to place signage so that it does not draw additional attention to cultural resources, but notifies vandals of surveillance and potential prosecution.

In addition, The Archaeological Conservancy will place a plaque nearby the site, designating the area a permanent archaeological preserve. This may also serve as a permanent datum.

Site Visitation

Permission will be required for all organized visits to sites, such as those by interested students, local groups, or professionals. Requests for such visits will be made in writing to the President of The Archaeological Conservancy.

Trails and other active or passive open space recreational elements should be routed around the site, as far from the site as is possible given the topography and development constraints.

Vehicular access to the archaeological site should be minimized as much as possible, and public parking opportunities limited nearby.

Procedures for Applying for a Research Permit

Research will not be discouraged when appropriate to a problem-oriented research program but permission will be required with the conditions stated below.

1. Formal application will be made in writing to the President, with a detailed research plan and an endorsement of the research by the institution or organization employing or funding the investigator.

2. A comprehensive research design will be submitted, comparable to that required by the NSF or the NEH, including (a) the relation of the proposed work to previous investigations at the site and in the area, (b) specific area(s) of the site designated for investigation, (c) the proposed field procedures, (d) techniques for acquiring and analyzing data, (e) a timetable for the field report, the analysis, and the reporting of the results, (f) a detailed budget for field work, analysis, and publication, and for costs of curation of artifacts and samples for analysis, that is cleaning, cataloging, storage and permanent curation, and (g) such other details as the President may specify. The research design should be oriented to problem solving rather than mere data gathering. A curriculum vitae of the principal investigator (and any other professional staff) should be included.

3. In the event of more than one request at a single site at the same time, the President may require the applicants to coordinate their plans before the applications receive further consideration, or he may appoint a review committee to consider them and select only one for approval.

4. Review Committee. The President will appoint a three-member committee to evaluate the qualifications of the researcher(s) and to review the application and determine if it is acceptable. The committee should include, insofar as it is possible and practical, (a) a representative of a state or local archaeological society or other organization and (b) an authority on the archaeology and/or history of the area and problems of the research being proposed, who is not involved in the project or associated with its sponsors, and could also include a non-professional avocational archaeologist, historian, or other appropriate specialist, who is interested in the local or regional archaeology and history, or a nationally recognized authority on archaeological research design and excavation procedures. One of the members will be designated by the President as chairman. Members of

the Board of The Archaeological Conservancy may serve on review committees.

5. Each review committee member will receive a copy of the proposal and within 30 days will discuss it with the other committee members in person, by mail, and/or telephone conference call, and the committee will agree on a recommendation (at least two members must agree). The chairman will notify the President of the committee's recommendation, which may be (a) the acceptance of the proposal as submitted, (2) acceptance subject to modifications specified by the committee, or (3) rejection, with specific reasons stated. The President will communicate to the applicant the results of the review; in the case of (2) the same committee will review the revised application, if one is submitted. In the case of (3) the President may, but need not necessarily, invite rewriting and resubmission.

Research Procedures

1. Compliance. The President may appoint a member of the Review Committee to monitor the research project during the field work and report to the President periodically or at its conclusion.

2. The site must be left in a safe and secure condition during interruptions in the work and at its completion, at the expense of the investigator.

3. Preliminary Report. Within 90 days after the conclusion of any field season the principal investigator will provide a written report of results to the President. This report will include a map of the site indicating the location(s) of any field work, and a discussion of results. It may include a request for modification of the original proposal if a subsequent field season has already been approved.

4. Final Report. Within a reasonable period of time following completion of the analysis of the data (usually a year or less), one or more papers or scientific reports will be presented at professional meetings and will subsequently be published. Copies of papers presented at meetings and of their published versions, as well as of other published reports, will be sent to the President, and if requested to members of the Board of The Archaeological Conservancy, and to any other organization or institutions that the President may specify.

5. Disposition of human remains. Any burials or cremations encountered by researchers during excavation or other activity at the Russell Ranch archaeological site shall be treated according to Federal and California State laws.

Ownership and Disposition of Collections

1. Ownership. The collections from a field program will include all artifacts, samples or specimens for analysis (faunal or floral identification, pollen study, dating, etc.) and all related documentation whether written or taped and including maps, diagrams, drawings, and photographic negatives and one print of each. The collection remains the property of The Archaeological Conservancy until it is transferred to an appropriate repository, usually within the state where the site is located. Collections will not belong to either the excavators or their institutions, although the latter may (but not necessarily will) become the permanent repository.

2. Borrowing Collections. The excavator, through his/her institution or sponsoring organization, may borrow a collection until analysis is complete and when doing so must inform the President of the location in which it will be kept, and of any change in its location. Portions of the collection may not be loaned to others,, except that for analysis and identification specimens and artifacts may be sent temporarily to appropriate laboratories.

3. Duplication of Documents. The excavator may duplicate any and all documents relating to the collection for his/her permanent use and possession.

4. Final Repository. The collections will be deposited in a public institution, preferably but not necessarily in the state in which the site is located. A repository will be designated by the President after recommendation are made by the Review Committee. Proper procedures for storage, curation, preservation, and retrieval of the collection must be followed by the permanent repository. The documentation must remain in the same repository as the rest of the collection and be stored in accordance with proper archival standards. In the case of gross breaches of proper storage and/or other procedures by the repository, as judged by the President of The Archaeological Conservancy, the collection may be recalled by The Archaeological Conservancy for deposit elsewhere. The deaccessioning of any of the collection by the repository will result in reversion of that part of the collection to The Archaeological Conservancy for deposit in another institution.

Public Education

At the conclusion of a research project the investigator should assist local museums and organization in correcting any information they are disseminating to the public in the light of new data and conclusions. Publication of a report on or description of the research in a popular medium is encouraged but not required.

The Archaeological Conservancy will cooperate with the developers, the homeowners' association, and the community services district to encourage development of educational materials that will increase public understanding of our prehistoric heritage and foster respect for archaeological sites.

SUPPORTING DOCUMENTATION

Board of Directors

THE ARCHAEOLOGICAL CONSERVANCY
BOARD OF DIRECTORS

Stewart L. Udall (Chairman) practices law in Phoenix and Santa Fe. He served as Secretary of the Interior under Presidents Kennedy and Johnson and as a Congressman from Arizona. As Secretary of the Interior, Mr. Udall was instrumental in the passage of the Wilderness Act and the Historic Preservation Act. He is the author of *The Quiet Crisis* and a new book on Coronado's expedition, *To The Inland Empire.*

Olds Anderson is the president of the Ransom Fidelity Company in Lansing, Michigan. He is a director of the Manufacture's Bank of Lansing and a trustee of the Ingham Medical Center. He is a graduate of Dartmouth and Michigan State and holds an honorary doctorate from Hillsdale College.

Timothy B. Atkeson heads the international program of the Environmental Protection Agency in Washington D.C. He is retired from the law firm of Steptoe & Johnson, Washington, D.C. He has served as general counsel to the Asian Development Bank, the Council on Environmental Quality and the Office of Technology Assessment. He is a graduate of Haverford College and Yale Law School and was a Rhodes Scholar.

Christopher B. Donnan is Director of the Museum of Cultural History at U.C.L.A. He holds a Ph.D. degree from the University of California at Berkeley and has worked extensively in Peru, where he was recently involved in the discovery of fantastic Moche tombs.

Earl L. Gadbery lives in Pittsburgh. He retired as president of the Alcoa Foundation in 1991 after twenty years with the foundation. He has served on numerous public policy boards including the Council on Foundations, Independent Sector and the American Symphony Orchestra League. He is a graduate of the University of Kansas with a degree in aeronautical engineering.

George B. Hartzog, Jr. is retired in McLean, Virginia. He served as director of the National Park Service from 1964 to 1973. Mr. Hartzog joined the Park Service in 1946 and served as superintendent at Great Smoky Mountains National Park and the Jefferson National Expansion Memorial. During his tenure as director, 62 new units were added to the National Park system.

W. James Judge is professor of anthropology at Fort Lewis College in Durango, Colorado. He is the former director of the Chaco Center of the National Park Service and a leading expert on the prehistoric cultures of the Southwest. Dr. Judge holds a Ph.D. degree from the University of New Mexico and is the author of numerous publications on the Chaco Culture.

Roger Kennedy is director of the National Museum of American History at the Smithsonian Institution in Washington, D.C. He is the author of seven books of which the most recent is *Rediscovering America.* He has hosted television series on American history including a recent Discovery channel program focusing on the Ohio moundbuilders. He is a trustee of the National Trust for Historic Preservation.

Edmund J. Ladd is a curator at the Laboratory of Anthropology in Santa Fe. He holds a Masters degree from the University of New Mexico and is retired from the National Park Service where he spent most of his time in Hawaii. Mr. Ladd is a native of Zuñi Pueblo and one of the first American Indians to become a professional archaeologist.

Jay T. Last lives in Beverly Hills, California and is a former vice-president for technology of Teledyne Corp. He holds a Ph.D. degree in physics from M.I.T. and was a founder of Fairchild Semiconductor Company. He operates an art publishing company and is the author of recent books on graphic arts and California watercolor artists.

Jack and Pat McCreery live in San Luis Obispo, California where Jack is retired from the U.S. Air Force. They are active in the American Rock Art Association and have served as volunteer archaeologists at Petrified Forest National Park and other sites in the Southwest.

Bonnie McKee lives in Dallas where she is the former president of the Dallas Archaeological Society. She is a member of the board of the Texas Archaeological Society. She has been active in research projects in Texas and New Mexico and is an avid collector of Southwestern art.

Helen Michaelis is curator of the Rock Art Archive at U.C.L.A. A native of Russia, she came to the United States in 1941 and worked for 30 years as the comptroller of a architectural firm in Los Angeles. She has studied archaeological sites in Iran and Southeast Asia and did her senior thesis on Hopi rock art.

Mark Michel lives in Santa Fe and has been President and Chief Executive Officer of the Conservancy since its founding in 1980. He holds a Master's degree from the University of Missouri and is a former management consultant and executive assistant to the Governor of New Mexico.

Edward M. Nicholas is an investor-businessman and retired rancher and farmer. Until recently he managed substantial real estate holdings in Columbus, Ohio. Mr. Nicholas is the author of *The Hours and the Ages* and a graduate of Princeton. He divides his time between Columbus and Santa Fe.

Project Staff

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WESTERN REGIONAL DIRECTOR
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(916) 663-4770

Mark Michel
CONSERVANCY PRESIDENT
415 Orchard Drive
Santa Fe NM 87501
(505) 982-3278

Sources of Financial Support

Sources of Financial Support

A. Foundations

Foundations have been a major source of support for The Archaeological Conservancy. The most significant foundation supporters include:

The Ford Foundation	New York
Rockefeller Brothers Fund	New York
George Gund Foundation	Ohio
Atlantic Richfield Foundation	California
Inglewood Foundation	Arkansas
Samuel Kress Foundation	New York
Pinewood Foundation	New York
Kettering Family Foundation	Ohio
GAR Foundation	Ohio
Boettcher Foundation	Colorado
Ruth & Vernon Taylor Foundation	Colorado
Johnson Foundation	Colorado
Gates Foundation	Colorado
Ahmanson Foundation	California
Columbus Foundation	Ohio
Mead Foundation	California
Meadows Foundation	Texas

B. Corporations

The Conservancy receives contributions of funds and land with archaeological sites from corporations, including:

Doubleday & Company	New York
Philip Morris	New York
Mobil	New York
Conoco	New York
Teledyne	California
Times Mirror	California
Public Service Company	New Mexico
Oppenheimer Industries	Missouri
Bank of Santa Fe	New Mexico
Chevron USA	California
H.J. Heinz Company	California
Alcoa	Pennsylvania
Santa Fe Southern Pacific	Illinois

C. Individual Support

More than 10,000 donors have contributed land as well as funds to the Conservancy since the organization was founded ten years ago. A large percentage of the Conservancy's financial support comes from individual contributors.

Nonprofit Status

Internal Revenue Service
District Director

Department of the Treasury

Date: APR 3 1985

Our Letter Dated:
September 1979
Person to Contact:
E.O. Technical Assistor
Contact Telephone Number:
(214) 767-3526
EO:7213:309:JS

Archaeological Conservancy
415 Orchard Drive
Santa Fe, New Mexico 87501

Dear Applicant:

This modifies our letter of the above date in which we stated that you would be treated as an organization which is not a private foundation until the expiration of your advance ruling period.

Based on the information you submitted, we have determined that you are not a private foundation within the meaning of section 509(a) of the Internal Revenue Code, because you are an organization of the type described in section 170(b)(1)(A)(vi). Your exempt status under section 501(c)(3) of the code is still in effect.

Grantors and contributors may rely on this determination until the Internal Revenue Service publishes notice to the contrary. However, a grantor or a contributor may not rely on this determination if he or she was in part responsible for, or was aware of, the act or failure to act that resulted in your loss of section 509(a)(1) status, or acquired knowledge that the Internal Revenue Service had given notice that you would be removed from classification as a section 509(a)(1) organization.

Because this letter could help resolve any questions about your private foundation status, please keep it in your permanent records.

If you have any questions, please contact the person whose name and telephone number are shown above.

Sincerely yours,

Glenn Cagle
District Director

1100 Commerce St., Dallas, Texas 75242

Letter 1050 (DO) (7-77)

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Financial Statement

THE ARCHAEOLOGICAL CONSERVANCY
FINANCIAL STATEMENTS AND SCHEDULES
(With Accountants' Review Report Thereon)
July 31, 1991 and 1990

OLMSTEAD & CO., P.C.
CERTIFIED PUBLIC ACCOUNTANTS
ALBUQUERQUE, NEW MEXICO

FRANK M. OLMSTEAD

Certified Public Accountant

4501 A B MONTGOMERY BLVD. NE • ALBUQUERQUE NEW MEXICO 87109 • (505) 881-1111

Board of Directors
The Archaeological Conservancy
Santa Fe, New Mexico

We have reviewed the accompanying balance sheets of The Archaeological Conservancy as of July 31, 1991 and July 31, 1990, and the related statements of revenues, expenditures and changes in fund balances, and statements of cash flows for the years then ended in accordance with standards promulgated by the American Institute of Certified Public Accountants. All information included in these financial statements is the representation of the Conservancy's management.

A review consists principally of inquiries of Conservancy personnel and analytical procedures applied to financial data. It is substantially less in scope than an audit in accordance with generally accepted auditing standards, the objective of which is the expression of an opinion regarding the financial statements taken as a whole. Accordingly, we do not express such an opinion.

Based upon our review, we are not aware of any material modifications that should be made to the accompanying financial statements in order for them to be in conformity with generally accepted accounting principles, consistently applied during the period.

The data presented in Schedules 1 and 2 accompanying the financial statements is presented only for supplementary analysis purposes and has been subjected to the inquiry and analytical procedures applied in the review of the basic financial statements. We did not become aware of any material modifications that should be made to that data.

November 1, 1991

Frank M. Olmstead

THE ARCHEOLOGICAL CONSERVANCY

Financial Statements and Schedules

July 31, 1991 and 1990

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Exhibit A

THE ARCHAEOLOGICAL CONSERVANCY

Balance Sheet

July 31, 1991 and 1990

(See Accountants' Review Report)

Assets	Preservation Fund	General Fund	Endowment Fund	Trust Fund	1991 Totals	1990 Totals
Cash	$ 54,335		44,362	3,031	101,728	13,994
Money market accounts	185,385				185,385	155,112
Investments (at cost - Market value $952,736.)			837,115	83,283	920,398	963,159
Furniture and equipment (net of depreciation - note 2)		186			186	2,466
Archaeological sites held for conservation	1,809,645				1,809,645	1,601,321
Archaeological sites in process of acquisition	25,113				25,113	12,891
Total assets	$ 2,074,478	186	881,477	86,314	3,042,455	2,750,943
Liabilities and Fund Balances						
Liabilities:						
Cash overdraft	$	14,152			14,152	
Accounts payable		12,382			12,382	9,908
Notes payable	90,000				90,000	45,000
Accrued vacation		6,791			6,791	7,031
Total liabilities	90,000	33,325	0	0	123,325	61,939
Fund balances:						
Unrestricted		(33,139)			(33,139)	6,850
Restricted	1,984,478		881,477	86,314	2,952,269	2,684,154
Total fund balances	1,984,478	(33,139)	881,477	86,314	2,919,130	2,689,004
Total liabilities and fund balances	$ 2,074,478	186	881,477	86,314	3,042,455	2,750,943

The accompanying notes are an integral part of the financial statements

Exhibit I

THE ARCHAEOLOGICAL CONSERVANCY

Statements of Revenues, Expenditures and Changes in Fund Balances

Years Ended July 31, 1991 and 1990

(See Accountants' Review Report)

1991	Unrestricted		Preservation Endowment			1991	1990
	Preservation Fund	General Fund	Preservation Fund	Endowment Fund	Trust Fund	Totals	Totals
Support and revenue							
Private grants	$				85,000	85,000	10,0
Government grants						0	205,0
Membership fees		133,237				133,237	124,6
Investment revenues		75,147			514	75,661	60,6
Rents		2,142				2,142	1,0
Donations of investment property						0	
Donations for specific archaeological sites acquired			261,177			261,177	176,6
Seminar income		232,487				232,487	196,8
Gain (loss) on sales of securities				(4,713)		(4,713)	(3
Sale of archaeological sites			174,111			174,111	
Recovery of overhead		35,000				35,000	30,00
Miscellaneous		1,401				1,401	52
Direct mail fund		143,679				143,679	91,58
Total revenues	0	623,093	435,288	(4,713)	86,314	1,139,982	898,70
Expenditures and donations:							
Program service:							
Site acquisition and management	133,165	232,482	36,234			401,881	398,89
Education		144,066				144,066	139,30
Supporting services:							
Management and support		60,138				60,138	33,15
Fund raising	35,000	224,396				259,396	114,10
Investment expense							
Total expenditures and donations	168,165	661,082	36,234	0	0	865,481	584,45
Excess (deficiency) of support and revenue over expenses before transfers	(168,165)	(37,989)	399,054	(4,713)	86,314	274,501	312,25
Fund balances beginning of year	286,512	4,850	1,422,642	975,000	0	2,688,004	2,376,74
Transfers			88,810	(88,810)		0	
Adjustment to beginning balance restated investment property values			(44,375)			(44,375)	
Fund balances end of year	$ 118,347	(33,139)	1,866,131	881,477	86,314	2,919,130	2,689,00

The accompanying notes are an integral part of the financial statements

Exhibit C

THE ARCHAEOLOGICAL CONSERVANCY

Statements of Cash Flows

Years Ended July 31, 1991 and 1990

(See Accountants' Review Report)

	General Fund	Preservation Fund	Endowment Fund	Trust Fund	1991 Total	1990 Total
Cash received from operating activity:						
Cash received from public support:						
Restricted	$	261,177		85,800	346,977	209,23
Unrestricted	133,237	0	0		133,237	232,14
	133,237	261,177	0	85,800	480,214	441,37
Cash received from revenues:						
Unrestricted	489,856			514	490,370	370,86
Total received from operating activity	623,093	261,177	0	86,314	970,584	812,23
Cash received from investment activity:						
Received from sales of investments		0	15,287		15,287	6,42
Cash from note from notes payable		80,000				
Total cash received	623,093	341,177	15,287	86,314	985,871	818,66
Cash paid for operating activity:						
Cash paid for program services:						
Restricted		36,234			36,234	73,426
Unrestricted	376,548				376,548	282,71
	376,548	36,234	0	0	412,782	356,140
Cash paid for supporting services:						
Unrestricted	284,534	35,000			319,534	197,502
Total cash paid for operating activity	661,082	71,234	0	0	732,316	553,642
Other cash paid:			0	0	0	0
for purchase of investments		133,165			133,165	211,313
for purchase of sites						
for purchase of equipment		35,000			35,000	0
for payment on notes						
Total other cash paid	0	168,165	0	0	168,165	211,313
Total cash paid	661,082	239,399	0	0	900,481	764,955
Transfers from (to) other funds	0	0	0	0	0	0
Net increase (decrease) in cash	(37,989)	101,778	32,521	86,314	182,624	53,713
Cash beginning of year	4,850	137,942	11,841	0	154,633	115,393
Cash end of year	$ (33,139)	239,720	44,362	86,314	337,257	169,106

The accompanying notes are an integral part of the financial statements

THE ARCHAEOLOGICAL CONSERVANCY

Notes to Financial Statements

July 31, 1991 and 1990

(See Accountants' Review Report)

1) Summary of Significant Accounting Policies

The financial statements of the Archaeological Conservancy are prepared on the accrual basis. Because the Conservancy records only cash transactions in its accounting system and does not maintain a general ledger, all adjustments required for conversion to an accrual basis as reflected in the accompanying financial statements have been recorded and summarized on work papers specifically developed for financial statement presentation purposes.

The following summarizes the accounting policies followed by the Conservancy:

Fund Accounting

To ensure that limitations and restrictions placed on resources used are observed, the Conservancy maintains its accounts following fund accounting principles. Under these principles, resources are classified into funds according to the activities and objectives specified. Separate accounts are maintained for each fund, and all financial transactions are reported by fund.

Fund balances restricted by outside sources and the Conservancy for specific purposes are so indicated and may only be utilized for the purposes specified. Unrestricted funds over which the Conservancy has full control to use in achieving any of its institutional purposes are so indicated.

Preservation funds are subject to the restrictions of donor instruments and the Conservancy requiring that the principal be maintained as a revolving fund for the acquisition and management of archaeological sites. Archaeological sites purchased with preservation funds may only be transferred to governmental agencies or public charities. The income only from the investment of preservation funds or from archaeological sites can be utilized by the general fund subject to any donor restrictions and approval by the Conservancy.

THE ARCHAEOLOGICAL CONSERVANCY

Notes to Financial Statements

July 31, 1991 and 1990

(See Accountants' Review Report)

Receivables

The Conservancy has adopted the policy of not reporting receivables based upon pledges, since there is no assurance that they will be received.

Investments

Marketable securities and other investments are stated at cost if purchased or fair market value (excluding the possible value of any archaeological features) on the date received if donated.

Archaeological Sites

Archaeological sites are stated at cost if purchased or fair market value (excluding the possible value of any archaeological features) on the date received if donated. Costs associated with site purchases such as appraisals, surveys, fees, etc., are recorded as costs of the site. Costs incurred after acquisition for maintenance of interest on notes payable are recorded as expenditures of the preservation fund in the period incurred. It is the Conservancy's intent to preserve the sites indefinitely, which may be accomplished by holding the sites or by resale or transfer to various governmental agencies or public charities.

Furniture and Equipment

Furniture and equipment is stated at original cost. Depreciation is computed using the straight line method over the estimated useful lives of the assets.

Income Taxes

The Conservancy is a non profit organization exempt from Federal income taxes under section 501(c)(3) of the Internal Revenue Code.

THE ARCHAEOLOGICAL CONSERVANCY

Notes to Financial Statements

July 31, 1991 and 1990

(See Accountants' Review Report)

2) Furniture and Equipment

A summary of furniture and equipment follows:

	Estimated Useful lives	1991	1990
Furniture	5-7 years	$ 2,548	2,548
Equipment	5 years	18,610	18,078
Total		21,158	20,626
Less accumulated depreciation		20,972	18,160
Book value of furniture and equipment		$ 186	2,466

3) Notes Payable

	1991	1990
A three year note at 5% interest to an individual. The note is secured by the Great Mound, Ohio, site and is due on May 30, 1992.	$ 45,000	45,000
A note due to a private party due 11/8/91 at no interest. The note is secured by the Hero Site, MI	45,000	-0-
Total notes payable	$ 90,000	45,000

4) Commitments

The Conservancy rents its principal operating office under a month to month rental.

THE ARCHAEOLOGICAL CONSERVANCY

Notes to Financial Statements

July 31, 1991 and 1990

(See Accountants' Review Report)

5) Retirement Plan

The Archaeological Conservancy funds a retirement plan for all full time employees with one year of service. Payments are made directly to those individuals covered who, in turn invest in Individual Retirement Accounts. Such payments totalled $3,886.00 and $3,766.00 for the years ended July 31, 1991 and 1990 respectively.

7) Statements of Cash Flow

In October, 1987, the Financial Accounting Standards Board issued Statement of Financial Accounting Standard No. 95 (SAS No. 95) which requires a statement of cash flow as part of a set of financial statements in place of a statement of changes in financial position. SAS No. 95 is effective for annual financial statements for fiscal years ending after July 15, 1988. Although the statement of cash flow is not required for non profit organizations, the Conservancy has elected to apply its provisions to the financial statements of the organization. Accordingly, the financial statements of the Conservancy include a statement of cash flow.

8) During the , the Conservancy received two remainder life trusts in the amount of $85,800.00. These are being treated as annuities and the Conservancy pays a life income of 5% per annum to the trustors.

THE ARCHEOLOGICAL CONSERVANCY

Schedule 1

Schedules of Land Activity

Years Ended July 31, 1991 and 1990

(See Accountants' Review Report)

	1991	1990
Archaeological Sites Acquired:		
Held for conservation:		
Balances beginning of period	$ 1,603,321	1,332,493
Acquisitions:		
Contributions of land	60,300	50,875
Cash paid	165,692	217,578
Transfer from archaeological sites in process of acquisition	1,512	2,375
Loan proceeds		
Total acquisitions	227,504	270,828
Disposition:		
Sale of archaeological site for preservation		
Donation of archaeological site for preservation	21,180	
Total dispositions	21,180	0
Balance at end of year	$ 1,809,645	1,603,321
Archaeological Sites in Process of Acquisition:		
Balance beginning of year	$ 12,891	10,656
Acquisitions - cash paid	13,734	2,534
Acquisitions - donations		1
Transfer to archaeological sites Held for conservation	(1,512)	(4,783)
Balance at end of year	$ 25,113	8,412

The accompanying notes are an integral part of the financial statements

Schedule 7

THE ARCHEOLOGICAL CONSERVANCY

Statements of Unrestricted Funds Expenditures

Years Ended July 31, 1991 and 1990

(See Accountants' Review Report)

1991	Program Services		Supporting Services		1991 Total	1990 Total
	Site Acquisition and Management	Education	Fund Raising	Management and Support		
Preservation Fund -						
Post Acquisition Costs:						
Interest	$ 3,119	0	0	0	3,119	1,890
Legal fees	7,840	0	0	0	7,840	3,882
Improvements and acquisitions	211,361	0	0	0	211,361	67,293
	222,320	0	0	0	222,320	73,065
General Fund:						
Salaries and wages	124,555	0	5,863	16,123	146,570	127,544
Travel	19,349	0	1,690	2,597	24,136	19,397
Rent and utilities	8,694	0	409	1,125	10,228	8,697
Telephone	2,390	0	181	4,431	7,002	4,036
Accounting and legal	2,067	0	97	268	2,432	3,565
Board expense	3,392	0	160	439	3,991	2,414
Supplies	5,415	0	255	701	6,371	9,445
Membership services	22,527	0	1,060	2,915	26,502	18,068
Insurance	2,428	0	114	314	2,856	2,297
Depreciation	1,390	0	112	309	2,812	2,812
East coast office	73,025	0	3,436	9,450	85,912	71,222
Seminar expense	0	144,066	0	0	144,066	139,303
Direct mail	0	0	197,567	0	197,567	102,385
	266,762	144,066	210,945	38,672	660,445	513,387
Total	$ 489,082	144,066	210,945	38,672	882,765	586,452

The accompanying notes are an integral part of the financial statements

Priority Cultures for Conservancy Acquisition

PRIORITY CULTURE SITES

The following provides descriptions of the various culture-type sites that The Archaeological Conservancy has identified as priorities for preservation. The listing is not all-inclusive, nor is it rigidly set. It is fully expected that as the organization establishes additional regional offices, the priorities will expand.

Adena: The Adena culture (800 B.C. to A.D. 200) dominated southern Ohio, northern Kentucky and western West Virginia. The Adena, a culture in transition from hunting and gathering to sedentary and agricultural, predate the Hopewell culture. The relationship between the cultures is unclear. Adena culture sites are typically identified by huge earthen burial mounds containing elaborate grave goods. The Conservancy has preserved Adena sites in all three states.

Anasazi: The Anasazi (A.D. 400 to 1800) are typically classified into three groups: Mesa Verde, Chaco and Kayenta. The Anasazi were sedentary and agricultural, and sites exist in Colorado, New Mexico, Arizona, Utah and Nevada. Anasazi sites typically feature evidence of extensive trade as well as interaction systems and alliances. The Conservancy has several Mesa Verde and Chacoan Anasazi sites in Arizona, Colorado and New Mexico.

Archaic: The Archaic period (6,000 B.C. to A.D. 100) follows the Paleo-Indian period and is characterized by hunting and gathering. The species hunted in the archaic period are modern. Archaic sites are nationwide. The Conservancy has preserved sites in Kentucky, Michigan, Oklahoma and Texas.

Caddo: The Caddo culture (A.D. 750 to 1700) was a sedentary and agricultural culture. Caddo sites exist within a region that includes Arkansas, Louisiana, Texas and Oklahoma. Later Caddoan sites typically feature ceremonial mound complexes located at the edge of village areas. To date, the Conservancy has preserved five Caddo sites in Texas and Oklahoma.

Historic: The Historic Period is generally considered to begin after the arrival of Columbus to North America. Although the Conservancy has a keen interest in historic period sites, it does not preserve sites with standing structures because there exist other groups that specialize in the preservation of structures. Historic sites are nationwide. To date, the Conservancy has preserved historic sites in Arizona, Michigan, Missouri, New Mexico and Texas. The sites are characterized as Spanish colonial (1765 to 1821), a French and Indian settlement (1671 to 1705), a Big Osage village (18th century), a Southwestern frontier post (1854 to 1885) and a Wichita village site (1770 to 1830).

Hohokam: The Hohokam culture (300 B.C. to A.D. 1450) was a sedentary and agricultural culture. Hohokam sites are located in southern Arizona. Sites from later stages typically have extensive irrigation canals or agricultural terraces. The Conservancy has preserved three Hohokam sites.

Hopewell: The Hopewell sites are perhaps the most famous archaeological sites of the Midwest. The Hopewell, though centered in southern Ohio, dominated the eastern United States from 300 B.C. to A.D. 500. Hopewellian sites are typified by huge burial and effigy mounds and geometric earthworks that can span more than 100 acres. As with Adena mounds, Hopewellian burial mounds contain grave goods and both Adena and Hopewell mounds have been common targets for looters. The Conservancy has preserved five Hopewell sites in Ohio.

Kalapuyan: The Kalapuyan culture has been difficult to date, though there is evidence of it as early as 6,000 B.C. The culture sites are found in the Willamette Valley region of Oregon.

Late Woodland: The Late Woodland period (A.D. 600 to 800) closes a long transitional phase in the Ohio Valley and Great Lakes regions. The culture of this period typically lived in large villages and were more sedentary and agricultural than hunter/gatherers. Late Woodland sites are also set apart from earlier Woodland phases by the absence of the construction of large earthworks like those built by the Early and Middle Woodland cultures (i.e. Adena and Hopewell cultures). The Conservancy has Late Woodland preserves in Michigan and Wisconsin.

Maidu: The Maidu occupied the foothills and mountain regions of California. Occupation in the Sierra foothills, however, tended to be seasonal. The Conservancy is interest in Maidu sites in this region because of the threats that development pose to the sites.

Mississippian: The Mississippian culture (A.D. 1000 to 1600) was prevalent in the Mississippi Valley region. The culture was sedentary and agricultural, settling in permanent villages. Mississippian sites typically include platform mounds and distinctive pottery. The Conservancy has Mississippian sites in Arkansas, Missouri and Wisconsin.

Miwok: The Miwok culture is a broad classification of similar sub-groups that settled much of California. Because of the variety of sub-cultures, our knowledge of the prehistory of Miwok culture varies from group to group. First contact with the Miwok culture by the Spanish occurred in the Sacramento-San Joaquin Valley in the latter half of the 18th century. Documentation of interactions between the Miwok and non-Indian settlers exist into the first decades of the 20th century, as Miwok people worked on rancherias and were briefly involved with gold mining.

Pacific Coastal: The Pacific Coastal and Lower Columbia regions of Oregon include a number of tribal groups and dates from 6,000 B.C. through to the Historic period. Development along the coast line is rapidly destroying the few remaining sites.

Paiute-Shoshone: Because of the nomadic nature of this culture (A.D. 1100 to 1400), quarry sites and long-term occupation sites are of interest to the Conservancy. There are a few of these sites in Nevada.

Paleo-Indian: Paleo-Indian sites are nationwide and span from about 12,000 to 6,000 B.C. The stage is characterized by hunting and gathering, and some of the hunted species are now-extinct Pleistocene forms. The Conservancy has Paleo-Indian preserves in California, Kentucky and Texas.

Salish: The Salish culture (4,000 B.C. to A.D. 1700) sites are of particular interest because of the changes in artifact assemblages, the establishment of permanent villages, the occurrence of shell middens and the full-scale development of maritime-orientation evidenced by the sites. Salish culture sites are located in the Puget Sound region of Washington.

Sinagua (Tuzigoot-phase): The Sinagua of this phase (A.D. 1300 to 1425) were a sedentary and agricultural culture located in central Arizona. Sites typically include evidence of trade with the Anasazi and Hohokam cultures, and the utilization of irrigation. Many of the Tuzigoot-phase ruins were extensively excavated by Public Works Administration programs during the 1930's, making the Conservancy's three Tuzigoot-phase Sinagua preserves some of the few remaining sites.

Yokuts: As with the Miwok, the Yokuts culture is a grouping of similar sub-cultures located in California. The Yokuts have their roots in prehistory at least as old as 6,000 B.C. In historic times, the Yokuts underwent a cultural breakdown when non-Indian settlers displaced them as a result of the annexation of California. The Conservancy has a option to purchase three acres of Rocky Hill Site which contains a large Yokuts village mound.

Conservancy Program Activities by State

The Conservancy seeks to permanently preserve endangered archaeological sites by obtaining title to the properties containing the sites. The Conservancy acquires sites either by donation, bargain sale to charity or by purchase at no greater than appraised value.

Program Activities by State

Arizona:

1990 * Conservancy preserve Mission Guevavi was legislated to become part of Tumacacori National Monument.

1991 * Acquired Sugarloaf Pueblo, a rare Tuzigoot-phase Sinagua ruin. The owner of the site had planned to build homes on it, but local residents' protests influenced him to sell it to the Conservancy. The controversy about Sugarloaf helped to lead to the passage of an Arizona burial protection bill.

California:

1989 * Acquired the Borax Lake Site, one of the most significant sites in California. The site contains at least three distinct occupations, the oldest dating to approximately 10,000 B.C.

1990 * Conducted an Open House at the Borax Lake Site, including displays and demonstrations. Event was co-sponsored by the Clearlake Cultural Heritage Council. Approximately 200 people attended.

* Obtained an Option to Purchase the Rocky Hill Site, considered to have some of the best rock art in California. Also contains a large Yokuts culture village mound.

Colorado:

1989 * Acquired Albert Porter Pueblo Ruin, a Mesa Verde Anasazi 35-room ruin occupied from A.D. 570 to 1300.

1990 * Acquired Ptolemy Pueblos, five Mesa Verde Anasazi pueblo ruins occupied during the Pueblo I and II periods (A.D. 800 to 1100).

Florida:

1991 * Working with state archaeologist on possible donation of the Margate Blount Site (1000 B.C. to A.D. 1000) from a developer.

Georgia:

1991 * Pursuing possible donation of Stallings Island Site, a large shell midden.

Indiana:

1989 * Established Eastern Regional Office.

1991 * Negotiating with owner David Stevenson for the acquisition of the Kethtippecanunk Site, an early historic French/Indian site.

Kentucky:

1991 * Received a grant from the Kentucky Heritage Council (of the State Historic Preservation Office) for establishing a priority list of sites and for work on acquisition projects.

* Offered a proposal to acquire the Sheephouse Shelter Site from owner Mrs. James Cornelison. She sold the property containing the site to another buyer. The Conservancy has plans to approach the new owner about acquiring the site.

Louisiana:

1991 * Offered a proposal to owner Deltic Farm & Timber Co. to acquire the Raffman Mounds, a significant Mississippian Mound Complex.

* Negotiating to acquire the Big Oak Island site.

Michigan:

1989 * Entered a Trust Agreement to preserve the Samels Sites, consisting of three archaeological sites of PaleoIndian, Archaic and Late Woodland periods.

1991 * Acquired the Juntunen Site, considered the type site of the Juntunen Phase of the Late Woodland period. It is thought to have been occupied seasonally from A.D. 1200 to 1450.

* Secured an option to purchase the Gros Cap Site, an historic Indian settlement site dating to the 17th century.

Minnesota:

1991 * Preparing to make formal proposal to owners for the acquisition of the Grand Meadow Quarry Site.

New Mexico:

1990 * Conducted an Open House at Conservancy-preserve San José de las Huertas Village Site, including a lecture presentation and walking tour. Approximately 30 members attended.

(New Mexico, continued)

1990 * Purchased at a tax auction two 80 acre private inholdings within the Chaco Culture National Historic Park. Both properties have been transferred to the Park Service.

Ohio:

1989 * Acquired the Great Mound, the third tallest Adena burial mound. The Adena culture dominated the Ohio Valley from 800 B.C. to A.D. 200, predating the Hopewell culture.

1990 * Acquired the Henneberger Mound, the last visible remnant of the extensive Frankfort Works built by the Hopewell culture 2000 years ago. The central part of these works was a circle shape connected to an octagon. When surveyed in the mid 1800's, the circle was reported to be more than 1,000 feet in diameter; the square was reported to cover 27 acres.

* Acquired the abandoned right-of-way of two sets of railroad tracks that crossed the Hopewell Mounds Group, preserved by the Conservancy in 1980.

* Acquired a 99 year lease of the Wilson Mound, a rare platform mound thought to have been built by the Hopewell.

1991 * Acquired the Chris Connor Site, a rare Fort Ancient culture site dating to A.D. 1100 to 1250.

* Secured an option to purchase the circle portion of the High Banks Earthworks. The site is Hopewellian and the primary features are a circle connected to an octagon. The entire earthworks cover an estimated 190 acres. The circle is 1,050 feet in diameter and covers 20 acres.

Oklahoma:

1990 * Acquired the Alford Mound, a Pre-Caddoan Midden dating to 1200 B.C.

Pennsylvania:

1991 * Offered a proposal to owner Dravo Basic Materials Co. to acquire the Georgetown Site, a multi-component site.

Texas:

1989 * Acquired the Vinson Site, an historic Wichita Indian Village site occupied from A.D. 1770 to 1830.

(Texas, continued)

1990 * Acquired by easement the Suhm Midden, a large burned rock midden site.

1991 * Acquired the Marjorie Ashcroft Wilson Archaeological Preserve, dating to 9000 B.C.

Utah:

1991 * Negotiating to acquire Bug Point Ruin, a major Mesa Verde Anasazi ruin.

West Virginia:

1991 * Acquired the Reynolds Mound, an Adena culture mound.

Wisconsin:

1990 * Acquired the Mero Site Complex containing several sites of both the Late Woodlands and Mississipian cultures.

All Conservancy preserves are placed under a 100 year management plan developed by Conservancy staff, archaeologists and local residents.

The Conservancy continues to be active in the above listed states, and in addition, has begun initial investigations of sites, identified land owners, contacted State Historic Preservation Officers and commenced negotiations with landowners in Illinois, Nevada, Oregon, Virginia and Washington.

Tours:

The Conservancy has conducted the following tours:

In 1989: 5 tours visiting archaeological sites in Arizona, Colorado, New Mexico, Ohio, and Mexico. A total of 89 members participated.

In 1990: 2 tours visiting archaeological sites in Arizona, Colorado and New Mexico. A total of 56 members participated.

In 1991: 7 tours visiting archaeological sites Arizona, Colorado, New Mexico, Ohio, Utah and Mexico. A total of 195 members participated.

Tours are guided by leading archaeologists. Domestic tours include visits to Conservancy preserves.

Membership:

The Conservancy has approximately 9,500 members in every state, plus the District of Columbia, Puerto Rico, the Virgin Islands, England, France, Saudi Arabia, Bolivia and Canada.

Background Information

THE ARIZONA REPUBLIC

Thursday, March 14, 1991 Phoenix, Arizona

Group plans to buy, protect Indian ruins

By Mark Shaffer
The Arizona Republic

A major Sinagua Indian ruins near Cornville, scene of large protests last year that blocked excavation and led to a new state law protecting burial grounds, has a new lease on life.

The Archaeological Conservancy, a non-profit preservation group from Santa Fe, announced plans this week to buy and protect 18 acres of land at the site, east of Cottonwood.

The acreage includes Sugarloaf Hill, on which the Sinaguas built a 54-room stone complex around 1300.

Jim Walker, a spokesman for the conservancy, said a one-year option to buy the property for $90,000 was signed last week with the site's owner, Sedona developer Bob Cristall.

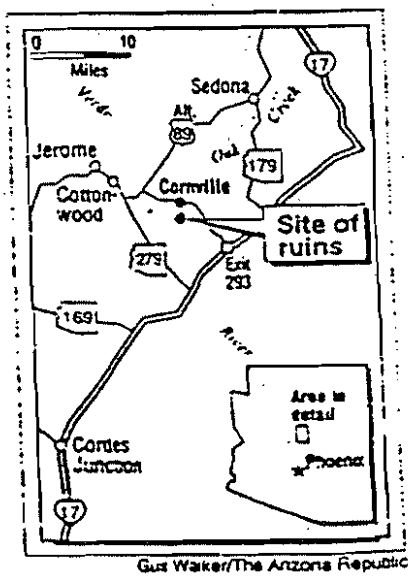
The purchase will be funded by grants and individual contributions, Walker said. An additional $20,000 will be used for fencing and other security measures, he said.

"We would like to see it become part of the state or federal park system," Walker said.

The contract to sell the ruins ends a tumultuous year for Cristall, who said he had planned to clear the ruins off the hilltop and build a home after he bought the property three years ago.

Residents of Cornville and members of the Hopi, Apache and Yavapai tribes organized a series of protests after a backhoe started digging at the site in April. The controversy led the state Legislature to outlaw digging up burial sites on private land.

Archaeologists believe that the Sugarloaf site, thought to have housed about 500 people before being abandoned for unknown reasons around 1425, was the main cultural and trading center for the Sinaguas in the Oak Creek drainage area.



Gus Walker/The Arizona Republic

Kathleen Dusek, a Cornville resident who organized the protests against destruction of the ruins, said a large celebration is planned in Cornville on March 23, followed by a walk to the ruins at sunset.

THE CINCINNATI ENQUIRER WEDNESDAY, JULY 19, 1989

The Cincinnati Enquirer/Irene Wright

William Kerrigan and Sylvia Ball show the tree-covered Indian burial mound their conservancy purchased.

Indian mound to be preserved

BY IRENE WRIGHT
The Cincinnati Enquirer

A 2,000-year-old Indian burial mound that juts from farmlands in northeastern Butler County will be preserved from urban development.

The Archaeological Conservancy, a New Mexico-based organization with an office in Cincinnati, has purchased the 34-foot tall and 178-foot wide mound.

"It's one of the largest Adena (Indian) mounds left in the United States," said William Kerrigan, eastern regional director for the conservancy's Cincinnati office.

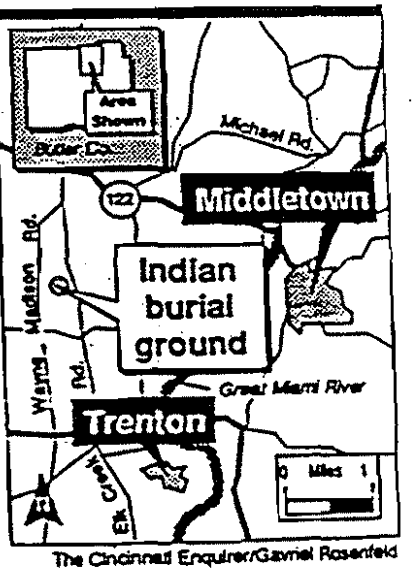
The earthwork and 14 surrounding acres were purchased from Gerald Fisher for $45,000.

The mound is the largest in Butler County, and second only to the Miamisburg Mound in the Miami River Valley, according to a field archaeologist for the Ohio Historical Society.

The archaeologist, Stephen Koleszar, said the upper one-fourth was destroyed by excavation. Bones and evidence of fire were found in an 1879 excavation, when the mound was 43 feet high and 511 feet wide.

Special to The Cincinnati Enquirer

During the leafless seasons, the Great Mound can be seen through the trees. This photo was taken in April of 1988.



The Cincinnati Enquirer/Gavriel Rosenfeld

The cone-shape structure is off Wayne Madison Road, about three miles from the unused Miller Brewing Co. plant near Trenton.

Built between 400 B.C. and 400 A.D., the mound predates the Hopewell Indian culture that built mounds at Ft. Ancient in adjoining Warren County. The Adena culture flourished in the Ohio Valley from about 800 B.C. to 500 A.D.

Archeological Conservancy Guarding Buried Treasures of America's Heritage

By RICHARD SEVERO

In the early 19th century, when American pioneers pushed westward, there were probably more than 20,000 significant archeological sites in the Ohio and Mississippi valleys alone, places that were inhabited or somehow used by peoples that, even then, were long gone and forgotten.

They were all part of the pre-Columbian civilization that once flourished in these Middle Western valleys and in many other places across the country. The vestiges of those cultures were not very important to the early settlers, who had other, more immediate concerns.

Now, perhaps only 200 sites remain in this area, representing much of what is known about pre-Columbian civilization in this part of America. The Archeological Conservancy has been formed to insure that the remaining sites do not vanish with the further development of great cities, highways that disgorge traffic into them, intensive agriculture and the sprawl and development that has marked 20th-century America.

"Each time a site is destroyed, a part of our heritage is lost," said Mark Michael, the president of the conservancy.

708 Acres Acquired

The new organization was modeled after the Nature Conservancy, which was formed to protect the nation's significant living environmental heritage.

The Archeological Conservancy, which has its headquarters in Santa Fe, N.M., was started in January 1980 with grants of $150,000 each from the Ford Foundation and the Rockefeller Brothers Fund.

Through gifts from private donors and purchases from landowners who sold at below-market rates, the conservancy has since acquired 708 acres, valued at $004,000, spread over 14 sites in Ohio, Kentucky, Missouri, Arkansas, New Mexico and Colorado. The conservancy intends to keep the sites until they can be taken over by a Government agency or a historical society with the resources and commitment to maintain them as archeological sites.

The Archeological Conservancy

A figure from the Menard-Hodges Mounds in Arkansas County, Ark.

The work of the conservancy has been welcomed by the nation's professional archeologists.

"They have already saved some key sites and thus filled a real void," said Dr. Eugene L. Sterud, the executive director of the Archaeological Institute of America, a nonprofit organization that supports scholarly research and promotes the conservation of archeological sites throughout the world.

Dr. Sterud said that America was losing its archeological sites at an alarming rate. In contrast, he said, Sweden has had an antiquities law since 1602. Under Sweden's law, for example, if a farmer building a new barn strikes a Viking site, he cannot finish until an archeologist excavates the site at the farmer's expense. Similar laws exist in Greece, Italy, Spain, France and some other European countries, but the conservancy is aware that the European respect for the ancient past is not always of paramount interest to entrepreneurs in the United States.

One of the most significant sites within the Archeological Conservancy's control is what archeologists generally accept as the central ceremonial site of the "Hopewell culture," which is thought to have dominated the eastern section of the United States from about 500 B.C. to A.D. 500. The culture is named for Capt. M. C. Hopewell, who owned the land near Chillicothe, Ohio, in the 19th century.

Mounds Laden With Artifacts

The name of the people who occupied the site is not known, and their style of life, culture and language grouping are a mystery. But the Hopewell way of death is as striking as it is inexplicable: the 130 acres acquired by the conservancy contain funeral mounds laden with exquisite pre-Columbian artifacts made from materials not native to Ohio. These include mica from North Carolina, cut into geometric or naturalistic designs; copper from Lake Superior; fossilized shark teeth from Florida, and obsidian from what is now part of the Yellowstone National Park in Wyoming.

Some archeologists have speculated that these objects were intended to give status to the dead, but how the Hopewell people determined which objects were valuable and how they brought the objects to Ohio, are not known.

"It remains an enigma to us," said Dr. C. Wesley Cowan, who teaches anthropology at Ohio State University. He suggested that modern archeological methods might yield new information from the sites, which were first excavated in the late 19th century.

Another site of great interest to archeologists is the Genevieve Savage Cave in Logan County, Ky., a five-acre area for which the conservancy paid $10,000.

'Non-Renewable Resource'

"It has deposits that go back through successive cultures to 12,000 years ago, to the earliest Americans," Mr. Michael said. "There are bones, arrowheads and tools near the top. But the unique thing about it is that as far as we can tell, the deposits below are undisturbed. It has never been excavated thoroughly."

In the far West, the conservancy acquired the Candelaria Pueblo near Grants, N.M., a 35-acre site that includes a small village of 50 rooms, and plans to buy other sites.

Other acquisitions include the Osage Village site near Nevada, Mo., south of Kansas City, and three of the so-called "Mississippian sites," one in Missouri and two in Arkansas, which contain unexamined funeral and building sites of an ancient people.

"It would only have been a matter of time before we lost all of these sites," said Dr. Cowan, "and archeological sites are a nonrenewable resource."

Beneath the chaparral of northeastern Arizona lies a ruined village built by the ancient Anasazi. Purchased by The Archaeological Conservancy, the area will be donated to Petrified Forest National Park. JEFF KIDA

The best of prophets of the future is the past. —*Byron*

It's been occurring since the first Europeans set foot on the shores of North America: the loss by looting, farming, real estate development, or road construction of priceless archeological sites throughout the land. Today the rate of damage is accelerating enormously.

It was the need for a reversal of this wholesale destruction that prompted the creation in 1980 of The Archaeological Conservancy. Composed of preservationists, conservationists, and archeologists, the group since its founding already has saved thirty sites in eleven states, including two Sinagua culture ruins in Arizona's Verde Valley and an Anasazi ruin next door to Petrified Forest National Park. The latter site is scheduled to be given to the park.

Says the chairman of the Conservancy board, Stewart L. Udall: "Most of these places of antiquity and the knowledge they contain would now be lost if we had not acted. Today they are permanent archeological preserves, protecting hundreds of thousands of artifacts of the past and the knowledge that goes with them. They are available to qualified researchers, and some are scheduled to become state and national parks sometime in the future."

How does the Conservancy acquire its land?

"We just buy it," replies Mark Michel, Conservancy president. "The only sure way of guaranteeing preservation is to acquire title to the land by donation or purchase."

The Archaeological Conservancy operates like The Nature Conservancy, targeting sites on private property that are not protected by federal or state laws.

Once a site is in possession, a master plan for management of the preserve is developed, allowing investigations by archeologists but leaving a portion unexcavated for scholars of the future.

Final step in the program is turning over these lands to universities and government agencies for study—and, perhaps, for the most dramatic or significant, stabilization and interpretation for the public.

Mark Michel again: "The Conservancy firmly believes that public education about the people who preceded us is a very important function—not only for what it tells us of the past, but what it can tell us of the future."

Lord Byron would be pleased.

Editor's note: For more information, write to The Archaeological Conservancy, 415 Orchard Drive, Santa Fe, NM 87501; or telephone (505) 982-3278.

January 1986

LETTER FROM *Sunset*

How to stop the time vandals?

Prowling public and private lands alike, they search out prehistoric villages and burial mounds. There they dig, rooting among the remnants of ancient civilizations for pots, baskets, ornaments—any antiquity they can carry.

They call themselves "pothunters" and brag about their "finds" to the dealers they sell the artifacts to—often for thousands of dollars. But to serious archeologists, they're worse than looters or grave robbers: they are time vandals.

"Once an archeological site is disturbed, it loses much of its value as a cultural record," says Arizona historic preservation officer Donna Schober. "It can take years to excavate and study an important complex properly, but a couple of pothunters with a backhoe can loot a site in a single night." In the West, such destruction by time vandals (and to a lesser extent by development) is reaching epidemic proportions.

"Archeologists generally agree the most important regions for pre-Columbian research in the U.S. are the Ohio Valley and the Four Corners area of the Southwest," notes Mark Michel, president of the Santa Fe-based Archaeological Conservancy. "But of 20,000 sites surveyed in the Ohio Valley in 1847, only about 200 are still intact. We're afraid the destruction is approaching that scale in the Southwest."

At the present pace, the remaining pre-Columbian sites could be so eroded by vandalism and looting that they'll be almost worthless in just a few years. Recent laws have increased penalties for illegal pothunting on public lands, but much more needs to be done.

The Archaeological Conservancy, a nonprofit organization of conservationists and archeologists, is one of several groups trying to reverse this trend. Founded in 1980 and modeled after the successful Nature Conservancy, it's working to identify, acquire, and preserve the most important sites; it has already acquired 30 through donation or purchase. Once obtained, the site may be stabilized—covered over with sterile dirt—then fenced and, as much as possible, patrolled by local volunteers.

Two recent acquisitions—Mud Springs and Yellowjacket pueblos near Cortez, Colorado—are perhaps the most significant yet saved. Built by the Anasazi, who also built the famous cliff dwellings in nearby Mesa Verde National Park, the two were threatened by both pothunters and developers. The conservancy bought Mud Springs with an emergency loan from the National Trust for Historic Preservation; Yellowjacket was donated in part by the landowners, who benefited from tax write-offs.

Taken together, these two ancient pueblos supported a larger population, and thus contain more rooms and ceremonial kivas, than Mesa Verde. Both sites, now stabilized and fenced, will eventually be turned over to public agencies for long-term excavation, study, and protection.

"We've won a few battles, but we're still losing the war," says Michel. "Our biggest challenge is to educate the public about the value of preserving these sites. That takes volunteers and donations." To learn more, write or call the conservancy at 415 Orchard Dr., Santa Fe 87501; (505) 982-3278.

WINDOW ON THE WEST: *Road to Chaco*

In 1066, while the Normans were thrashing the English at the Battle of Hastings, the West's first highways were being built in the northwest corner of New Mexico. The Anasazi, Navajo for "Ancient Ones," built them straight, with carved steps (left) up canyon walls. Some 250 miles of road once connected the pueblo that is now Chaco Culture National Historical Park with smaller villages—called outliers—outside park boundaries. Many of the remaining outliers are on private land and are being destroyed by pothunters. Archeologists believe these outliers may hold the key to understanding Chacoan culture, including the role of this elaborate road system.

APPENDIX B

PRELIMINARY ENGINEERING REPORT FOR THE PROMONTORY

PRELIMINARY ENGINEERING REPORT
FOR
THE PROMONTORY

MASTER DRAINAGE STUDY
JULY 11, 1997

PREPARED BY:

COOPER, THORNE & ASSOCIATES, INC.
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HYDROLOGY:

DUE

SUMMARY

This Master Drainage Study was performed for the purpose of evaluating the impacts of The Promontory Specific Plan Development on storm water runoff leaving the proposed site. Runoff, due to the 10 and 100 year 24 hour duration design storms, was analyzed by means of the HEC-1 Flood Hydrograph Package Computer Model, utilizing criteria described in the following sections of this report.

The goal of this master drainage study is to provide an analysis that will be used as part of developing and defining design guidelines for the designs of drainage facilities in both El Dorado County and in the City of Folsom. The master drainage study will analysis the peak flows that will be anticipated at the border between El Dorado County and the City of Folsom, in Sacramento County. This four mile border between El Dorado County and the City of Folsom bisects the Willow Creek and Humbug Creek Watersheds. The Promontory Specific Plan Development is located at the headwaters of both watersheds within the foothills.

This study will utilize appropriate sections of the approved El Dorado County Design and Improvement Standards Manual Volume VI - Drainage, for the analysis. The City of Folsom utilized a different methodology and the results of this study may differ from the City of Folsom study. However, this will be consistent with the memorandum of understanding (MOU) between El Dorado County and the City of Folsom.

The drainage study was analyzed based upon five geographical areas. The five areas will be identified as follows:

1) Southern Alder Creek drainage flowing through the Broadstone development. Throughout this report we will refer to this area as shed area "A".
2) Southern Willow Creek drainage flowing through the proposed private golf course. Throughout this report we will refer to this area as shed area "B".
3) Central Humbug Creek drainage flowing through a portion of the proposed public golf course and the Silberstein property and to humbug Creek within the Parkway at Blue Ravine development. Throughout this report we will refer to this area as shed area "C".
4) Northern Humbug Creek drainage flowing into the proposed Folsom public golf course. Throughout this report we will refer to this area as shed area "D".
5) Browns Ravine Creek drainage flowing directly into Folsom Lake. Throughout this report we will refer to this area as shed area "E".

The five watersheds are shown on Exhibits "A" and "B".

The drainage study includes a storm water detention pond for the purpose of peak flow reduction for the design storms under consideration and is located in shed area "C" (Central Humbug Creek Drainage Area). This detention pond will be oversized to accommodate unmitigated peak flows downstream of this project. This criteria is consistent with the MOU. A second detention basin will be located in shed area "E" and will accomondate existing flows upstream of the The Promontory Specific Plan Development and future developed flows for The Promontory Specific Plan Development. The other three sheds will provide peak flow reductions with proposed detention ponds located downstream of the project within the City of Folsom. These ponds will be oversized to accommodate this projects peak flow reductions. This will be consistent with the MOU between El Dorado County and the City of Folsom. The effects of peak flow mitigation are summarized below for key point at each of the sheds at the shed boundaries.

PEAK RUNOFF AT KEY POINTS, SOUTH ALDER CREEK DRAINAGE, AT THE PLAN AREA BOUNDARY

KEY POINT	STORM EVENT	EXISTING	TIME OF PEAK	FUTURE/UNMITIGATED	TIME OF PEAK	FUTURE/MITIGATED*	TIME OF PEAK
A	10 YR	9 CFS	10.00	9 CFS	10.00	*MITIGATION BY OTHERS	
A	100 YR	17 CFS	10.00	17 CFS	10.00	*MITIGATION BY OTHERS	

* PEAK RUNOFF MITIGATED BY MEANS OF DETENTION/RETENTION STORAGE DOWNSTREAM OF PROJECT PER EL DORADO COUNTY AND CITY OF FOLSOM MOU.

PEAK RUNOFF AT KEY POINTS, SOUTHERN WILLOW CREEK DRAINAGE FLOWING THROUGH THE PRIVATE GOLF COURSE AT THE PLAN AREA BOUNDARY

KEY POINT	STORM EVENT	EXISTING	TIME OF PEAK	FUTURE/UNMITIGATED	TIME OF PEAK	FUTURE/MITIGATED*	TIME OF PEAK
B1	10 YR	20 CFS	10.00	22 CFS	10.00	*MITIGATION BY OTHERS	
B1	100 YR	37 CFS	10.00	40 CFS	10.00	*MITIGATION BY OTHERS	
B2	10 YR	8 CFS	10.00	9 CFS	10.00	*MITIGATION BY OTHERS	
B2	100 YR	16 CFS	10.00	16 CFS	10.00	*MITIGATION BY OTHERS	
B3	10 YR	8 CFS	10.00	8 CFS	10.00	*MITIGATION BY OTHERS	
B3	100 YR	14 CFS	10.00	15 CFS	10.00	*MITIGATION BY OTHERS	
B4	10 YR	9 CFS	10.00	9 CFS	10.00	*MITIGATION BY OTHERS	
B4	100 YR	17 CFS	10.00	17 CFS	10.00	*MITIGATION BY OTHERS	
B5	10 YR	21 CFS	10.08	23 CFS	10.08	*MITIGATION BY OTHERS	
B5	100 YR	37 CFS	10.08	40 CFS	10.00	*MITIGATION BY OTHERS	
B6	10 YR	79 CFS	10.08	88 CFS	10.08	*MITIGATION BY OTHERS	
B6	100 YR	138 CFS	10.08	150 CFS	10.00	*MITIGATION BY OTHERS	
B7	10 YR	22 CFS	10.08	24 CFS	10.08	*MITIGATION BY OTHERS	
B7	100 YR	40 CFS	10.08	43 CFS	10.00	*MITIGATION BY OTHERS	
B8	10 YR	63 CFS	10.08	69 CFS	10.08	*MITIGATION BY OTHERS	
B8	100 YR	109 CFS	10.08	118 CFS	10.00	*MITIGATION BY OTHERS	
B9	10 YR	45 CFS	10.08	52 CFS	10.08	*MITIGATION BY OTHERS	
B9	100 YR	79 CFS	10.08	89 CFS	10.00	*MITIGATION BY OTHERS	
B10	10 YR	22 CFS	10.08	27 CFS	10.00	*MITIGATION BY OTHERS	
B10	100 YR	40 CFS	10.08	46 CFS	10.00	*MITIGATION BY OTHERS	
B11	10 YR	126 CFS	10.17	139 CFS	10.08	*MITIGATION BY OTHERS	
B11	100 YR	213 CFS	10.17	235 CFS	10.08	*MITIGATION BY OTHERS	
B12	10 YR	19 CFS	10.08	24 CFS	10.00	*MITIGATION BY OTHERS	
B12	100 YR	36 CFS	10.08	41 CFS	10.00	*MITIGATION BY OTHERS	

* PEAK RUNOFF MITIGATED BY MEANS OF DETENTION/RETENTION STORAGE DOWNSTREAM OF PROJECT PER EL DORADO COUNTY AND CITY OF FOLSOM MOU. (DETENTION PONDS "A", "B", "C" AND "D")

PEAK RUNOFF AT KEY POINTS, CENTRAL HUMBUG CREEK DRAINAGE AT THE PLAN AREA BOUNDARY

KEY POINT	STORM EVENT	EXISTING	TIME OF PEAK	FUTURE/UNMITIGATED	TIME OF PEAK	FUTURE/MITIGATED	TIME OF PEAK
C1	10 YR	15 CFS	10.00	18 CFS	10.00	*MITIGATION BY OTHERS	
C1	100 YR	27 CFS	10.00	32 CFS	10.00	*MITIGATION BY OTHERS	
C2	10 YR	13 CFS	10.00	15 CFS	10.00	*MITIGATION BY OTHERS	
C2	100 YR	23 CFS	10.00	27 CFS	10.00	*MITIGATION BY OTHERS	
C3	10 YR	26 CFS	10.08	33 CFS	10.00	*MITIGATION BY OTHERS	
C3	100 YR	48 CFS	10.08	57 CFS	10.00	*MITIGATION BY OTHERS	
C4	10 YR	252 CFS	10.33	365 CFS	10.17	219 CFS (87% OF EXISTING)	10.67
C4	100 YR	467 CFS	10.33	623 CFS	10.17	297 CFS (64% OF EXISTING)	10.83
C5	10 YR	18 CFS	10.08	25 CFS	10.00	*MITIGATION BY OTHERS	
C5	100 YR	33 CFS	10.08	41 CFS	10.00	*MITIGATION BY OTHERS	

* PEAK RUNOFF MITIGATED BY MEANS OF DETENTION/RETENTION STORAGE DOWNSTREAM OF PROJECT PER EL DORADO COUNTY AND CITY OF FOLSOM MOU. (DETENTION POND "1")

PEAK RUNOFF AT KEY POINTS, NORTHERN HUMBUG CREEK DRAINAGE AT THE PLAN AREA BOUNDARY

KEY POINT	STORM EVENT	EXISTING	TIME OF PEAK	FUTURE/UNMITIGATED	TIME OF PEAK	FUTURE/MITIGATED	TIME OF PEAK
D1	10 YR	33 CFS	10.17	45 CFS	10.08	*MITIGATION BY OTHERS	
D1	100 YR	60 CFS	10.08	77 CFS	10.08	*MITIGATION BY OTHERS	
D2	10 YR	24 CFS	10.08	33 CFS	10.00	*MITIGATION BY OTHERS	
D2	100 YR	45 CFS	10.08	56 CFS	10.00	*MITIGATION BY OTHERS	
D3	10 YR	126 CFS	10.33	170 CFS	10.25	*MITIGATION BY OTHERS	
D3	100 YR	226 CFS	10.33	285 CFS	10.25	*MITIGATION BY OTHERS	
D4	10 YR	34 CFS	10.08	44 CFS	10.08	219 CFS (87% OF EXISTING)	10.67
D4	100 YR	61 CFS	10.08	73 CFS	10.08	297 CFS (64% OF EXISTING)	10.83
D5	10 YR	15 CFS	10.08	20 CFS	10.00	*MITIGATION BY OTHERS	
D5	100 YR	28 CFS	10.08	34 CFS	10.00	*MITIGATION BY OTHERS	
D6	10 YR	14 CFS	10.08	18 CFS	10.00	*MITIGATION BY OTHERS	
D6	100 YR	25 CFS	10.08	31 CFS	10.00	*MITIGATION BY OTHERS	

* PEAK RUNOFF MITIGATED BY MEANS OF DETENTION/RETENTION STORAGE DOWNSTREAM OF PROJECT PER EL DORADO COUNTY AND CITY OF FOLSOM MOU. (DETENTION POND "E")

PEAK RUNOFF AT KEY POINTS, BROWNS RAVINE CREEK DRAINAGE AT THE PLAN AREA BOUNDARY

KEY POINT	STORM EVENT	EXISTING	TIME OF PEAK	FUTURE/UNMITIGATED	TIME OF PEAK	FUTURE/MITIGATED	TIME OF PEAK
E	10 YR	105 CFS	10.58	156 CFS	10.33	104 CFS (99% OF EXISTING)	10.83
E	100 YR	193 CFS	10.58	266 CFS	10.33	185 CFS (96% OF EXISTING)	10.75

* PEAK RUNOFF MITIGATED BY MEANS OF DETENTION/RETENTION STORAGE. (DETENTION POND "2")

DESIGN CRITERIA

Outlined below is the design criteria utilized in the hydrologic analysis of The Promontory Specific Plan Development.

Runoff Computations

Precipitation:

The Precipitation data that was used for the study came from the "El Dorado County Design and Improvement Standards Manual Volume VI - Drainage" Adopted March 14, 1995. The El Dorado County design rainfall tables, prepared by Jim Goodridge, July 29, 1989 were input to HEC-1 which computes a hypothetical 24-hour storm. A temporal distribution of the 24-hour design precipitation is determined on the basis of elevation.

DEPTH OF RAINFALL FOR SPECIFIED DURATION AT ELEVATION 900 (24-INCHES) MEAN ANNUAL PREC.

STORM FREQUENCY	5 MIN.	15 MIN.	60 MIN.	2 HRS.	3 HRS.	6 HRS.	12 HRS.	24 HRS.
10 YEAR	.188	.332	.679	.972	1.198	1.715	2.454	3.511
100 YEAR	.266	.470	.963	1.377	1.699	2.431	3.478	4.977

Computation Interval:

A 5-minute computation interval and computed to 300 hydrograph ordinates, the maximum available in the HEC-1 program is 300, to compute a 24-hour storm runoff.

Predominant Soil Types:

"Soil Survey of El Dorado County, California, United States Department of Agriculture, Soil Conservation Service and Forest Service", Issued June,1986.

Soil Types	Hydrologic Soil Group
Auburn Silt Loam (AwD)	D
Auburn Very Rocky Silt Loam (AxD)	D
Auburn Very Rocky Silt Loam (AxE)	D

A weighted curve number was computed for each sub-basin, based on the proportion of the subbasin area which lies in each of the following land use classifications. Curve number computations are summarized in Table "4" for both existing and developed conditions.

Land Use	Curve Number (CN)
Existing Conditions:	
Residential districts (average lot size 1/2 acres)	85
Residential districts (average lot size 1/3 acres)	86
Residential districts (average lot size 2.0 acres)	82
Woods - grass combination, poor	86
Woods - grass combination, good	79
Pasture, grassland or range	80

Developed:	
Residential districts (average lot size 1/8 acres)	92
Residential districts (average lot size 1/2 acres)	85
Residential districts (average lot size 1/3 acres)	86
Residential districts (average lot size 1.0 acres)	84
Commercial & Business	95
Pasture, grassland or range	80
Open Space (Lawns, parks, etc.)	80

Losses:

HEC-1 computes an initial abstraction and uniform losses based on the subbasin curve number, which is a weighted value determined for each subbasin based on soil types, projected land uses and input to HEC-1. Precipitation excess is computed within the HEC-1 program by subtracting an initial loss for interception and depression storage, and infiltration losses.

Runoff Hydrograph:

The HEC-1 runoff computation transforms precipitation excess into runoff by use of the unit hydrograph technique. The SCS dimensionless unit hydrograph was used. HEC-1 generates the unit hydrograph based on subbasin lag times.

The lag times for the study were based upon 60% of the Tc for each subbasin, estimated of lag time by using the following equation:

$$lag = 0.60 * Tc$$

where: lag= lag time in hours
Tc= Time of concentration (hours)

In determining each of the sub-basin's characteristics for both the overland flow plane data and the channel data an average or typical approach was used for each subbasin's characteristics. The model used for each sub-basin employed two overland flow elements and one to two collector channels and one main channel. In some instances only one collector channel and one main channel was used.

The following resistance factors for overland flow were used:

Surface	N-Value
Smooth surfaces	.011
Woods: Light underbrush	.40
Woods: Dense underbrush	.80
Grass: Short grass prairie	.15

The following resistance factors for channel or pipe flows was used:

Surface	N-Value
RCP Pipe	.013
Natural Channel	.040-.080

Flood Routing:

The shed areas and the sub-basins within El Dorado County are located at the upper reaches of all the watersheds. A majority of the study area have slopes that exceed 15%. Flood Routing within steep areas have insignficant impacts on the overall analysis. The reason for this, is the sub-basins are small and steep, and the routing reaches are short. Shed areas "A", "B", "C" and "E" did not require flood routing. Shed area "D" has terrain where the slopes are in the 1% range, this shed area was analyzed with flood routing. The Muskingum-Cunge method was used for this study.

Detention Routing:

Two detention facilities were analyzed for the study. Pond "1" was place within shed area "C" as shown on Exhibit "A". This pond was placed on The Promontory Specific Plan Development on the El Dorado County side and is consistent with the MOU. Pond "2" was placed to mitigate peak flows that will discharge into the Browns Ravine Creek watershed and is not considered part of the MOU, but is a requirement of the El Dorado County drainage manual.

Pond "1" was oversized to discharge a peak flow for the 100 year storm of approximately 300 cubic feet per second (cfs) at the County border. This information was provided to us by the City of Folsom's representative Mr. Bill Gill. It is our understanding that this peak flow discharge will meet the City of Folsom requirements to mitigate peak flows from the area and is consistent with the MOU. A stage-storage-discharge relationship was developed, utilizing standard weir and orifice equations.

Pond 2 was sized to mitigate peak flows from The Promontory Specific Plan Development and existing areas located above the project. A stage-storage-discharge relationship was developed, utilizing standard weir and orifice equations.

The actual location and configuration may vary, once final designs are completed for each pond.

Base Flow:

Baseflow enters the stream channel via seepage and springs. In El Dorado County, most areas have unlined channels. Presently there are no gaging stations to determine actual flows due to springs and groundwater within the study area. For this Master drainage study, a base flow has been included. Appropriate data from Table 2.6.1 as outlined in the "El Dorado County Design and Improvement Standards Manual Volume VI - Drainage" was used.

Return period, in yrs	Initial Flow, in cfs (STRTQ)	Ratio of flow at point of recession to flow 1 hr. later (RTIOR)	Recession flow as fraction of runoff peak (QRCSN)
10	5	1.05	0.1
100	10	1.05	0.1

INTRODUCTION

The Promontory Specific Plan Development is located in El Dorado County adjacent to the County's western boundary. This 1000 acre property stretches north from U.S. Highway 50 for approximately four miles. It is bounded on the east by El Dorado Hills and on the west by the Foothills Development in the City of Folsom, in Sacramento County. The Study Area consists of land, varying in elevation from 420 feet to 1160 feet above mean sea level.

At present the land use within the Plan Area consists of undeveloped grass and wood covered land, which was used for grading. No other land use has existed on the site with the exception of two parallel transmission lines that bisect the site within a 300 foot utility easement. The El Dorado County General Plan identifies implementation by means of The Promontory Specific Plan Development as a Planned Community and requires a specific plan.

There are presently existing storm drainage facilities adjacent to the site to the west. This study is limited to the project site and existing areas within El Dorado County that will discharge into the South Alder Creek, Willow Creek, Humbug Creek and Browns Ravine Creek Watersheds. The goal of this master drainage study is to provide an analysis that will be used as part of developing and defining design guidelines for the designs of drainage facilities in both El Dorado County and in the City of Folsom. The master drainage study will analysis the peak flows that will be anticipated at the border between El Dorado County and the City of Folsom, in Sacramento County. This four mile border between El Dorado County and the City of Folsom bisects the Willow Creek and Humbug Creek Watersheds. The study area is located at the headwaters of both watersheds within El Dorado County.

Development of the Plan Area will result in increased peak storm runoff due to the addition of impervious surfaces. The Master Drainage Study assesses projected increases in peak runoff flows for storm water management facilities that will maintain post-development peak rates of runoff from the Study Area at or near existing levels.

PURPOSE

The purpose of the Master Drainage Study is to provide a unified approach for storm water management within the study area. It is the intent of The Promontory Specific Plan Development to establish an approach to storm water management that addresses public concerns regarding downstream impacts that can be integrated into the study area. This study will be an intragal part in executing a Memorandum of Understanding (MOU) between El Dorado County and the City of Folsom.

The storm water mitigation facilities proposed in this study and those that will be developed as part of the City of Folsom's "Humbug-Willow Creek Study", will enable the development to meet, the goal of no increase in runoff due to the proposed development for the design storms under consideration. Throughout this report we will refer to the "Humbug-Willow Creek Study" as the City's Study.

STORM DRAINAGE EVALUATION

The storm drainage master plan evaluated runoff conditions for both existing pre-development and future post-development conditions, using a 10 and 100 year 24-hour design storm. Precipitation data was taken from the "El Dorado County Design and Improvement Standards Manual Volume VI - Drainage" for elevations at 420 to 1160 feet above mean sea level. The City's Study utilizes a different methodology than El Dorado County and the City's Study will be updated and expanded to include the most recent rainfall data from El Dorado County. This study will identify specific target peak flows and hydrographs for locations along the County border at key locations. Appropriate drainage facilities will be designed by future developments to convey the

peak discharges at these key points through their developments. The designs of these facilities will be the responsibility of the City of Folsom and the developments to carry the peak flows as identified in this study. It is imperative that appropriate overland release be considered for the storm events greater than those analyzed for this study.

There were three main watershed basin areas associated with the drainage system that will impact the MOU. The upper portion of the South Alder Creek, Willow Creek, and Humbug Creek Watersheds was analyzed for this study. The site in relationship to these three watersheds is shown in Exhibit "A" and "B".

The goal of the Master Drainage Study is to identify the need for storm water management facilities that will minimize impacts of future development on the existing drainage system. The following criteria were used:

* Under future conditions, the entrance and exit of surface water to and from the site will, to the maximum extent possible, be at naturally occurring locations, in existing natural drainage ways or facilities.

* Peak discharges exiting the study area under post-development conditions will be determined for the 10 year and 100 year storm events. In shed areas "A", "B", "C" and "D", these peak flows will be conveyed by the City and the developments through appropriate drainage systems to future detention/retention facilities located in the City of Folsom, in Sacramento County. For shed "C" the Promontory will oversize the detention pond to discharge a maximum peak flow of 300 cfs under the 100 year storm event. This maximum discharge of 300 cfs was provided by the City of Folsom based upon the City's Study. This detention facility will be located within El Dorado County. Shed "E" will provide a detention facility that will mitigate post development flows to existing pre development flows. This facility will be located within El Dorado County and is not part of the MOU. This detention facility will be the responsibility of The Promontory Specific Plan Development and El Dorado County for size and location.

* Storm water detention/retention facilities will be used to maintain discharge rates at or below pre-development levels. The same volume of water will be discharged from the facility as flows in, but outflow occurs over a longer period of time and at a lesser rated than inflow.

RUNOFF COMPUTATIONS

HEC-1 Hydrograph Analysis

The HEC-1 computer model was used to simulate the precipitation-runoff process for the Plan Area. (Reference: "HEC-1 Flood Hydrograph Package", US Army Corps of Engineers, Water Resources Support Center, the Hydrologic Engineering Center, Davis, California, September 1990). This method produces runoff hydrographs for sub-basin locations within and reservoir routings and hydrograph combinations at specified points of analysis throughout the stream/drainage network.

Surface runoff is produced as the result of a precipitation event. Rainfall data published in the "El Dorado County Design and Improvement Standards Manual Volume VI - Drainage" were input to the HEC-1 program for a 24-hour event. The 24-hour precipitation totals for the 10 and 100 year return period storms are 3.511 and 4.977 inches respectively. The HEC-1 runoff computation transforms precipitation excess into runoff by use of the unit hydrograph technique. The SCS dimensionless unit hydrograph was used. HEC-1 generates the unit hydrograph based on subbasin lag times. A 5-minute computation interval was used.

Precipitation excess is computed within the HEC-1 program by subtracting an initial loss for interception and depression storage, and infiltration losses. These losses are calculated based on Soil Conservation Service cumulative loss "curve numbers" for each soil-cover complex adjusted for saturated ground conditions. Review of the "Soil Survey of El Dorado County, California, United States Department of Agriculture, Soil Conservation Service and Forest Service", Issued June 1986, shows that the Plan Area soils are within hydrologic soil group "D", indicative of low rates of infiltration and high runoff potential.

Results

The results of the HEC-1 Hydrograph analyses for the 10 and 100 year storm events are shown in Table "1" for existing and future conditions within the watershed areas, as identified on Exhibits "A" and "B". The peak flows tabulated for future conditions show the affects of anticipated development of areas both off-site and within the Plan Area. The table shows anticipated peaks, with no detention routing either on-site or off-site, and peak flows mitigated through use of the detention facilities Ponds "1" and "2", for sheds "C" and "E" respectively. Proposed detention facilites for sheds "A", "B" and "D" will be located within future developments in the City of Folsom per the MOU. These proposed detention ponds have been shown on Exhibit "A" and are identified as Ponds "A", "B", "C", "D" and "E". The shed areas "A" will discharge into the South Alder Creek watershed, and will not require peak flow mitigation since this area will be preserved as open space area and existing conditions will stay the same under future development. The sub-basins proposed for the South Alder Creek Watershed will not require any detention facilities.

The HEC-1 results show that for the design storms under consideration, development of the project will have impacts along the County's border. Increased peak flows within the shed areas "B" and "D" will be mitigated by proposed detention faclities located within future developments in the City of Folsom. The proposed location of these pond have been identified in Exhibit "A". Shed area "C" will oversize the proposed detention facility for future development downstream and also provide detention for development of shed area "C". Increased peak flows within the shed areas "E" will be mitigated by a proposed detention faclitiy located within this project.

All watersheds, areas were subdivided into smaller drainage basins called sub-basins. The results of each sub-basin were analyzed and have been tabulated in Table "1".

Peak Flow Reduction - Detention/Retention Storage

Results of the HEC-1 analyses, as summarized in the Appendix "A", indicate the level of peak flow reduction required to alleviate the impacts of site development for the 10 and 100 year peak runoffs. Peak flow reduction is warranted where post-development runoff leaving the site exceeds existing runoff rates for the design storm(s) under consideration.

Detention/retention storage can be an effective means for management of peak storm water runoff. A relatively small detention volume can significantly reduce downstream flows, particularly when the runoff hydrograph has a rapid rise and fall, as is the case for the basins included in the Master Drainage Study.

Detention facilities for Ponds "1" and "2", as shown on Exhibit "A", were evaluated using the HEC-1 program for the 10 and 100 year design storms. The data for these facilities, were developed from the preliminary design improvement plans. A stage-storage-discharge relationship was developed, utilizing standard weir and orifice equations. For the detention pond locations, topographic mapping and field data was used to calculate pond volume utilizing digitized water surface areas taken at appropriate contour intervals, and computing average incremental volumes. Discharge for the pond consist of an outflow pipe through the base of the embankment. Where an overflow riser will be used as a spillway for the pond and it will be rated as a broad-crested weir with c=3.0. The future detention/retention facilities Ponds "A", "B", "C", "D" and "E" located within the City of Folsom will be analyzed and sized to accomondate the remaining shed areas peak flow reduction. The City's Study will provide the appropriate design criteria for the ponds, as per the MOU.

Detention volumes are summarized in Table "3" entitled "Summary of Detention/Retention Storage for Peak Flow Mitigation" for Ponds "1" and "2" as shown on Exhibit "A". These facilities provide the necessary peak flow reduction required to maintain peak runoff from these sheds due to the 10 and 100 year storms at or near existing levels. Table "2" entitled "Peak Runoff from Basin Areas" shows the affects of peak flow at selected key points in the HEC-1 analyses. In all cases, the use of detention/retention storage will reduces runoff peaks to or near existing levels.

Storm water management should be an integral part of development of these areas. It is expected that as these areas develop, these storm water management facilities will be evaluated for peak flow mitigation by El Dorado County and the City of Folsom..

CONCLUSIONS AND RECOMMENDATIONS

The proposed development of The Promontory Specific Plan Development will result in increased runoff. However, these increases will be mitigated by the inclusion of storm water detention facilities Ponds "1" and "2" and future Ponds "A", "B", "C", "D" and "E" as shown in Exhibit "A". This study was utilized the adopted El Dorado County drainage manual, the results of this study will differ from the City's Study, since the City's Study utilizes a different methodology. It will be the County's responsibility to review any future studies, in the watersheds, to determine the future effects upon these facilities.

On-going analysis are required to determine appropriate final designs and construction of the required detention/retention facilities in conjunction with development. Future development upstream should provide the appropriate mitigation to avoid any increases of flows through adjacent development which would insure additional peak flow reductions to the County line. Peak flow summaries at key points were previously identified in the beginning of this report under the "Executive Summary" and Table "2".

As outlined in the MOU, the location and points of discharge for the sub-basins along the County border have been shown in Exhibit "A". It will be the responsibility of The Promontory Specific Plan Development to concentrate the flows to these key points of discharge through some type of drainage conveyance system. From these key points of discharge at the County border, future development and the City of Folsom will provide the appropriate storm drainage facilities to convey the flows through their developments. We recommend that overland release be included as part of the design of all storm drainage facilities.

TABLE "1"

PEAK RUNOFF FROM SHED AREA "A" SOUTH ALDER CREEK
TO KEY POINTS AND THE COUNTY BORDER
(SEE EXHIBITS "A" AND "B")

10 YEAR PEAK RUNOFF

BASIN KEY PT.	TOTAL AREA(AC.)	EXISTING (CFS)	DRAINAGE BASIN	TOTAL AREA(AC.)	FUTURE (CFS) UNMITIGATED	MITIGATED
A	8.2	9	A	8.2	9	N/A
TOTALS	8.2	9	TOTALS	8.2	9	N/A

100 YEAR PEAK RUNOFF

BASIN & KEY PT.	TOTAL AREA(AC.)	EXISTING (CFS)	DRAINAGE BASIN	TOTAL AREA(AC.)	FUTURE (CFS) UNMITIGATED	MITIGATED
A	8.2	17	A	8.2	17	N/A
TOTALS	8.2	17	TOTALS	8.2	17	N/A

PEAK RUNOFF FROM SHED AREA "B" SOUTHERN WILLOW CREEK
TO KEY POINTS AND THE COUNTY BORDER
(SEE EXHIBITS "A" AND "B")

10 YEAR PEAK RUNOFF

BASIN & KEY PT.	TOTAL AREA(AC.)	EXISTING (CFS)	DRAINAGE BASIN	TOTAL AREA(AC.)	FUTURE (CFS) UNMITIGATED	MITIGATED
B1	23.4	20	B1	23.4	22	N/A*
B2	7.1	8	B2	7.1	9	N/A*
B3	6.2	8	B3	6.2	8	N/A*
B4	8.0	9	B4	8.0	9	N/A*
B5	23.4	21	B5	23.4	23	N/A*
B6	99.5	79	B6	99.5	88	N/A*
B7	25.0	22	B7	25.0	24	N/A*
B8	74.3	63	B8	74.3	69	N/A*
B9	55.3	45	B9	55.3	52	N/A*
B10	26.0	22	B10	26.0	27	N/A*
B11	158.5	126	B11	158.5	139	N/A*
B12	23.4	19	B12	23.4	24	N/A*
TOTALS	530.1	442	TOTALS	530.1	494	N/A*

* DETENTION FACILITIES TO BE COMPLETED BY FUTURE DEVELOPMENT AND THE CITY OF FOLSOM PER THE MOU

TABLE "1"
(CONT.)
PEAK RUNOFF FROM SHED AREA "B" SOUTHERN WILLOW CREEK
TO KEY POINTS AND THE COUNTY BORDER
(SEE EXHIBITS "A" AND "B")

100 YEAR PEAK RUNOFF

DRAINAGE BASIN	TOTAL AREA(AC.)	EXISTING (CFS)	DRAINAGE BASIN	TOTAL AREA(AC.)	FUTURE (CFS) UNMITIGATED	MITIGATED
B1	23.4	37	B1	23.4	40	N/A*
B2	7.1	16	B2	7.1	16	N/A*
B3	6.2	14	B3	6.2	15	N/A*
B4	8.0	17	B4	8.0	17	N/A*
B5	23.4	37	B5	23.4	40	N/A*
B6	99.5	138	B6	99.5	150	N/A*
B7	25.0	40	B7	25.0	43	N/A*
B8	74.3	109	B8	74.3	116	N/A*
B9	55.3	79	B9	55.3	89	N/A*
B10	26.0	40	B10	26.0	46	N/A*
B11	158.5	213	B11	158.5	235	N/A*
B12	23.4	36	B12	23.4	41	N/A*
TOTALS	530.1	776	TOTALS	530.1	850	N/A*

* TOTAL FLOWS BASED UPON FLOOD ROUTING AND STORAGE ROUTING.

PEAK RUNOFF FROM SHED AREA "C" CENTRAL HUMBUG CREEK
TO KEY POINTS AND THE COUNTY BORDER
(SEE EXHIBITS "A" AND "B")

10 YEAR PEAK RUNOFF

BASIN & KEY PT.	TOTAL AREA(AC.)	EXISTING (CFS)	DRAINAGE BASIN	TOTAL AREA(AC.)	FUTURE (CFS) UNMITIGATED	MITIGATED
C1	16.3	15	C1	16.3	18	18
C2	12.9	13	C2	12.9	15	15
C3	33.6	26	C3	33.6	33	33
C4	498.0	252	C4	498.0	365 *POND "1"	219
C5	21.5	18	C5	21.5	25	25
TOTALS	582.3	324	TOTALS	582.3	456	310

* THIS DETENTION FACILITIES TO BE COMPLETED BY THE PROMONTORY DEVELOPMENT AND EL DORADO COUNTY PER THE MOU.

TABLE "1"
(CONT.)
PEAK RUNOFF FROM SHED AREA "C" CENTRAL HUMBUG CREEK
TO KEY POINTS AND THE COUNTY BORDER
(SEE EXHIBITS "A" AND "B")

100 YEAR PEAK RUNOFF

BASIN & KEY PT.	TOTAL AREA(AC.)	EXISTING (CFS)	DRAINAGE BASIN	TOTAL AREA(AC.)	FUTURE (CFS) UNMITIGATED	MITIGATED
C1	16.3	27	C1	16.3	32	32
C2	12.9	23	C2	12.9	27	27
C3	33.6	48	C3	33.6	57	57
C4	498.0	467	C4	498.0	623	*POND "1" 297
C5	21.5	33	C5	21.5	41	41
TOTALS	582.3	598	TOTALS	582.3	780	454

* THIS DETENTION FACILITIES TO BE COMPLETED BY THE PROMONTORY DEVELOPMENT AND EL DORADO COUNTY PER THE MOU.

PEAK RUNOFF FROM SHED AREA "D" NORTHERN HUMBUG CREEK
TO KEY POINTS AND THE COUNTY BORDER
(SEE EXHIBITS "A" AND "B")

10 YEAR PEAK RUNOFF

BASIN & KEY PT.	TOTAL AREA(AC.)	EXISTING (CFS)	DRAINAGE BASIN	TOTAL AREA(AC.)	FUTURE (CFS) UNMITIGATED	MITIGATED
D1	47.5	33	D1	47.5	45	N/A*
D2	32.1	24	D2	32.1	33	N/A*
D3	224.5	126	D3	224.5	170	N/A*
D4	43.7	34	D4	43.7	44	N/A*
D5	17.6	15	D5	17.6	20	N/A*
D6	15.7	14	D6	15.7	18	N/A*
TOTALS	381.1	246**	TOTALS	381.1	330**	

* DETENTION FACILITIES TO BE COMPLETED BY FUTURE DEVELOPMENT AND THE CITY OF FOLSOM PER THE MOU.

** TOTAL FLOWS BASED UPON FLOOD ROUTING AND COMBINED HYDROGRAPHS

TABLE "1"
(CONT.)
PEAK RUNOFF FROM SHED AREA "D" NORTHERN HUMBUG CREEK
TO KEY POINTS AND THE COUNTY BORDER
(SEE EXHIBITS "A" AND "B")

100 YEAR PEAK RUNOFF

BASIN & KEY PT.	TOTAL AREA(AC.)	EXISTING (CFS)	DRAINAGE BASIN	TOTAL AREA(AC.)	FUTURE (CFS) UNMITIGATED	MITIGATED
D1	47.5	60	D1	47.5	77	N/A*
D2	32.1	45	D2	32.1	56	N/A*
D3	224.5	226	D3	224.5	285	N/A*
D4	43.7	61	D4	43.7	73	N/A*
D5	17.6	28	D5	17.6	34	N/A*
D6	15.7	25	D6	15.7	31	N/A*
TOTALS	381.1	445**	TOTALS	381.1	556**	

* DETENTION FACILITIES TO BE COMPLETED BY FUTURE DEVELOPMENT AND THE CITY OF FOLSOM PER THE MOU.

** TOTAL FLOWS BASED UPON FLOOD ROUTING AND COMBINED HYDROGRAPHS

PEAK RUNOFF FROM BASIN AREAS BROWNS RAVINE CREEK
TO POINT "E" AT THE BOUNDARY STUDY AREA
(SEE EXHIBITS "A" AND "B")

10 YEAR PEAK RUNOFF

BASIN KEY PT.	TOTAL AREA(AC.)	EXISTING (CFS)	DRAINAGE BASIN	TOTAL AREA(AC.)	FUTURE (CFS) UNMITIGATED		MITIGATED
E	235.7	105	E	235.7	156	POND "2"	104
TOTALS	235.7	105	TOTALS	235.7	156		104

100 YEAR PEAK RUNOFF

BASIN KEY PT.	TOTAL AREA(AC.)	EXISTING (CFS)	DRAINAGE BASIN	TOTAL AREA(AC.)	FUTURE (CFS) UNMITIGATED		MITIGATED
E	235.7	193	E	235.7	266	POND "2"	185
TOTALS	235.7	193	TOTALS	235.7	266		185

TABLE "2"

PEAK RUNOFF AT KEY POINTS, SOUTH ALDER CREEK DRAINAGE,
AT THE PLAN AREA BOUNDARY

KEY POINT	STORM EVENT	EXISTING	TIME OF PEAK	FUTURE/UNMITIGATED	TIME OF PEAK	FUTURE/MITIGATED*	TIME OF PEAK
A	10 YR	9 CFS	10.00	9 CFS	10.00	*MITIGATION BY OTHERS	
A	100 YR	17 CFS	10.00	17 CFS	10.00	*MITIGATION BY OTHERS	

* PEAK RUNOFF MITIGATED BY MEANS OF DETENTION/RETENTION STORAGE DOWNSTREAM OF PROJECT PER EL DORADO COUNTY AND CITY OF FOLSOM MOU.

PEAK RUNOFF AT KEY POINTS, SOUTHERN WILLOW CREEK DRAINAGE
FLOWING THROUGH THE PRIVATE GOLF COURSE
AT THE PLAN AREA BOUNDARY

KEY POINT	STORM EVENT	EXISTING	TIME OF PEAK	FUTURE/UNMITIGATED	TIME OF PEAK	FUTURE/MITIGATED*	TIME OF PEAK
B1	10 YR	20 CFS	10.00	22 CFS	10.00	*MITIGATION BY OTHERS	
B1	100 YR	37 CFS	10.00	40 CFS	10.00	*MITIGATION BY OTHERS	
B2	10 YR	8 CFS	10.00	9 CFS	10.00	*MITIGATION BY OTHERS	
B2	100 YR	16 CFS	10.00	16 CFS	10.00	*MITIGATION BY OTHERS	
B3	10 YR	8 CFS	10.00	8 CFS	10.00	*MITIGATION BY OTHERS	
B3	100 YR	14 CFS	10.00	15 CFS	10.00	*MITIGATION BY OTHERS	
B4	10 YR	9 CFS	10.00	9 CFS	10.00	*MITIGATION BY OTHERS	
B4	100 YR	17 CFS	10.00	17 CFS	10.00	*MITIGATION BY OTHERS	
B5	10 YR	21 CFS	10.08	23 CFS	10.08	*MITIGATION BY OTHERS	
B5	100 YR	37 CFS	10.08	40 CFS	10.00	*MITIGATION BY OTHERS	
B6	10 YR	79 CFS	10.08	88 CFS	10.08	*MITIGATION BY OTHERS	
B6	100 YR	138 CFS	10.08	150 CFS	10.00	*MITIGATION BY OTHERS	
B7	10 YR	22 CFS	10.08	24 CFS	10.08	*MITIGATION BY OTHERS	
B7	100 YR	40 CFS	10.08	43 CFS	10.00	*MITIGATION BY OTHERS	
B8	10 YR	63 CFS	10.08	69 CFS	10.08	*MITIGATION BY OTHERS	
B8	100 YR	109 CFS	10.08	118 CFS	10.00	*MITIGATION BY OTHERS	
B9	10 YR	45 CFS	10.08	52 CFS	10.08	*MITIGATION BY OTHERS	
B9	100 YR	79 CFS	10.08	89 CFS	10.00	*MITIGATION BY OTHERS	
B10	10 YR	22 CFS	10.08	27 CFS	10.00	*MITIGATION BY OTHERS	
B10	100 YR	40 CFS	10.08	46 CFS	10.00	*MITIGATION BY OTHERS	
B11	10 YR	126 CFS	10.17	139 CFS	10.08	*MITIGATION BY OTHERS	
B11	100 YR	213 CFS	10.17	235 CFS	10.08	*MITIGATION BY OTHERS	
B12	10 YR	19 CFS	10.08	24 CFS	10.00	*MITIGATION BY OTHERS	
B12	100 YR	36 CFS	10.08	41 CFS	10.00	*MITIGATION BY OTHERS	

* PEAK RUNOFF MITIGATED BY MEANS OF DETENTION/RETENTION STORAGE DOWNSTREAM OF PROJECT PER EL DORADO COUNTY AND CITY OF FOLSOM MOU. (DETENTION POND "A", "B", "C", AND "D")

TABLE "2"
(CONTINUED)
PEAK RUNOFF AT KEY POINTS, CENTRAL HUMBUG CREEK DRAINAGE
AT THE PLAN AREA BOUNDARY

KEY POINT	STORM EVENT	EXISTING	TIME OF PEAK	FUTURE/UNMITIGATED	TIME OF PEAK	FUTURE/MITIGATED	TIME OF PEAK
C1	10 YR	15 CFS	10.00	18 CFS	10.00	*MITIGATION BY OTHERS	
C1	100 YR	27 CFS	10.00	32 CFS	10.00	*MITIGATION BY OTHERS	
C2	10 YR	13 CFS	10.00	15 CFS	10.00	*MITIGATION BY OTHERS	
C2	100 YR	23 CFS	10.00	27 CFS	10.00	*MITIGATION BY OTHERS	
C3	10 YR	26 CFS	10.08	33 CFS	10.00	*MITIGATION BY OTHERS	
C3	100 YR	48 CFS	10.08	57 CFS	10.00	*MITIGATION BY OTHERS	
C4	10 YR	252 CFS	10.33	365 CFS	10.17	219 CFS (87% OF EXISTING)	10.67
C4	100 YR	467 CFS	10.33	623 CFS	10.17	297 CFS (64% OF EXISTING)	10.83
C5	10 YR	18 CFS	10.08	25 CFS	10.00	*MITIGATION BY OTHERS	
C5	100 YR	33 CFS	10.08	41 CFS	10.00	*MITIGATION BY OTHERS	

* PEAK RUNOFF MITIGATED BY MEANS OF DETENTION/RETENTION STORAGE DOWNSTREAM OF PROJECT PER EL DORADO COUNTY AND CITY OF FOLSOM MOU. (DETENTION POND "1")

PEAK RUNOFF AT KEY POINTS, NORTHERN HUMBUG CREEK DRAINAGE
AT THE PLAN AREA BOUNDARY

KEY POINT	STORM EVENT	EXISTING	TIME OF PEAK	FUTURE/UNMITIGATED	TIME OF PEAK	FUTURE/MITIGATED	TIME OF PEAK
D1	10 YR	33 CFS	10.17	45 CFS	10.08	*MITIGATION BY OTHERS	
D1	100 YR	60 CFS	10.08	77 CFS	10.08	*MITIGATION BY OTHERS	
D2	10 YR	24 CFS	10.08	33 CFS	10.00	*MITIGATION BY OTHERS	
D2	100 YR	45 CFS	10.08	56 CFS	10.00	*MITIGATION BY OTHERS	
D3	10 YR	126 CFS	10.33	170 CFS	10.25	*MITIGATION BY OTHERS	
D3	100 YR	226 CFS	10.33	285 CFS	10.25	*MITIGATION BY OTHERS	
D4	10 YR	34 CFS	10.08	44 CFS	10.08	219 CFS (87% OF EXISTING)	10.67
D4	100 YR	61 CFS	10.08	73 CFS	10.08	297 CFS (64% OF EXISTING)	10.83
D5	10 YR	15 CFS	10.08	20 CFS	10.00	*MITIGATION BY OTHERS	
D5	100 YR	28 CFS	10.08	34 CFS	10.00	*MITIGATION BY OTHERS	
D6	10 YR	14 CFS	10.08	18 CFS	10.00	*MITIGATION BY OTHERS	
D6	100 YR	25 CFS	10.08	31 CFS	10.00	*MITIGATION BY OTHERS	

* PEAK RUNOFF MITIGATED BY MEANS OF DETENTION/RETENTION STORAGE DOWNSTREAM OF PROJECT PER EL DORADO COUNTY AND CITY OF FOLSOM MOU. (DETENTION POND "E")

PEAK RUNOFF AT KEY POINTS, BROWNS RAVINE DRAINAGE
AT THE PLAN AREA BOUNDARY

KEY POINT	STORM EVENT	EXISTING	TIME OF PEAK	FUTURE/UNMITIGATED	TIME OF PEAK	FUTURE/MITIGATED	TIME OF PEAK
E	10 YR	105 CFS	10.58	156 CFS	10.33	104 CFS(99% OF EXISTING)	10.83
E	100 YR	193 CFS	10.58	266 CFS	10.33	185 CFS(96% OF EXISTING)	10.75

* PEAK RUNOFF MITIGATED BY MEANS OF DETENTION/RETENTION STORAGE. (DETENTION POND "2",

TABLE "3"

SUMMARY OF DETENTION STORAGE FOR
PEAK FLOW MITIGATION
CENTRAL HUMBUG CREEK WATERSHED
EL DORADO COUNTY, PROMONTORY DEVELOPMENT

DETENTION POND LOCATION DESIGNATION	VOLUME (AC FT)	TYPE OF POND	SHED AREA ACRES	10 YEAR FLOW PEAKS (CFS) EXISTING	FUTURE INFLOW	FUTURE OUTFLOW
1	23.0	"DRY"	498.0	249	362	217

DETENTION POND LOCATION DESIGNATION	VOLUME (AC FT)	TYPE OF POND	SHED AREA ACRES	100 YEAR FLOW PEAKS (CFS) EXISTING	FUTURE INFLOW	FUTURE OUTFLOW
1	23.0	"DRY"	498.0	461	616	295

SUMMARY OF DETENTION STORAGE FOR
PEAK FLOW MITIGATION
BROWNS RAVINE CREEK WATERSHED
EL DORADO COUNTY, PROMONTORY DEVELOPMENT

DETENTION POND LOCATION DESIGNATION	VOLUME (AC FT)	TYPE OF POND	SHED AREA ACRES	10 YEAR FLOW PEAKS (CFS) EXISTING	FUTURE INFLOW	FUTURE OUTFLOW
2	8.5	"DRY"	235.7	103	153	103

DETENTION POND LOCATION DESIGNATION	VOLUME (AC FT)	TYPE OF POND	SHED AREA ACRES	100 YEAR FLOW PEAKS (CFS) EXISTING	FUTURE INFLOW	FUTURE OUTFLOW
2	8.5	"DRY"	235.7	187	260	181

TABLE "4"
SOUTH ALDER CREEK WATERSHED
PROJECTED LAND USE AT
SPECIFIC PLAN AREA BUILD OUT AND EL DORADO COUNTY BUILD OUT
SOUTH ALDER CREEK WATERSHED EL DORADO COUNTY SIDE

Trib.	Pasture/Grass Range		Woods/Grass Poor		Woods/Grass Good		Residential 1 Acre		Residential 1/3 Acre		Residential 1/2 Acre		Residential 1/8 Acre		Total Cum.
Basin	Ac.	CN	Ac.	CN	Ac.	CN	Ac.	CN	Ac.	CN	Ac.	CN	Ac.	CN	CN
A	8.2	80													80
Total	8.2		0		0		0		0		0		0		

SOUTHERN WILLOW CREEK WATERSHED
PROJECTED LAND USE AT
SPECIFIC PLAN AREA BUILD OUT AND EL DORADO COUNTY BUILD OUT
SOUTHERN WILLOW CREEK WATERSHED EL DORADO COUNTY SIDE

Trib.	Pasture/Grass Range		Brush/Weeds Grass		Woods/Grass Good		Residential 1 Acre		Residential 1/3 Acre		Residential 1/2 Acre		Residential 1/8 Acre		Total Cum.
Basin	Ac.	CN	Ac.	CN	Ac.	CN	Ac.	CN	Ac.	CN	Ac.	CN	Ac.	CN	CN
B1	17.5	80					5.9	84							81
B2	5.3	80					1.8	84							81
B3	4.6	80					1.6	84							81
B4	6.0	80					2.0	84							81
B5	5.0	80									18.4	85			84
B6	17.5	80									82	85			84
B7	5.0	80									20	85			84
B8			2.3	77			19	84	53	86					85
B9							27	84	28.3	86					85
B10							18	84	8	86					85
B11					8.5	79	40	84	110	86					85
B12							23.4	84							84
Total	60.9		2.3		8.5		139		199		120		0		

TABLE "4"
(CONTINUED)
CENTRAL HUMBUG CREEK WATERSHED
PROJECTED LAND USE AT
SPECIFIC PLAN AREA BUILD OUT AND EL DORADO COUNTY BUILD OUT
CENTRAL HUMBUG CREEK WATERSHED EL DORADO COUNTY SIDE

Trib.	Open Space Grass		Woods/Grass Poor		Commercial Business		Residential 1 Acre		Residential 1/3 Acre		Residential 1/2 Acre		Residential 1/8 Acre		Total Cum.
Basin	Ac.	CN	Ac.	CN	Ac.	CN	Ac.	CN	Ac.	CN	Ac.	CN	Ac.	CN	CN
C1							16.3	84							84
C2							12.9	84							84
C3							33.6	84							84
C4	24.2	80			8.3	95					435	85	30.5	92	85
C5					5.0	95					16.5	85			87
Total	24.2		0		13.3		62.8		0		452		30.5		

NORTHERN HUMBUG CREEK WATERSHED
PROJECTED LAND USE AT
SPECIFIC PLAN AREA BUILD OUT AND EL DORADO COUNTY BUILD OUT
NORTHERN HUMBUG CREEK WATERSHED EL DORADO COUNTY SIDE

Trib.	Pasture/Grass Range		Woods/Grass Poor		Woods/Grass Good		Residential 1 Acre		Residential 1/3 Acre		Residential 1/2 Acre		Residential 1/8 Acre		Total Cum.
Basin	Ac.	CN	Ac.	CN	Ac.	CN	Ac.	CN	Ac.	CN	Ac.	CN	Ac.	CN	CN
D1											47.5	85			85
D2									32.1	86					86
D3									224	86					86
D4									43.7	86					86
D5									17.6	86					86
D6									15.7	86					86
Total	0		0		0		0		333		47.5		0		

BROWNS RAVINE CREEK WATERSHED
PROJECTED LAND USE AT
SPECIFIC PLAN AREA BUILD OUT AND EL DORADO COUNTY BUILD OUT
BROWNS RAVINE CREEK WATERSHED EL DORADO COUNTY SIDE

Trib.	Pasture/Grass Range		Brush/Weeds Poor		Woods/Grass Good		Residential 1 Acre		Residential 1/3 Acre		Residential 1/2 Acre		Residential 1/8 Acre		Total Cum.
Basin	Ac.	CN	Ac.	CN	Ac.	CN	Ac.	CN	Ac.	CN	Ac.	CN	Ac.	CN	CN
E											235	85			85
Total	0		0		0		0		0		235		0		

TABLE "4"
SOUTH ALDER CREEK WATERSHED
EXISTING CONDITIONS
SPECIFIC PLAN AREA AND EL DORADO COUNTY BUILD OUT
SOUTH ALDER CREEK WATERSHED EL DORADO COUNTY SIDE

Trib.	Pasture/Grass Range		Woods/Grass Poor		Woods/Grass Good		Residential 1 Acre		Residential 1/3 Acre		Residential 1/2 Acre		Residential 1/8 Acre		Total Cum.
Basin	Ac.	CN	Ac.	CN	Ac.	CN	Ac.	CN	Ac.	CN	Ac.	CN	Ac.	CN	CN
A	8.2	80													80
Total	8.2		0		0		0		0		0		0		

SOUTHERN WILLOW CREEK WATERSHED
EXISTING CONDITIONS
SPECIFIC PLAN AREA AND EL DORADO COUNTY BUILD OUT
SOUTHERN WILLOW CREEK WATERSHED EL DORADO COUNTY SIDE

Trib.	Pasture/Grass Range		Woods/Grass Poor		Woods/Grass Good		Residential 1 Acre		Residential 1/3 Acre		Residential 1/2 Acre		Residential 1/8 Acre		Total Cum.
Basin	Ac.	CN	Ac.	CN	Ac.	CN	Ac.	CN	Ac.	CN	Ac.	CN	Ac.	CN	CN
B1	23.4	80													80
B2	7.1	80													80
B3	6.2	80													80
B4	8.0	80													80
B5	5.0	80									18.4	85			84
B6	42.5	80									57	85			83
B7	11.0	80									14	85			83
B8	20.3	80							54	86					84
B9	22.0	80					5.0	84	28.3	86					83
B10	20.0	80							6	86					81
B11	22	80			8.5	79	18	84	110	86					85
B12	23.4	80													80
Total	211		0		8.5		23		198		89.4		0		

TABLE "4"
(CONTINUED)
CENTRAL HUMBUG CREEK WATERSHED
EXISTING CONDITIONS
SPECIFIC PLAN AREA AND EL DORADO COUNTY BUILD OUT
CENTRAL HUMBUG CREEK WATERSHED EL DORADO COUNTY SIDE

Trib.	Open Space Grass		Woods/Grass Poor		Woods/Grass Good		Residential 1 Acre		Residential 1/3 Acr		Residential 1/2 Acre		Residential 1/8 Acre		Total Cum.
Basin	Ac.	CN	Ac.	CN	Ac.	CN	Ac.	CN	Ac.	CN	Ac.	CN	Ac.	CN	CN
C1	16.3	80													80
C2	12.9	80													80
C3	33.6	80													80
C4	348	80			150	79									80
C5	21.5	80													80
Total	432		0		150		0		0		0		0		

NORTHERN HUMBUG CREEK WATERSHED
EXISTING CONDITIONS
SPECIFIC PLAN AREA AND EL DORADO COUNTY BUILD OUT
NORTHERN HUMBUG CREEK WATERSHED EL DORADO COUNTY SIDE

Trib.	Pasture/Grass Range		Woods/Grass Poor		Woods/Grass Good		Residential 2 Acre		Residential 1/3 Acre		Residential 1/2 Acre		Residential 1/8 Acre		Total Cum.
Basin	Ac.	CN	Ac.	CN	Ac.	CN	Ac.	CN	Ac.	CN	Ac.	CN	Ac.	CN	CN
D1	33.0	80			14.5	79									80
D2	24.0	80			8.1	79									80
D3	138	80	15	86	15	79			56.0	86					82
D4	10.7	80					33	82							82
D5	17.6	80													80
D6	15.7	80													80
Total	239		15		37.6		33		56		0		0		

BROWNS RAVINE CREEK WATERSHED
PROJECTED LAND USE AT
SPECIFIC PLAN AREA BUILD OUT AND EL DORADO COUNTY BUILD OUT
BROWNS RAVINE CREEK WATERSHED EL DORADO COUNTY SIDE

Trib.	Pasture/Grass Range		Woods/Grass Poor		Woods/Grass Good		Residential 1 Acre		Residential 1/3 Acre		Residential 1/2 Acre		Residential 1/8 Acre		Total Cum.
Basin	Ac.	CN	Ac.	CN	Ac.	CN	Ac.	CN	Ac.	CN	Ac.	CN	Ac.	CN	CN
E	116	80			59.0	79					60.0	85			81
Total	116		0		59		0		0		60		0		

TABLE "5"
SOUTH ALDER CREEK WATERSHED
LAG TIME USING HEC-1 HYDROGRAPH ANALYSIS

	EXISTING				FUTURE		
Drainage Basin	CN	Time of Concent (Hr.)	.60 Tc Lag (Hr.)	Drainage Basin	CN	Time of Concent (Hr.)	.60 Tc Lag (Hr.)
A	80	.25	0.15	A	80	.25	0.15

SOUTHERN WILLOW CREEK WATERSHED
LAG TIME USING HEC-1 HYDROGRAPH ANALYSIS

	EXISTING				FUTURE		
Drainage Basin	CN	Time of Concent (Hr.)	.60 Tc Lag (Hr.)	Drainage Basin	CN	Time of Concent (Hr.)	.60 Tc Lag (Hr.)
B1	80	.23	0.138	B1	81	.18	0.108
B2	80	.24	0.144	B2	81	.19	0.114
B3	80	.24	0.144	B3	81	.19	0.114
B4	80	.25	0.15	B4	81	.20	0.12
B5	84	.46	0.276	B5	84	.31	0.186
B6	83	.41	0.246	B6	84	.31	0.186
B7	83	.39	0.234	B7	84	.30	0.18
B8	84	.40	0.24	B8	85	.30	0.18
B9	83	.42	0.252	B9	85	.31	0.186
B10	81	.34	0.204	B10	85	.27	0.162
B11	85	.53	0.318	B11	85	.38	0.228
B12	80	.32	0.192	B12	84	.25	0.15

TABLE "5"
(CONTINUED)
CENTRAL HUMBUG CREEK WATERSHED
LAG TIME USING HEC-1 HYDROGRAPH ANALYSIS

	EXISTING			FUTURE		
Drainage Basin	CN	Time of Concent (Hr.)	.60 Tc Lag (Hr.)	Drainage Basin	CN	Time of Concent (Hr.)	.60 Tc Lag (Hr.)
C1	80	.27	0.162	C1	84	.20	0.12
C2	80	.22	0.132	C2	84	.17	0.102
C3	80	.34	0.204	C3	84	.25	0.15
C4	80	.81	0.486	C4	85	.62	0.372
C5	80	.34	0.204	C5	87	.27	0.162

NORTHERN HUMBUG CREEK WATERSHED
LAG TIME USING HEC-1 HYDROGRAPH ANALYSIS

	EXISTING			FUTURE		
Drainage Basin	CN	Time of Concent (Hr.)	.60 Tc Lag (Hr.)	Drainage Basin	CN	Time of Concent (Hr.)	.60 Tc Lag (Hr.)
D1	80	.46	0.276	D1	85	.32	0.192
D2	80	.40	0.24	D2	86	.29	0.174
D3	82	.84	0.504	D3	86	.66	0.396
D4	82	.43	0.258	D4	86	.32	0.192
D5	80	.36	0.216	D5	86	.29	0.174
D6	80	.36	0.216	D6	86	.29	0.174

BROWNS RAVINE CREEK WATERSHED
LAG TIME USING HEC-1 HYDROGRAPH ANALYSIS

	EXISTING			FUTURE		
Drainage Basin	CN	Time of Concent (Hr.)	.60 Tc Lag (Hr.)	Drainage Basin	CN	Time of Concent (Hr.)	.60 Tc Lag (Hr.)
E	81	1.20	0.72	E	85	.81	0.486

TABLE "6"
ALDER CREEK WATERSHED
SUMMARY OF TIME OF CONCENTRATIONS (Tc)

	EXISTING			FUTURE	
Drainage Basin	Flow Type	Time (hours)	Drainage Basin	Flow Type	Time (hours)
A	SHEET	.118	A	SHEET	.118
	SHALLOW	.010		SHALLOW	.010
	MAIN	.125		MAIN	.125
	TOTALS	0.25		TOTALS	0.25

SOUTHERN WILLOW CREEK WATERSHED
SUMMARY OF TIME OF CONCENTRATIONS (Tc)

	EXISTING			FUTURE	
Drainage Basin	Flow Type	Time (hours)	Drainage Basin	Flow Type	Time (hours)
B1	SHEET	.156	B1	SHEET	.135
	SHALLOW	.014		SHALLOW	.010
	MAIN	.056		MAIN	.033
	TOTALS	0.23		TOTALS	0.18
B2	SHEET	.156	B2	SHEET	.135
	SHALLOW	.012		SHALLOW	.010
	MAIN	.069		MAIN	.046
	TOTALS	0.24		TOTALS	0.19
B3	SHEET	.156	B3	SHEET	.135
	SHALLOW	.014		SHALLOW	.012
	MAIN	.069		MAIN	.046
	TOTALS	0.24		TOTALS	0.19
B4	SHEET	.156	B4	SHEET	.135
	SHALLOW	.014		SHALLOW	.010
	MAIN	.083		MAIN	.056
	TOTALS	0.25		TOTALS	0.20
B5	SHEET	.216	B5	SHEET	.135
	SHALLOW	.024		SHALLOW	.024
	MAIN	.222		MAIN	.148
	TOTALS	0.46		TOTALS	0.31
B6	SHEET	.135	B6	SHEET	.135
	SHALLOW	.024		SHALLOW	.024
	MAIN	.250		MAIN	.150
	TOTALS	0.41		TOTALS	0.31
B7	SHEET	.135	B7	SHEET	.135
	SHALLOW	.024		SHALLOW	.024
	MAIN	.231		MAIN	.139
	TOTALS	0.39		TOTALS	0.30

TABLE "6"
(CONTINUED)
SOUTHERN WILLOW CREEK WATERSHED
SUMMARY OF TIME OF CONCENTRATIONS (Tc)

EXISTING			FUTURE		
Drainage Basin	Flow Type	Time (hours)	Drainage Basin	Flow Type	Time (hours)
B8	SHEET	.135	B8	SHEET	.135
	SHALLOW	.024		SHALLOW	.024
	MAIN	.241		MAIN	.144
	TOTALS	0.40		TOTALS	0.30
B9	SHEET	.137	B9	SHEET	.135
	SHALLOW	.024		SHALLOW	.024
	MAIN	.259		MAIN	.155
	TOTALS	0.42		TOTALS	0.31
B10	SHEET	.135	B10	SHEET	.135
	SHALLOW	.024		SHALLOW	.024
	MAIN	.185		MAIN	.111
	TOTALS	0.34		TOTALS	0.27
B11	SHEET	.135	B11	SHEET	.135
	SHALLOW	.024		SHALLOW	.024
	MAIN	.370		MAIN	.222
	TOTALS	0.53		TOTALS	0.38
B12	SHEET	.156	B12	SHEET	.135
	SHALLOW	.014		SHALLOW	.024
	MAIN	.148		MAIN	.089
	TOTALS	0.32		TOTALS	0.25

TABLE "6"
(CONTINUED)
CENTRAL HUMBUG CREEK WATERSHED
SUMMARY OF TIME OF CONCENTRATIONS (Tc)

EXISTING			FUTURE		
Drainage Basin	Flow Type	Time (hours)	Drainage Basin	Flow Type	Time (hours)
C1	SHEET	.131	C1	SHEET	.113
	SHALLOW	.027		SHALLOW	.022
	MAIN	.111		MAIN	.067
	TOTALS	0.27		TOTALS	0.20
C2	SHEET	.131	C2	SHEET	.113
	SHALLOW	.027		SHALLOW	.022
	MAIN	.065		MAIN	.039
	TOTALS	0.22		TOTALS	0.17
C3	SHEET	.131	C3	SHEET	.113
	SHALLOW	.027		SHALLOW	.022
	MAIN	.185		MAIN	.111
	TOTALS	0.34		TOTALS	0.25
C4	SHEET	.131	C4	SHEET	.113
	SHALLOW	.027		SHALLOW	.022
	MAIN	.648		MAIN	.486
	TOTALS	0.81		TOTALS	0.62
C5	SHEET	.137	C5	SHEET	.119
	SHALLOW	.030		SHALLOW	.024
	MAIN	.176		MAIN	.131
	TOTALS	0.34		TOTALS	0.27

TABLE "6"
(CONTINUED)
NORTHERN HUMBUG CREEK WATERSHED
SUMMARY OF TIME OF CONCENTRATIONS (Tc)

	EXISTING			FUTURE	
Drainage Basin	Flow Type	Time (hours)	Drainage Basin	Flow Type	Time (hours)
D1	SHEET	.238	D1	SHEET	.182
	SHALLOW	.027		SHALLOW	.024
	MAIN	.194		MAIN	.117
	TOTALS	0.46		TOTALS	0.32
D2	SHEET	.238	D2	SHEET	.182
	SHALLOW	.027		SHALLOW	.024
	MAIN	.139		MAIN	.083
	TOTALS	0.40		TOTALS	0.29
D3	SHEET	.282	D3	SHEET	.282
	SHALLOW	.027		SHALLOW	.031
	MAIN	.528		MAIN	.351
	TOTALS	0.84		TOTALS	0.66
D4	SHEET	.169	D4	SHEET	.137
	SHALLOW	.038		SHALLOW	.031
	MAIN	.222		MAIN	.148
	TOTALS	0.43		TOTALS	0.32
D5	SHEET	.189	D5	SHEET	.153
	SHALLOW	.030		SHALLOW	.024
	MAIN	.139		MAIN	.111
	TOTALS	0.36		TOTALS	0.29
D6	SHEET	.189	D6	SHEET	.153
	SHALLOW	.030		SHALLOW	.024
	MAIN	.139		MAIN	.111
	TOTALS	0.36		TOTALS	0.29

BROWNS RAVINE CREEK WATERSHED
SUMMARY OF TIME OF CONCENTRATIONS (Tc)

	EXISTING			FUTURE	
Drainage Basin	Flow Type	Time (hours)	Drainage Basin	Flow Type	Time (hours)
E	SHEET	.673	E	SHEET	.392
	SHALLOW	.027		SHALLOW	.022
	MAIN	.500		MAIN	.400
	TOTALS	1.20		TOTALS	0.81

EXHIBIT "B"

EXISTING DRAINAGE SHED MAP

EXHIBIT "B"
EXISTING DRAINAGE SHED MAP

DRAINAGE PLAN

LEGEND:

0 800 1200 2400

GRAPHIC SCALE

JULY, 1987

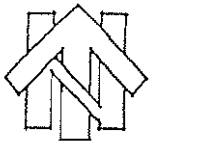
COOPER, THORNE & ASSOCIATES, INC.

EXHIBIT "A"
MASTER DRAINAGE PLAN

DRAINAGE PLAN

LEGEND:

DETENTION POND



0 800 1600 2400

GRAPHIC SCALE

JULY, 1987

COOPER, THORNE & ASSOCIATES, INC.

EXHIBIT "A"

MASTER DRAINAGE PLAN

EXHIBIT "A"
MASTER DRAINAGE PLAN

DRAINAGE PLAN

LEGEND:

DETENTION POND

0 800 1700 2400

GRAPHIC SCALE

JULY, 1997

COOPER, THORNE & ASSOCIATES, INC.

APPENDIX "A"

HEC-1 COMPUTER RUNS

10 AND 100 YEAR STORMS

EXISTING CONDITIONS

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+----------------------------------------+
*                                        *
*    FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*          SEPTEMBER 1990                *
*            VERSION 4.0                 *
*                                        *
*  RUN DATE  07/13/1997  TIME  16:34:48  *
*                                        *
******************************************
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******************************************
*                                        *
*    U.S. ARMY CORPS OF ENGINEERS        *
*    HYDROLOGIC ENGINEERING CENTER       *
*          609 SECOND STREET             *
*        DAVIS, CALIFORNIA 95616         *
*            (916) 756-1104              *
*                                        *
******************************************
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X    X  XXXXXXX   XXXXX          X
X    X  X        X     X        XX
X    X  X              X       X X
XXXXXXX  XXXX     X        XXXXX  X
X    X  X        X                X
X    X  X        X     X          X
X    X  XXXXXXX   XXXXX          XXX
```

THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KM.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.
THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 30 SEP 81. THIS IS THE FORTRAN77 VERSION
NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

1 HEC-1 INPUT PAGE 1

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LINE          ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10
   1          ID     PROMONTORY MASTER DRAINAGE STUDY
   2          ID     WILLOW CREEK AND HUMBUG CREEK WATERSHEDS TO THE EL DORADO COUNTY LINE
   3          ID     RUNOFF FOR EXISTING CONDITIONS DUE TO 10 YEAR 24-HOUR SCS TYPE I STORM
   4          ID     HEC 1 FILE 9706E10.DAT/OUT
   5          IT       5       0       0     300
   6          IO       5       1

   7          KK      B1  SUBBASIN B1
   8          KM          SUBBASIN B1 RUNOFF FOR 10 YEAR STORM
   9          BA   .0366
  10          BF       5      .1    1.05
  11          IN      30
  12          PB   2.511
  13          PC       0    .008    .017    .026    .035    .045    .055    .065    .076    .087
  14          PC    .099    .112    .126     .14    .156    .174    .194    .219    .254    .303
  15          PC    .515    .583    .624    .655    .682    .706    .728    .748    .766    .783
  16          PC    .799    .815    .833    .844    .857     .87    .882    .893    .905    .916
  17          PC    .926    .936    .946    .956    .965    .974    .983    .992       1
  18          LS       0      80
  19          UD    .138

  20          KK      B2  SUBBASIN B2
  21          KM          SUBBASIN B2 RUNOFF FOR 10 YEAR STORM
  22          BA   .0211
  23          LS       0      80
  24          UD    .144

  25          KK      B3  SUBBASIN B3
  26          KM          SUBBASIN B3 RUNOFF FOR 10 YEAR STORM
  27          BA   .0097
  28          LS       0      80
  29          UD    .144

  30          KK      B4  SUBBASIN B4
  31          KM          SUBBASIN B4 RUNOFF FOR 10 YEAR STORM
  32          BA   .0125
  33          LS       0      80
  34          UD     .15

  35          KK      B5  SUBBASIN B5
  36          KM          SUBBASIN B5 RUNOFF FOR 10 YEAR STORM
  37          BA   .0366
  38          LS       0      84
  39          UD   .2760

  40          KK      B6  SUBBASIN B6
  41          KM          SUBBASIN B6 RUNOFF FOR 10 YEAR STORM
  42          BA   .1555
  43          LS       0      83
  44          UD   .2460
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1 HEC-1 INPUT PAGE 2

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LINE          ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

  45          KK      B7  SUBBASIN B7
  46          KM          SUBBASIN B7 RUNOFF FOR 10 YEAR STORM
  47          BA   .0391
  48          LS       0      83
  49          UD    .234

  50          KK      B8  SUBBASIN B8
  51          KM          SUBBASIN B8 RUNOFF FOR 10 YEAR STORM
  52          BA   .1161
  53          LS       0      84
  54          UD     .24

  55          KK      B9  SUBBASIN B9
  56          KM          SUBBASIN B9 RUNOFF FOR 10 YEAR STORM
  57          BA   .0864
  58          LS       0      83
  59          UD    .252

  60          KK     B10  SUBBASIN B10
  61          KM          SUBBASIN B10 RUNOFF FOR 10 YEAR STORM
  62          BA   .0406
  63          LS       0      81
  64          UD    .204

  65          KK     B11  SUBBASIN B11
  66          KM          SUBBASIN B11 RUNOFF FOR 10 YEAR STORM
  67          BA   .2469
  68          LS       0      85
  69          UD    .318

  70          KK     B12  SUBBASIN B12
  71          KM          SUBBASIN B12 RUNOFF FOR 10 YEAR STORM
  72          BA   .0366
  73          LS       0      80
  74          UD    .192

  75          KK      C1  SUBBASIN C1
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          76          KM          SUBBASIN C1 RUNOFF FOR 10 YEAR STORM
          77          BA    .0255
          78          LS       0       80
          79          UD     .162

          80          KK       C2  SUBBASIN C2
          81          KM           SUBBASIN C2 RUNOFF FOR 10 YEAR STORM
          82          BA    .0302
          83          LS       0       80
          84          UD     .132

          85          KK       C3  SUBBASIN C3
          86          KM           SUBBASIN C3 RUNOFF FOR 10 YEAR STORM
          87          BA    .0525
          88          LS       0       80
          89          UD     .204
1                                          HEC-1 INPUT                                                    PAGE  3
        LINE          ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

          90          KK       C4  SUBBASIN C4
          91          KM           SUBBASIN C4 RUNOFF FOR 10 YEAR STORM
          92          BA    .7781
          93          LS       0       80
          94          UD     .486

          95          KK       C5  SUBBASIN C5
          96          KM           SUBBASIN C5 RUNOFF FOR 10 YEAR STORM
          97          BA    .0336
          98          LS       0       80
          99          UD     .204

         100          KK       D1  SUBBASIN D1
         101          KM           SUBBASIN D1 RUNOFF FOR 10 YEAR STORM
         102          BA    .0742
         103          LS       0       80
         104          UD     .276

         105          KK       D2  SUBBASIN D2
         106          KM           SUBBASIN D2 RUNOFF FOR 10 YEAR STORM
         107          BA    .0502
         108          LS       0       80
         109          UD      .24

         110          KK     COMB  COMBINE HYDROGRAPHS
         111          KM           COMBINE D1 AND D2
         112          HC       2

         113          KK       D3  SUBBASIN D3
         114          KM           SUBBASIN D3 RUNOFF FOR 10 YEAR STORM
         115          BA      .35
         116          LS       0       82
         117          UD     .504

         118          KK     COMB  COMBINE HYDROGRAPHS
         119          KM           COMBINED D1, D2 & D3
         120          HC       2

         121          KK     CHAN  CHANNEL ROUTING MUSKINGUM-CUNGE
         122          KM           ROUTE D1 - D3 COMBINED HYDROGRAPHS
         123          RD     1500   .0125      .08            TRAP       25       40

         124          KK       D4  SUBBASIN D4
         125          KM           SUBBASIN D4 RUNOFF FOR 10 YEAR STORM
         126          BA    .0683
         127          LS       0       82
         128          UD     .258

         129          KK     COMB  COMBINE HYDROGRAPHS
         130          KM           COMBINED D1, D2, D3 & D4
         131          HC       2
1                                          HEC-1 INPUT                                                    PAGE  4
        LINE          ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

         132          KK       D5  SUBBASIN D5
         133          KM           SUBBASIN D5 RUNOFF FOR 10 YEAR STORM
         134          BA    .0275
         135          LS       0       80
         136          UD     .216

         137          KK     COMB  COMBINE HYDROGRAPHS
         138          KM           COMBINED D1-D5
         139          HC       2

         140          KK       D6  SUBBASIN D6
         141          KM           SUBBASIN D6 RUNOFF FOR 10 YEAR STORM
         142          BA    .0245
         143          LS       0       80
         144          UD     .216

         145          KK        E  SUBBASIN E
         146          KM           SUBBASIN E RUNOFF FOR 10 YEAR STORM
         147          BA    .3472
         148          LS       0       81
         149          UD      .72

         150          KK        A  SUBBASIN A
         151          KM           SUBBASIN A RUNOFF FOR 10 YEAR STORM
         152          BA    .0128
         153          LS       0       80
         154          UD      .15
         155          KZ
```

```
1*************************************
*                                   *
*   FLOOD HYDROGRAPH PACKAGE (HEC-1)*
*         SEPTEMBER 1998            *
*           VERSION 4.0             *
*                                   *
*  RUN DATE  07/13/1999  TIME  14:34:48 *
*                                   *
*************************************
```

```
*************************************
*                                   *
*    U.S. ARMY CORPS OF ENGINEERS   *
*    HYDROLOGIC ENGINEERING CENTER  *
*          609 SECOND STREET        *
*        DAVIS, CALIFORNIA 95616    *
*             (916) 756-1104        *
*                                   *
*************************************
```

PROMONTORY MASTER DRAINAGE STUDY
WILLOW CREEK AND HUMBUG CREEK WATERSHEDS TO THE EL DORADO COUNTY LINE
RUNOFF FOR EXISTING CONDITIONS DUE TO 10 YEAR 24-HOUR SCS TYPE I STORM
HEC 1 FILE 9706E10.DAT/OUT

```
  6 IO          OUTPUT CONTROL VARIABLES
                     IPRNT         5  PRINT CONTROL
                     IPLOT         1  PLOT CONTROL
                     QSCAL        0.  HYDROGRAPH PLOT SCALE

    IT          HYDROGRAPH TIME DATA
```

NMIN		5	MINUTES IN COMPUTATION INTERVAL
IDATE	1	0	STARTING DATE
ITIME		0000	STARTING TIME
NQ		300	NUMBER OF HYDROGRAPH ORDINATES
NDDATE	2	0	ENDING DATE
NDTIME		0055	ENDING TIME
ICENT		19	CENTURY MARK

COMPUTATION INTERVAL .08 HOURS
TOTAL TIME BASE 24.92 HOURS

ENGLISH UNITS

DRAINAGE AREA	SQUARE MILES
PRECIPITATION DEPTH	INCHES
LENGTH, ELEVATION	FEET
FLOW	CUBIC FEET PER SECOND
STORAGE VOLUME	ACRE-FEET
SURFACE AREA	ACRES
TEMPERATURE	DEGREES FAHRENHEIT

1

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
HYDROGRAPH AT	B1	20.	10.00	7.	5.	4.	.04		
HYDROGRAPH AT	B2	8.	10.00	4.	3.	3.	.01		
HYDROGRAPH AT	B3	8.	10.00	4.	3.	3.	.01		
HYDROGRAPH AT	B4	9.	10.00	4.	3.	3.	.01		
HYDROGRAPH AT	B5	21.	10.08	8.	5.	5.	.04		
HYDROGRAPH AT	B6	79.	10.08	23.	11.	10.	.16		
HYDROGRAPH AT	B7	22.	10.08	8.	5.	5.	.04		
HYDROGRAPH AT	B8	63.	10.08	18.	9.	9.	.12		
HYDROGRAPH AT	B9	45.	10.08	14.	7.	7.	.09		
HYDROGRAPH AT	B10	22.	10.08	8.	5.	5.	.04		
HYDROGRAPH AT	B11	126.	10.17	37.	16.	16.	.25		
HYDROGRAPH AT	B12	19.	10.08	7.	5.	4.	.04		
HYDROGRAPH AT	C1	15.	10.00	6.	4.	4.	.03		
HYDROGRAPH AT	C2	13.	10.00	5.	4.	4.	.02		
HYDROGRAPH AT	C3	26.	10.08	9.	5.	5.	.05		
HYDROGRAPH AT	C4	252.	10.33	90.	37.	36.	.70		
HYDROGRAPH AT	C5	18.	10.08	7.	4.	4.	.03		
HYDROGRAPH AT	D1	33.	10.17	11.	6.	6.	.07		
HYDROGRAPH AT	D2	24.	10.08	8.	5.	5.	.05		
2 COMBINED AT	COMB	56.	10.08	20.	11.	11.	.12		
HYDROGRAPH AT	D3	126.	10.33	46.	20.	19.	.35		
2 COMBINED AT	COMB	172.	10.25	65.	31.	30.	.47		
ROUTED TO	CHAN	171.	10.42	65.	31.	30.	.47		
HYDROGRAPH AT	D4	34.	10.08	11.	6.	6.	.07		
2 COMBINED AT	COMB	194.	10.42	76.	37.	36.	.54		
HYDROGRAPH AT	D5	15.	10.08	6.	4.	4.	.03		
3 COMBINED AT	COMB	203.	10.42	82.	41.	40.	.57		
HYDROGRAPH AT	D6	14.	10.08	6.	4.	4.	.02		
HYDROGRAPH AT	E	105.	10.58	46.	20.	19.	.37		
HYDROGRAPH AT	A	9.	10.00	4.	4.	3.	.01		

1

SUMMARY OF KINEMATIC WAVE - MUSKINGUM-CUNGE ROUTING
(FLOW IS DIRECT RUNOFF WITHOUT BASE FLOW)

ISTAQ	ELEMENT	DT	PEAK	TIME TO PEAK	VOLUME	INTERPOLATED TO COMPUTATION INTERVAL DT	PEAK	TIME TO PEAK	VOLUME
		(MIN)	(CFS)	(MIN)	(IN)	(MIN)	(CFS)	(MIN)	(IN)
CHAN	MAIN	5.00	171.45	625.00	2.46	5.00	171.45	625.00	2.46

CONTINUITY SUMMARY (AC-FT) - INFLOW= .6215E+02 EXCESS= .0000E+00 OUTFLOW= .6246E+02 BASIN STORAGE=-.1740E+00 PERCENT ERROR= .0

*** NORMAL END OF HEC-1 ***

```
1*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*         SEPTEMBER 1990                *
*          VERSION 4.0                  *
*                                       *
*  RUN DATE  07/13/1997  TIME  16:50:09 *
*                                       *
*****************************************

*****************************************
*                                       *
*   U.S. ARMY CORPS OF ENGINEERS        *
*   HYDROLOGIC ENGINEERING CENTER       *
*        609 SECOND STREET              *
*      DAVIS, CALIFORNIA 95616          *
*          (916) 756-1104               *
*                                       *
*****************************************

X    X  XXXXXXX   XXXXX          X
X    X  X        X     X        XX
X    X  X              X       X X
XXXXXXX  XXXX         X       X  X
X    X  X              X       X  X
X    X  X        X     X       X  X
X    X  XXXXXXX   XXXXX        XXX

THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KN.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.
THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL   LOSS RATE:GREEN AND AMPT INFILTRATION
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

1                                   HEC-1 INPUT                                    PAGE  1

LINE          ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

   1          ID     PROMONTORY MASTER DRAINAGE STUDY
   2          ID     WILLOW CREEK AND HUMBUG CREEK WATERSHEDS TO THE EL DORADO COUNTY LINE
   3          ID     RUNOFF FOR EXISTING CONDITIONS DUE TO 100 YEAR 24-HOUR SCS TYPE I STORM
   4          ID     HEC 1 FILE 9706E100.DAT/OUT
   5          IT       5       0       0     300
   6          IO       5       1

   7          KK      B1  SUBBASIN B1
   8          KM          SUBBASIN B1 RUNOFF FOR 10 YEAR STORM
   9          BA   .0366
  10          BF      10      .1    1.05
  11          IN      30
  12          PB   4.977
  13          PC       0    .008    .017    .026    .035    .045    .055    .065    .076    .087
  14          PC    .099    .112    .126    .14     .156    .174    .194    .219    .254    .303
  15          PC    .515    .583    .624    .655    .682    .706    .728    .748    .766    .783
  16          PC    .799    .815    .833    .844    .857     .87    .882    .893    .905    .916
  17          PC    .926    .936    .946    .956    .965    .974    .983    .992       1
  18          LS       0     80
  19          UD   .138

  20          KK      B2  SUBBASIN B2
  21          KM          SUBBASIN B2 RUNOFF FOR 100 YEAR STORM
  22          BA   .0111
  23          LS       0      80
  24          UD    .144

  25          KK      B3  SUBBASIN B3
  26          KM          SUBBASIN B3 RUNOFF FOR 100 YEAR STORM
  27          BA   .0097
  28          LS       0      80
  29          UD    .144

  30          KK      B4  SUBBASIN B4
  31          KM          SUBBASIN B4 RUNOFF FOR 100 YEAR STORM
  32          BA   .0125
  33          LS       0      80
  34          UD     .15

  35          KK      B5  SUBBASIN B5
  36          KM          SUBBASIN B5 RUNOFF FOR 100 YEAR STORM
  37          BA   .0366
  38          LS       0      84
  39          UD   .2760

  40          KK      B6  SUBBASIN B6
  41          KM          SUBBASIN B6 RUNOFF FOR 100 YEAR STORM
  42          BA   .1555
  43          LS       0      83
  44          UD   .2460

1                                   HEC-1 INPUT                                    PAGE  2

LINE          ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

  45          KK      B7  SUBBASIN B7
  46          KM          SUBBASIN B7 RUNOFF FOR 100 YEAR STORM
  47          BA   .0391
  48          LS       0      83
  49          UD    .234

  50          KK      B8  SUBBASIN B8
  51          KM          SUBBASIN B8 RUNOFF FOR 100 YEAR STORM
  52          BA   .2161
  53          LS       0      84
  54          UD     .24

  55          KK      B9  SUBBASIN B9
  56          KM          SUBBASIN B9 RUNOFF FOR 100 YEAR STORM
  57          BA   .0844
  58          LS       0      83
  59          UD    .252

  60          KK     B10  SUBBASIN B10
  61          KM          SUBBASIN B10 RUNOFF FOR 100 YEAR STORM
  62          BA   .0406
  63          LS       0      81
  64          UD    .204

  65          KK     B11  SUBBASIN B11
  66          KM          SUBBASIN B11 RUNOFF FOR 100 YEAR STORM
  67          BA   .2469
  68          LS       0      85
  69          UD    .318

  70          KK     B12  SUBBASIN B12
  71          KM          SUBBASIN B12 RUNOFF FOR 100 YEAR STORM
  72          BA   .0366
  73          LS       0      80
  74          UD    .192

  75          KK      C1  SUBBASIN C1
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          76          KM          SUBBASIN C1 RUNOFF FOR 100 YEAR STORM
          77          BA    .0255
          78          LS       0       80
          79          UD     .162

          80          KK       C2   SUBBASIN C2
          81          KM            SUBBASIN C2 RUNOFF FOR 100 YEAR STORM
          82          BA    .0202
          83          LS       0       80
          84          UD     .132

          85          KK       C3   SUBBASIN C3
          86          KM            SUBBASIN C3 RUNOFF FOR 100 YEAR STORM
          87          BA    .0525
          88          LS       0       80
          89          UD     .204
1                                          HEC-1 INPUT                                                    PAGE  3
        LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

          90          KK       C4   SUBBASIN C4
          91          KM            SUBBASIN C4 RUNOFF FOR 100 YEAR STORM
          92          BA    .7781
          93          LS       0       80
          94          UD     .686

          95          KK       C5   SUBBASIN C5
          96          KM            SUBBASIN C5 RUNOFF FOR 100 YEAR STORM
          97          BA    .0336
          98          LS       0       80
          99          UD     .204

         100          KK       D1   SUBBASIN D1
         101          KM            SUBBASIN D1 RUNOFF FOR 100 YEAR STORM
         102          BA    .0742
         103          LS       0       80
         104          UD     .276

         105          KK       D2   SUBBASIN D2
         106          KM            SUBBASIN D2 RUNOFF FOR 100 YEAR STORM
         107          BA    .0502
         108          LS       0       80
         109          UD      .24

         110          KK     COMB   COMBINE HYDROGRAPHS
         111          KM            COMBINE D1 AND D2
         112          HC       2

         113          KK       D3   SUBBASIN D3
         114          KM            SUBBASIN D3 RUNOFF FOR 100 YEAR STORM
         115          BA      .35
         116          LS       0       82
         117          UD     .504

         118          KK     COMB   COMBINE HYDROGRAPHS
         119          KM            COMBINED D1, D2 & D3
         120          HC       2

         121          KK     CHAN   CHANNEL ROUTING MUSKINGUM-CUNGE
         122          KM            ROUTE D1 - D3 COMBINED HYDROGRAPHS
         123          RD     1500    .0125     .08          TRAP      25      40

         124          KK       D4   SUBBASIN D4
         125          KM            SUBBASIN D4 RUNOFF FOR 100 YEAR STORM
         126          BA    .0681
         127          LS       0       82
         128          UD     .258

         129          KK     COMB   COMBINE HYDROGRAPHS
         130          KM            COMBINED D1, D2, D3 & D4
         131          HC       2
1                                          HEC-1 INPUT                                                    PAGE  4
        LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

         132          KK       D5   SUBBASIN D5
         133          KM            SUBBASIN D5 RUNOFF FOR 100 YEAR STORM
         134          BA    .0275
         135          LS       0       80
         136          UD     .216

         137          KK     COMB   COMBINE HYDROGRAPHS
         138          KM            COMBINED D1-D5
         139          HC       2

         140          KK       D6   SUBBASIN D6
         141          KM            SUBBASIN D6 RUNOFF FOR 100 YEAR STORM
         142          BA    .0245
         143          LS       0       80
         144          UD     .216

         145          KK        E   SUBBASIN E
         146          KM            SUBBASIN E RUNOFF FOR 100 YEAR STORM
         147          BA    .3672
         148          LS       0       81
         149          UD      .72

         150          KK        A   SUBBASIN A
         151          KM            SUBBASIN A RUNOFF FOR 100 YEAR STORM
         152          BA    .0128
         153          LS       0       80
         154          UD      .15
         155          ZZ
```

```
1**********************************************
*                                            *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)        *
*          SEPTEMBER 1990                    *
*            VERSION 4.0                     *
*                                            *
*  RUN DATE  07/13/1997  TIME  16:50:09      *
*                                            *
**********************************************
```

```
**********************************************
*                                            *
*     U.S. ARMY CORPS OF ENGINEERS           *
*     HYDROLOGIC ENGINEERING CENTER          *
*          609 SECOND STREET                 *
*        DAVIS, CALIFORNIA 95616             *
*          (916) 756-1104                    *
*                                            *
**********************************************
```

PROMONTORY MASTER DRAINAGE STUDY
WILLOW CREEK AND HUMBUG CREEK WATERSHEDS TO THE EL DORADO COUNTY LINE
RUNOFF FOR EXISTING CONDITIONS DUE TO 100 YEAR 24-HOUR SCS TYPE I STORM
HEC 1 FILE 9706E100.DAT/OUT

```
  6 IO          OUTPUT CONTROL VARIABLES
                     IPRNT          5  PRINT CONTROL
                     IPLOT          1  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE

    IT          HYDROGRAPH TIME DATA
```

NMIN		5	MINUTES IN COMPUTATION INTERVAL
IDATE	1	0	STARTING DATE
ITIME		0000	STARTING TIME
NQ		300	NUMBER OF HYDROGRAPH ORDINATES
NDDATE	2	0	ENDING DATE
NDTIME		0055	ENDING TIME
ICENT		19	CENTURY MARK

COMPUTATION INTERVAL .08 HOURS
TOTAL TIME BASE 36.92 HOURS

ENGLISH UNITS

DRAINAGE AREA	SQUARE MILES
PRECIPITATION DEPTH	INCHES
LENGTH, ELEVATION	FEET
FLOW	CUBIC FEET PER SECOND
STORAGE VOLUME	ACRE-FEET
SURFACE AREA	ACRES
TEMPERATURE	DEGREES FAHRENHEIT

1

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
HYDROGRAPH AT	B1	37.	10.00	13.	9.	9.	.04		
HYDROGRAPH AT	B2	16.	10.00	9.	7.	7.	.01		
HYDROGRAPH AT	B3	14.	10.00	9.	7.	7.	.01		
HYDROGRAPH AT	B4	17.	10.00	9.	7.	7.	.01		
HYDROGRAPH AT	B5	37.	10.08	14.	9.	9.	.04		
HYDROGRAPH AT	B6	138.	10.08	39.	19.	18.	.16		
HYDROGRAPH AT	B7	40.	10.08	14.	9.	9.	.04		
HYDROGRAPH AT	B8	109.	10.08	32.	16.	16.	.12		
HYDROGRAPH AT	B9	79.	10.08	24.	13.	13.	.09		
HYDROGRAPH AT	B10	40.	10.08	14.	9.	9.	.04		
HYDROGRAPH AT	B11	213.	10.17	63.	28.	27.	.25		
HYDROGRAPH AT	B12	36.	10.08	13.	9.	9.	.04		
HYDROGRAPH AT	C1	27.	10.00	11.	8.	8.	.03		
HYDROGRAPH AT	C2	23.	10.00	10.	7.	7.	.02		
HYDROGRAPH AT	C3	48.	10.08	16.	10.	10.	.05		
HYDROGRAPH AT	C4	467.	10.33	159.	66.	64.	.78		
HYDROGRAPH AT	C5	33.	10.08	12.	8.	8.	.03		
HYDROGRAPH AT	D1	60.	10.08	20.	12.	11.	.07		
HYDROGRAPH AT	D2	45.	10.08	16.	10.	10.	.05		
2 COMBINED AT	COMB	105.	10.08	36.	21.	21.	.12		
HYDROGRAPH AT	D3	226.	10.33	79.	34.	33.	.35		
2 COMBINED AT	COMB	312.	10.25	115.	56.	54.	.47		
ROUTED TO	CHAN	312.	10.42	115.	56.	54.	.47		
HYDROGRAPH AT	D4	61.	10.08	20.	11.	11.	.07		
2 COMBINED AT	COMB	353.	10.33	135.	67.	66.	.54		
HYDROGRAPH AT	D5	28.	10.08	11.	8.	8.	.03		
2 COMBINED AT	COMB	371.	10.33	146.	75.	74.	.57		
HYDROGRAPH AT	D6	35.	10.08	11.	8.	8.	.02		
HYDROGRAPH AT	E	193.	10.58	80.	35.	34.	.37		
HYDROGRAPH AT	A	17.	10.00	9.	7.	7.	.01		

1

SUMMARY OF KINEMATIC WAVE - MUSKINGUM-CUNGE ROUTING
(FLOW IS DIRECT RUNOFF WITHOUT BASE FLOW)

ISTAQ	ELEMENT	DT	PEAK	TIME TO PEAK	VOLUME	DT	INTERPOLATED TO COMPUTATION INTERVAL PEAK	TIME TO PEAK	VOLUME
		(MIN)	(CFS)	(MIN)	(IN)	(MIN)	(CFS)	(MIN)	(IN)
CHAN	MAIN	5.00	311.90	625.00	4.43	5.00	311.90	625.00	4.43

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1120E+03 EXCESS= .0000E+00 OUTFLOW= .1124E+03 BASIN STORAGE=-.3632E+00 PERCENT ERROR= .0

*** NORMAL END OF HEC-1 ***

10 AND 100 YEAR STORMS

FUTURE CONDITIONS

```
1*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*         SEPTEMBER 1990                *
*           VERSION 4.0                 *
*                                       *
*  RUN DATE  07/13/1997  TIME  17:20:54 *
*                                       *
*****************************************
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```
*****************************************
*                                       *
*  U.S. ARMY CORPS OF ENGINEERS         *
*  HYDROLOGIC ENGINEERING CENTER        *
*     609 SECOND STREET                 *
*   DAVIS, CALIFORNIA 95616             *
*       (916) 756-1104                  *
*                                       *
*****************************************
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```
X     X  XXXXXXX   XXXXX          X
X     X  X        X     X        XX
X     X  X        X              X
XXXXXXX  XXXX     X        XXXXX  X
X     X  X        X              X
X     X  X        X     X        X
X     X  XXXXXXX  XXXXX          XXX
```

THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.
THE DEFINITION OF -ANSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

1 HEC-1 INPUT PAGE 1

```
LINE          ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

   1          ID     PROMONTORY MASTER DRAINAGE STUDY
   2          ID     WILLOW CREEK AND HUMBUG CREEK WATERSHEDS TO THE EL DORADO COUNTY LINE
   3          ID     RUNOFF FOR FUTURE CONDITIONS DUE TO 10 YEAR 24-HOUR SCS TYPE I STORM
   4          ID     FOR NON-PARTICIPANTS ASSUME FUTURE RUNOFF IS UNMITIGATED
   5          ID     (CHANNEL ROUTING BY MUSKINGUM CUNGE METHOD)
   6          ID     HEC 1 FILE 9706D10.DAT/OUT
   7          IT       $       0       0     300
   8          IO       5       1

   9          KK      B1  SUBBASIN B1
  10          KM          SUBBASIN B1 RUNOFF FOR 10 YEAR STORM
  11          BA   .0366
  12          BF       $      .1    1.05
  13          IN      30
  14          PB   3.511
  15          PC       0    .008    .017    .026    .035    .045    .055    .065    .076    .087
  16          PC    .099    .112    .126    .14     .156    .174    .194    .219    .254    .303
  17          PC    .515    .583    .624    .655    .682    .706    .728    .748    .766    .783
  18          PC    .799    .815    .833    .844    .857     .87    .882    .893    .905    .916
  19          PC    .926    .936    .946    .956    .965    .974    .983    .992       1
  20          LS       0      81
  21          UD    .108

  22          KK      B2  SUBBASIN B2
  23          KM          SUBBASIN B2 RUNOFF FOR 10 YEAR STORM
  24          BA   .0111
  25          LS       0      81
  26          UD    .114

  27          KK      B3  SUBBASIN B3
  28          KM          SUBBASIN B3 RUNOFF FOR 10 YEAR STORM
  29          BA   .0097
  30          LS       0      81
  31          UD    .114

  32          KK      B4  SUBBASIN B4
  33          KM          SUBBASIN B4 RUNOFF FOR 10 YEAR STORM
  34          BA   .0125
  35          LS       0      81
  36          UD     .12

  37          KK      B5  SUBBASIN B5
  38          KM          SUBBASIN B5 RUNOFF FOR 10 YEAR STORM
  39          BA   .0366
  40          LS       0      84
  41          UD    .106

  42          KK      B6  SUBBASIN B6
  43          KM          SUBBASIN B6 RUNOFF FOR 10 YEAR STORM
  44          BA   .1555
  45          LS       0      84
  46          UD    .106
```

1 HEC-1 INPUT PAGE 2

```
LINE          ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

  47          KK      B7  SUBBASIN B7
  48          KM          SUBBASIN B7 RUNOFF FOR 10 YEAR STORM
  49          BA   .0391
  50          LS       0      84
  51          UD     .19

  52          KK      B8  SUBBASIN B8
  53          KM          SUBBASIN B8 RUNOFF FOR 10 YEAR STORM
  54          BA   .1161
  55          LS       0      85
  56          UD     .18

  57          KK      B9  SUBBASIN B9
  58          KM          SUBBASIN B9 RUNOFF FOR 10 YEAR STORM
  59          BA   .0864
  60          LS       0      85
  61          UD    .186

  62          KK     B10  SUBBASIN B10
  63          KM          SUBBASIN B10 RUNOFF FOR 10 YEAR STORM
  64          BA   .0406
  65          LS       0      85
  66          UD    .162

  67          KK     B11  SUBBASIN B11
  68          KM          SUBBASIN B11 RUNOFF FOR 10 YEAR STORM
  69          BA   .2469
  70          LS       0      85
  71          UD    .228

  72          KK     B12  SUBBASIN B12
  73          KM          SUBBASIN B12 RUNOFF FOR 10 YEAR STORM
  74          BA   .0366
  75          LS       0      84
  76          UD     .15
```

```
                77          KK      C1  SUBBASIN C1
                78          KM          SUBBASIN C1 RUNOFF FOR 10 YEAR STORM
                79          BA    .0255
                80          LS       0      84
                81          UD     .12

                82          KK      C2  SUBBASIN C2
                83          KM          SUBBASIN C2 RUNOFF FOR 10 YEAR STORM
                84          BA    .0202
                85          LS       0      84
                86          UD     .102

                87          KK      C3  SUBBASIN C3
                88          KM          SUBBASIN C3 RUNOFF FOR 10 YEAR STORM
                89          BA    .0535
                90          LS       0      84
                91          UD     .15
1                                                  HEC-1 INPUT                                                  PAGE  3

              LINE          ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

                92          KK      C4  SUBBASIN C4
                93          KM          SUBBASIN C4 RUNOFF FOR 10 YEAR STORM
                94          BA    .7781
                95          LS       0      85
                96          UD     .372

                97          KK      C5  SUBBASIN C5
                98          KM          SUBBASIN C5 RUNOFF FOR 10 YEAR STORM
                99          BA    .0336
               100          LS       0      87
               101          UD     .162

               102          KK      D1  SUBBASIN D1
               103          KM          SUBBASIN D1 RUNOFF FOR 10 YEAR STORM
               104          BA    .0742
               105          LS       0      85
               106          UD     .192

               107          KK      D2  SUBBASIN D2
               108          KM          SUBBASIN D2 RUNOFF FOR 10 YEAR STORM
               109          BA    .0501
               110          LS       0      86
               111          UD     .174

               112          KK    COMB  COMBINE HYDROGRAPHS
               113          KM          COMBINE D1 AND D2
               114          HC       2

               115          KK      D3  SUBBASIN D3
               116          KM          SUBBASIN D3 RUNOFF FOR 10 YEAR STORM
               117          BA     .35
               118          LS       0      86
               119          UD     .396

               120          KK    COMB  COMBINE HYDROGRAPHS
               121          KM          COMBINED D1, D2 & D3
               122          HC       2

               123          KK    CHAN  CHANNEL ROUTING MUSKINGUM-CUNGE
               124          KM          ROUTE D1 - D3 COMBINED HYDROGRAPHS
               125          RD    1500   .0125     .08            TRAP       25       40

               126          KK      D4  SUBBASIN D4
               127          KM          SUBBASIN D4 RUNOFF FOR 10 YEAR STORM
               128          BA    .0683
               129          LS       0      86
               130          UD     .192

               131          KK    COMB  COMBINE HYDROGRAPHS
               132          KM          COMBINED D1, D2, D3 & D4
               133          HC       2
1                                                  HEC-1 INPUT                                                  PAGE  4

              LINE          ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

               134          KK      D5  SUBBASIN D5
               135          KM          SUBBASIN D5 RUNOFF FOR 10 YEAR STORM
               136          BA    .0275
               137          LS       0      86
               138          UD     .174

               139          KK    COMB  COMBINE HYDROGRAPHS
               140          KM          COMBINED D1-D5
               141          HC       2

               142          KK      D6  SUBBASIN D6
               143          KM          SUBBASIN D6 RUNOFF FOR 10 YEAR STORM
               144          BA    .0245
               145          LS       0      86
               146          UD     .174

               147          KK       E  SUBBASIN E
               148          KM          SUBBASIN E RUNOFF FOR 10 YEAR STORM
               149          BA    .3672
               150          LS       0      85
               151          UD     .686

               152          KK       A  SUBBASIN A
               153          KM          SUBBASIN A RUNOFF FOR 10 YEAR STORM
               154          BA    .0128
               155          LS       0      80
               156          UD     .15
               157          ZZ
```

```
+*****************************************+
*                                         *
*                                         *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)     *
*         SEPTEMBER 1990                  *
*           VERSION 4.0                   *
*                                         *
*                                         *
* RUN DATE  07/13/1997  TIME  17:20:54    *
*                                         *
*                                         *
+*****************************************+
```

```
+*****************************************+
*                                         *
*                                         *
*   U.S. ARMY CORPS OF ENGINEERS          *
*   HYDROLOGIC ENGINEERING CENTER         *
*        609 SECOND STREET                *
*      DAVIS, CALIFORNIA 95616            *
*         (916) 756-1104                  *
*                                         *
*                                         *
+*****************************************+
```

PROMONTORY MASTER DRAINAGE STUDY
WILLOW CREEK AND HUMBUG CREEK WATERSHEDS TO THE EL DORADO COUNTY LINE
RUNOFF FOR FUTURE CONDITIONS DUE TO 10 YEAR 24-HOUR SCS TYPE I STORM
FOR NON-PARTICIPANTS ASSUME FUTURE RUNOFF IS UNMITIGATED
(CHANNEL ROUTING BY MUSKINGUM CUNGE METHOD)
HEC 1 FILE 97D6D10.DAT/OUT

```
 0 IO          OUTPUT CONTROL VARIABLES
                  IPRNT         5  PRINT CONTROL
```

10 AND 100 YEAR STORMS

FUTURE CONDITIONS/MITIGATED

```
1*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*         SEPTEMBER 1990                *
*           VERSION 4.0                 *
*                                       *
*  RUN DATE  07/13/1997  TIME  16:46:29 *
*                                       *
*****************************************
```

```
*****************************************
*                                       *
*   U.S. ARMY CORPS OF ENGINEERS        *
*   HYDROLOGIC ENGINEERING CENTER       *
*        609 SECOND STREET              *
*      DAVIS, CALIFORNIA 95616          *
*          (916) 756-1104               *
*                                       *
*****************************************
```

```
X    X  XXXXXXX   XXXXX          X
X    X  X        X     X        XX
X    X  X              X       X
XXXXXXX  XXXX         X   XXXXX  X
X    X  X              X        X
X    X  X        X     X        X
X    X  XXXXXXX   XXXXX         XXX
```

THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.
THE DEFINITION OF -ANSWK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

1 HEC-1 INPUT PAGE 1

```
LINE          ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

   1          ID     PROMONTORY MASTER DRAINAGE STUDY
   2          ID     WILLOW CREEK AND RUMBUG CREEK WATERSHEDS TO THE EL DORADO COUNTY LINE
   3          ID     RUNOFF FOR FUTURE CONDITIONS DUE TO 10 YEAR 24-HOUR SCS TYPE I STORM
   4          ID     FOR NON-PARTICIPANTS ASSUME FUTURE RUNOFF IS MITIGATED
   5          ID     (CHANNEL ROUTING BY MUSKINGUM-CUNGE METHOD)
   6          ID     HEC 1 FILE 9706PD10.DAT/OUT
   7          IT     5       0       0     300
   8          IO     5       1

   9          KK       B1  SUBBASIN B1
  10          KM           SUBBASIN B1 RUNOFF FOR 10 YEAR STORM
  11          BA   .0366
  12          BF     5         .1    1.05
  13          IN     30
  14          PB  3.511
  15          PC     0      .008    .017    .026    .035    .045    .055    .065    .076    .087
  16          PC   .099      .112    .126     .14    .156    .174    .194    .219    .254    .303
  17          PC   .515      .583    .624    .655    .682    .706    .728    .748    .766    .783
  18          PC   .799      .815    .833    .844    .857     .87    .882    .893    .905    .916
  19          PC   .926      .936    .946    .956    .965    .974    .983    .992       1
  20          LS     0        81
  21          UD   .108

  22          KK       B2  SUBBASIN B2
  23          KM           SUBBASIN B2 RUNOFF FOR 10 YEAR STORM
  24          BA   .0111
  25          LS     0        81
  26          UD   .114

  27          KK       B3  SUBBASIN B3
  28          KM           SUBBASIN B3 RUNOFF FOR 10 YEAR STORM
  29          BA   .0097
  30          LS     0        81
  31          UD   .114

  32          KK       B4  SUBBASIN B4
  33          KM           SUBBASIN B4 RUNOFF FOR 10 YEAR STORM
  34          BA   .0125
  35          LS     0        81
  36          UD    .13

  37          KK       B5  SUBBASIN B5
  38          KM           SUBBASIN B5 RUNOFF FOR 10 YEAR STORM
  39          BA   .0366
  40          LS     0        84
  41          UD   .186

  42          KK       B6  SUBBASIN B6
  43          KM           SUBBASIN B6 RUNOFF FOR 10 YEAR STORM
  44          BA   .1555
  45          LS     0        84
  46          UD   .186
```

1 HEC-1 INPUT PAGE 2

```
LINE          ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

  47          KK       B7  SUBBASIN B7
  48          KM           SUBBASIN B7 RUNOFF FOR 10 YEAR STORM
  49          BA   .0391
  50          LS     0        84
  51          UD    .18

  52          KK       B8  SUBBASIN B8
  53          KM           SUBBASIN B8 RUNOFF FOR 10 YEAR STORM
  54          BA   .1161
  55          LS     0        85
  56          UD    .18

  57          KK       B9  SUBBASIN B9
  58          KM           SUBBASIN B9 RUNOFF FOR 10 YEAR STORM
  59          BA   .0864
  60          LS     0        85
  61          UD   .186

  62          KK      B10  SUBBASIN B10
  63          KM           SUBBASIN B10 RUNOFF FOR 10 YEAR STORM
  64          BA   .0406
  65          LS     0        85
  66          UD   .162

  67          KK      B11  SUBBASIN B11
  68          KM           SUBBASIN B11 RUNOFF FOR 10 YEAR STORM
  69          BA   .2469
  70          LS     0        85
  71          UD   .228

  72          KK      B12  SUBBASIN B12
  73          KM           SUBBASIN B12 RUNOFF FOR 10 YEAR STORM
  74          BA   .0366
  75          LS     0        84
  76          UD    .15
```

```
   77          KK      C1  SUBBASIN C1
   78          KM          SUBBASIN C1 RUNOFF FOR 10 YEAR STORM
   79          BA   .0255
   80          LS       0      84
   81          UD     .12

   82          KK      C2  SUBBASIN C2
   83          KM          SUBBASIN C2 RUNOFF FOR 10 YEAR STORM
   84          BA   .0202
   85          LS       0      84
   86          UD     .102

   87          KK      C3  SUBBASIN C3
   88          KM          SUBBASIN C3 RUNOFF FOR 10 YEAR STORM
   89          BA   .0525
   90          LS       0      84
   91          UD     .15
1                                        HEC-1 INPUT                                                    PAGE  3
        LINE          ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

   92          KK      C4  SUBBASIN C4
   93          KM          SUBBASIN C4 RUNOFF FOR 10 YEAR STORM
   94          BA   .7781
   95          LS       0      85
   96          UD     .372
               *

   97          KK    POND  ROUTE THROUGH DETENTION POND
   98          KM          POND OUTLET WITH 12", 36" AND 42" PIPES
   99          RS       1    ELEV     415
  100          SV       0    0.37    2.68    5.77    9.41   13.50   17.92   22.81
  101          SE     415     416     418     420     422     424     426     428
  102          SQ       0      84     145     187     222     252     279     303
  103          SE     415     416     418     420     422     424     426     428
               *

  104          KK      C5  SUBBASIN C5
  105          KM          SUBBASIN C5 RUNOFF FOR 10 YEAR STORM
  106          BA   .0336
  107          LS       0      87
  108          UD     .162

  109          KK      D1  SUBBASIN D1
  110          KM          SUBBASIN D1 RUNOFF FOR 10 YEAR STORM
  111          BA   .0742
  112          LS       0      85
  113          UD     .192

  114          KK      D2  SUBBASIN D2
  115          KM          SUBBASIN D2 RUNOFF FOR 10 YEAR STORM
  116          BA   .0502
  117          LS       0      86
  118          UD     .174

  119          KK    COMB  COMBINE HYDROGRAPHS
  120          KM          COMBINE D1 AND D2
  121          HC       2

  122          KK      D3  SUBBASIN D3
  123          KM          SUBBASIN D3 RUNOFF FOR 10 YEAR STORM
  124          BA     .35
  125          LS       0      86
  126          UD     .396

  127          KK    COMB  COMBINE HYDROGRAPHS
  128          KM          COMBINED D1, D2 & D3
  129          HC       2

  130          KK    CHAN  CHANNEL ROUTING MUSKINGUM-CUNGE
  131          KM          TOURE D1 - D3 COMBINED HYDROGRAPHS
  132          RD    1500   .0125     .08          TRAP      25      40
1                                        HEC-1 INPUT                                                    PAGE  4
        LINE          ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

  133          KK      D4  SUBBASIN D4
  134          KM          SUBBASIN D4 RUNOFF FOR 10 YEAR STORM
  135          BA   .0603
  136          LS       0      86
  137          UD     .192

  138          KK    COMB  COMBINE HYDROGRAPHS
  139          KM          COMBINED D1, D2, D3 & D4
  140          HC       2

  141          KK      D5  SUBBASIN D5
  142          KM          SUBBASIN D5 RUNOFF FOR 10 YEAR STORM
  143          BA   .0275
  144          LS       0      86
  145          UD     .274

  146          KK    COMB  COMBINE HYDROGRAPHS
  147          KM          COMBINED D1-D5
  148          HC       2

  149          KK      D6  SUBBASIN D6
  150          KM          SUBBASIN D6 RUNOFF FOR 10 YEAR STORM
  151          BA   .0245
  152          LS       0      86
  153          UD     .174

  154          KK       E  SUBBASIN E
  155          KM          SUBBASIN E RUNOFF FOR 10 YEAR STORM
  156          BA   .3672
  157          LS       0      85
  158          UD     .484
               *

  159          KK   POND2  ROUTE THROUGH DETENTION POND
  160          KM          POND OUTLET WITH 1-12", 36" AND 36" PIPES
  161          RS       1    ELEV     539
  162          SV       0     .09     .64    1.60    2.80    4.32    6.22     8.5
  163          SE     539     540     542     544     546     548     550     552
  164          SQ       0    36.6    63.5    81.8    96.9   109.8   120.7   129.5
  165          SE     539     540     542     544     546     548     550     552
               *

  166          KK       A  SUBBASIN A
  167          KM          SUBBASIN A RUNOFF FOR 10 YEAR STORM
  168          BA   .0128
  169          LS       0      80
  170          UD     .15
  171          ZZ
1**************************************                **************************************
*                                    *                *                                    *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)*                *    U.S. ARMY CORPS OF ENGINEERS    *
```

```
          SEPTEMBER 1990                    HYDROLOGIC ENGINEERING CENTER
          VERSION 4.0                          609 SECOND STREET
                                               DAVIS, CALIFORNIA 95616
 RUN DATE  07/13/1997  TIME  16:46:29          (916) 756-1104
```

PROMONTORY MASTER DRAINAGE STUDY
WILLOW CREEK AND HUMBUG CREEK WATERSHEDS TO THE EL DORADO COUNTY LINE
RUNOFF FOR FUTURE CONDITIONS DUE TO 10 YEAR 24-HOUR SCS TYPE I STORM
FOR NON-PARTICIPANTS ASSUME FUTURE RUNOFF IS MITIGATED
(CHANNEL ROUTING BY MUSKINGUM-CUNGE METHOD)
HEC 1 FILE 9706PD10.DAT/OUT

```
  8 IO        OUTPUT CONTROL VARIABLES
                IPRNT        5  PRINT CONTROL
                IPLOT        1  PLOT CONTROL
                QSCAL        0. HYDROGRAPH PLOT SCALE

   IT         HYDROGRAPH TIME DATA
                NMIN         5  MINUTES IN COMPUTATION INTERVAL
                IDATE        1  0  STARTING DATE
                ITIME        0000  STARTING TIME
                NQ           300  NUMBER OF HYDROGRAPH ORDINATES
                NDDATE       2  0  ENDING DATE
                NDTIME       0055  ENDING TIME
                ICENT        19  CENTURY MARK

              COMPUTATION INTERVAL      .08 HOURS
                 TOTAL TIME BASE    24.92 HOURS

        ENGLISH UNITS
             DRAINAGE AREA          SQUARE MILES
             PRECIPITATION DEPTH    INCHES
             LENGTH, ELEVATION      FEET
             FLOW                   CUBIC FEET PER SECOND
             STORAGE VOLUME         ACRE-FEET
             SURFACE AREA           ACRES
             TEMPERATURE            DEGREES FAHRENHEIT
1
```

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
HYDROGRAPH AT	B1	22.	10.00	7.	5.	5.	.04		
HYDROGRAPH AT	B2	9.	10.00	4.	3.	3.	.01		
HYDROGRAPH AT	B3	8.	10.00	4.	3.	3.	.01		
HYDROGRAPH AT	B4	9.	10.00	4.	4.	3.	.01		
HYDROGRAPH AT	B5	23.	10.08	8.	5.	5.	.04		
HYDROGRAPH AT	B6	88.	10.08	24.	11.	11.	.16		
HYDROGRAPH AT	B7	24.	10.08	8.	5.	5.	.04		
HYDROGRAPH AT	B8	69.	10.08	19.	9.	9.	.12		
HYDROGRAPH AT	B9	52.	10.08	15.	8.	7.	.09		
HYDROGRAPH AT	B10	27.	10.00	9.	5.	5.	.04		
HYDROGRAPH AT	B11	139.	10.08	37.	16.	16.	.25		
HYDROGRAPH AT	B12	24.	10.00	8.	5.	5.	.04		
HYDROGRAPH AT	C1	18.	10.00	6.	4.	4.	.03		
HYDROGRAPH AT	C2	15.	10.00	6.	4.	4.	.02		
HYDROGRAPH AT	C3	33.	10.00	10.	6.	6.	.05		
HYDROGRAPH AT	C4	365.	10.17	111.	45.	44.	.78		
ROUTED TO	POND	219.	10.67	111.	45.	44.	.78	421.81	10.67
HYDROGRAPH AT	C5	25.	10.00	8.	5.	5.	.03		
HYDROGRAPH AT	D1	45.	10.08	13.	7.	7.	.07		
HYDROGRAPH AT	D2	33.	10.00	10.	6.	6.	.05		
2 COMBINED AT	COMB	78.	10.08	23.	13.	12.	.12		
HYDROGRAPH AT	D3	170.	10.25	54.	23.	22.	.35		
2 COMBINED AT	COMB	236.	10.17	77.	35.	34.	.47		
ROUTED TO	CHAN	236.	10.33	77.	35.	35.	.47		
HYDROGRAPH AT	D4	44.	10.08	13.	7.	7.	.07		
2 COMBINED AT	COMB	262.	10.33	90.	42.	41.	.54		

+	HYDROGRAPH AT	D5	20.	10.00	7.	4.	4.	.03		
+	2 COMBINED AT	COMB	275.	10.25	96.	46.	46.	.57		
+	HYDROGRAPH AT	D6	18.	10.00	6.	4.	4.	.02		
+	HYDROGRAPH AT	E	156.	10.33	54.	23.	22.	.37		
+	ROUTED TO	POND2	104.	10.83	54.	23.	22.	.37	547.09	10.83
+	HYDROGRAPH AT	A	9.	10.00	4.	4.	3.	.01		

1

SUMMARY OF KINEMATIC WAVE - MUSKINGUM-CUNGE ROUTING
(FLOW IS DIRECT RUNOFF WITHOUT BASE FLOW)

ISTAQ	ELEMENT	DT	PEAK	TIME TO PEAK	VOLUME	INTERPOLATED TO COMPUTATION INTERVAL DT	PEAK	TIME TO PEAK	VOLUME
		(MIN)	(CFS)	(MIN)	(IN)	(MIN)	(CFS)	(MIN)	(IN)
CHAN	MANE	5.00	236.07	620.00	2.81	5.00	236.07	620.00	2.81

CONTINUITY SUMMARY (AC-FT) - INFLOW= .7093E+02 EXCESS= .0000E+00 OUTFLOW= .7118E+02 BASIN STORAGE=-.2321E+00 PERCENT ERROR= .0

*** NORMAL END OF HEC-1 ***

```
1*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*         SEPTEMBER 1990                *
*           VERSION 4.0                 *
*                                       *
*  RUN DATE  07/13/1997  TIME  16:52:47 *
*                                       *
*****************************************
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*****************************************
*                                       *
*   U.S. ARMY CORPS OF ENGINEERS        *
*   HYDROLOGIC ENGINEERING CENTER       *
*        609 SECOND STREET              *
*      DAVIS, CALIFORNIA 95616          *
*          (916) 756-1104               *
*                                       *
*****************************************
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```
X    X  XXXXXXX   XXXXX          X
X    X  X        X     X        XX
X    X  X              X       X X
XXXXXX  XXXX           X       X X
X    X  X              X       X X
X    X  X        X     X       X X
X    X  XXXXXXX   XXXXX        XXX
```

THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KM.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.
THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

1 HEC-1 INPUT PAGE 1

```
LINE          ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

   1          ID     PROMONTORY MASTER DRAINAGE STUDY
   2          ID     WILLOW CREEK AND RUMBUG CREEK WATERSHEDS TO THE EL DORADO COUNTY LINE
   3          ID     RUNOFF FOR FUTURE CONDITIONS DUE TO 100 YEAR 24-HOUR SCS TYPE I STORM
   4          ID     FOR NON-PARTICIPANTS ASSUME FUTURE RUNOFF IS UNMITIGATED
   5          ID     (CHANNEL ROUTING BY MUSKINGUM CUNGE METHOD)
   6          ID     HEC 1 FILE 9706DEV.DAT/OUT
   7          IT       5       0       0     300
   8          IO       5       1

   9          KK      B1  SUBBASIN B1
  10          KM          SUBBASIN B1 RUNOFF FOR 100 YEAR STORM
  11          BA   .0366
  12          BF      10      .1    1.05
  13          IN      30
  14          PB   4.977
  15          PC       0    .008    .017    .026    .035    .045    .055    .065    .076    .087
  16          PC    .099    .112    .126    .14     .156    .174    .194    .219    .254    .303
  17          PC    .515    .583    .624    .655    .682    .706    .728    .748    .766    .783
  18          PC    .799    .815    .833    .844    .857     .87    .882    .893    .905    .916
  19          PC    .926    .936    .946    .956    .965    .974    .983    .992       1
  20          LS       0      B1
  21          UD    .108

  22          KK      B2  SUBBASIN B2
  23          KM          SUBBASIN B2 RUNOFF FOR 100 YEAR STORM
  24          BA   .0111
  25          LS       0      B1
  26          UD    .114

  27          KK      B3  SUBBASIN B3
  28          KM          SUBBASIN B3 RUNOFF FOR 100 YEAR STORM
  29          BA   .0097
  30          LS       0      B1
  31          UD    .114

  32          KK      B4  SUBBASIN B4
  33          KM          SUBBASIN B4 RUNOFF FOR 100 YEAR STORM
  34          BA   .0125
  35          LS       0      B1
  36          UD     .12

  37          KK      B5  SUBBASIN B5
  38          KM          SUBBASIN B5 RUNOFF FOR 100 YEAR STORM
  39          BA   .0366
  40          LS       0      B4
  41          UD    .186

  42          KK      B6  SUBBASIN B6
  43          KM          SUBBASIN B6 RUNOFF FOR 100 YEAR STORM
  44          BA   .1555
  45          LS       0      B4
  46          UD    .186
```

1 HEC-1 INPUT PAGE 2

```
LINE          ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

  47          KK      B7  SUBBASIN B7
  48          KM          SUBBASIN B7 RUNOFF FOR 100 YEAR STORM
  49          BA   .0391
  50          LS       0      B4
  51          UD     .18

  52          KK      B8  SUBBASIN B8
  53          KM          SUBBASIN B8 RUNOFF FOR 100 YEAR STORM
  54          BA   .1161
  55          LS       0      B5
  56          UD     .18

  57          KK      B9  SUBBASIN B9
  58          KM          SUBBASIN B9 RUNOFF FOR 100 YEAR STORM
  59          BA   .0064
  60          LS       0      B5
  61          UD    .186

  62          KK     B10  SUBBASIN B10
  63          KM          SUBBASIN B10 RUNOFF FOR 100 YEAR STORM
  64          BA   .0406
  65          LS       0      B5
  66          UD    .162

  67          KK     B11  SUBBASIN B11
  68          KM          SUBBASIN B11 RUNOFF FOR 100 YEAR STORM
  69          BA   .2469
  70          LS       0      B5
  71          UD    .228

  72          KK     B12  SUBBASIN B12
  73          KM          SUBBASIN B12 RUNOFF FOR 100 YEAR STORM
  74          BA   .0366
  75          LS       0      B4
  76          UD     .15
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```
          77          KK      C1  SUBBASIN C1
          78          KM          SUBBASIN C1 RUNOFF FOR 100 YEAR STORM
          79          BA   .0255
          80          LS       0      84
          81          UD    .12

          82          KK      C2  SUBBASIN C2
          83          KM          SUBBASIN C2 RUNOFF FOR 100 YEAR STORM
          84          BA   .0102
          85          LS       0      84
          86          UD    .102

          87          KK      C3  SUBBASIN C3
          88          KM          SUBBASIN C3 RUNOFF FOR 100 YEAR STORM
          89          BA   .0525
          90          LS       0      84
          91          UD    .15
1                                        HEC-1 INPUT                                        PAGE  3
        LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

          92          KK      C4  SUBBASIN C4
          93          KM          SUBBASIN C4 RUNOFF FOR 100 YEAR STORM
          94          BA   .7781
          95          LS       0      85
          96          UD    .372

          97          KK      C5  SUBBASIN C5
          98          KM          SUBBASIN C5 RUNOFF FOR 100 YEAR STORM
          99          BA   .0336
         100          LS       0      87
         101          UD    .162

         102          KK      D1  SUBBASIN D1
         103          KM          SUBBASIN D1 RUNOFF FOR 100 YEAR STORM
         104          BA   .0742
         105          LS       0      85
         106          UD    .192

         107          KK      D2  SUBBASIN D2
         108          KM          SUBBASIN D2 RUNOFF FOR 100 YEAR STORM
         109          BA   .0502
         110          LS       0      86
         111          UD    .174

         112          KK    COMB  COMBINE HYDROGRAPHS
         113          KM          COMBINE D1 AND D2
         114          HC       2

         115          KK      D3  SUBBASIN D3
         116          KM          SUBBASIN D3 RUNOFF FOR 100 YEAR STORM
         117          BA    .35
         118          LS       0      86
         119          UD    .396

         120          KK    COMB  COMBINE HYDROGRAPHS
         121          KM          COMBINED D1, D2 & D3
         122          HC       2

         123          KK    CHAN  CHANNEL ROUTING MUSKINGUM-CUNGE
         124          KM          ROUTE D1 - D3 COMBINED HYDROGRAPHS
         125          RD    1500   .0125     .08          TRAP       25       40

         126          KK      D4  SUBBASIN D4
         127          KM          SUBBASIN D4 RUNOFF FOR 100 YEAR STORM
         128          BA   .0683
         129          LS       0      86
         130          UD    .192

         131          KK    COMB  COMBINE HYDROGRAPHS
         132          KM          COMBINED D1, D2, D3 & D4
         133          HC       2
1                                        HEC-1 INPUT                                        PAGE  4
        LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

         134          KK      D5  SUBBASIN D5
         135          KM          SUBBASIN D5 RUNOFF FOR 100 YEAR STORM
         136          BA   .0275
         137          LS       0      86
         138          UD    .174

         139          KK    COMB  COMBINE HYDROGRAPHS
         140          KM          COMBINED D1-D5
         141          HC       2

         142          KK      D6  SUBBASIN D6
         143          KM          SUBBASIN D6 RUNOFF FOR 100 YEAR STORM
         144          BA   .0245
         145          LS       0      86
         146          UD    .174

         147          KK       E  SUBBASIN E
         148          KM          SUBBASIN E RUNOFF FOR 100 YEAR STORM
         149          BA   .3672
         150          LS       0      85
         151          UD    .486

         152          KK       A  SUBBASIN A
         153          KM          SUBBASIN A RUNOFF FOR 100 YEAR STORM
         154          BA   .0128
         155          LS       0      80
         156          UD    .15
         157          ZZ
```

```
1*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*         SEPTEMBER 1990                *
*           VERSION 4.0                 *
*                                       *
* RUN DATE  07/13/1997  TIME  16:52:47  *
*                                       *
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*****************************************
*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
*    HYDROLOGIC ENGINEERING CENTER      *
*          609 SECOND STREET            *
*       DAVIS, CALIFORNIA 95616         *
*          (916) 756-1104               *
*                                       *
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```

PROMONTORY MASTER DRAINAGE STUDY
WILLOW CREEK AND HUMBUG CREEK WATERSHEDS TO THE EL DORADO COUNTY LINE
RUNOFF FOR FUTURE CONDITIONS DUE TO 100 YEAR 24-HOUR SCS TYPE I STORM
FOR NON-PARTICIPANTS ASSUME FUTURE RUNOFF IS UNMITIGATED
(CHANNEL ROUTING BY MUSKINGIM CUNGE METHOD)
HEC 1 FILE 9706DEV.DAT/OUT

```
  0 IO          OUTPUT CONTROL VARIABLES
                     IPRNT         5  PRINT CONTROL
```

	IPLOT	1	PLOT CONTROL
	QSCAL	0.	HYDROGRAPH PLOT SCALE

IT HYDROGRAPH TIME DATA

NMIN	5		MINUTES IN COMPUTATION INTERVAL
IDATE	1	0	STARTING DATE
ITIME		0000	STARTING TIME
NQ		300	NUMBER OF HYDROGRAPH ORDINATES
NDDATE	2	0	ENDING DATE
NDTIME		0055	ENDING TIME
ICENT		19	CENTURY MARK

COMPUTATION INTERVAL .00 HOURS
TOTAL TIME BASE 24.92 HOURS

ENGLISH UNITS

DRAINAGE AREA	SQUARE MILES
PRECIPITATION DEPTH	INCHES
LENGTH, ELEVATION	FEET
FLOW	CUBIC FEET PER SECOND
STORAGE VOLUME	ACRE-FEET
SURFACE AREA	ACRES
TEMPERATURE	DEGREES FAHRENHEIT

1

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
HYDROGRAPH AT	B1	40.	10.00	13.	9.	9.	.04		
HYDROGRAPH AT	B2	16.	10.00	9.	7.	7.	.01		
HYDROGRAPH AT	B3	15.	10.00	9.	7.	7.	.01		
HYDROGRAPH AT	B4	17.	10.00	9.	7.	7.	.01		
HYDROGRAPH AT	B5	40.	10.00	14.	9.	9.	.04		
HYDROGRAPH AT	B6	150.	10.00	41.	19.	19.	.16		
HYDROGRAPH AT	B7	43.	10.00	14.	9.	9.	.04		
HYDROGRAPH AT	B8	118.	10.00	32.	16.	16.	.12		
HYDROGRAPH AT	B9	89.	10.00	26.	14.	13.	.09		
HYDROGRAPH AT	B10	46.	10.00	15.	10.	9.	.04		
HYDROGRAPH AT	B11	235.	10.08	63.	28.	27.	.25		
HYDROGRAPH AT	B12	41.	10.00	14.	9.	9.	.04		
HYDROGRAPH AT	C1	32.	10.00	12.	8.	8.	.03		
HYDROGRAPH AT	C2	27.	10.00	10.	8.	7.	.02		
HYDROGRAPH AT	C3	57.	10.00	17.	10.	10.	.05		
HYDROGRAPH AT	C4	623.	10.17	185.	76.	73.	.78		
HYDROGRAPH AT	C5	41.	10.00	14.	9.	9.	.03		
HYDROGRAPH AT	D1	77.	10.08	23.	13.	12.	.07		
HYDROGRAPH AT	D2	56.	10.00	18.	11.	10.	.05		
2 COMBINED AT	COMB	133.	10.00	40.	23.	22.	.12		
HYDROGRAPH AT	D3	285.	10.25	88.	38.	37.	.35		
2 COMBINED AT	COMB	397.	10.17	129.	61.	59.	.47		
ROUTED TO	CHAN	395.	10.25	129.	61.	60.	.47		
HYDROGRAPH AT	D4	73.	10.08	22.	12.	12.	.07		
2 COMBINED AT	COMB	447.	10.25	151.	73.	72.	.54		
HYDROGRAPH AT	D5	34.	10.00	12.	8.	8.	.03		
2 COMBINED AT	COMB	471.	10.25	163.	82.	80.	.57		
HYDROGRAPH AT	D6	31.	10.00	12.	8.	8.	.02		
HYDROGRAPH AT	E	266.	10.33	90.	39.	38.	.37		
HYDROGRAPH AT	A	17.	10.00	9.	7.	7.	.01		

1

SUMMARY OF KINEMATIC WAVE - MUSKINGUM-CUNGE ROUTING
(FLOW IS DIRECT RUNOFF WITHOUT BASE FLOW)

ISTAQ	ELEMENT	DT (MIN)	PEAK (CFS)	TIME TO PEAK (MIN)	VOLUME (IN)	INTERPOLATED TO COMPUTATION INTERVAL DT (MIN)	PEAK (CFS)	TIME TO PEAK (MIN)	VOLUME (IN)

```
            CHAN  MAIN          5.00    395.44    615.00      4.86      5.00    395.44    615.00      4.86

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1226E+03 EXCESS= .0000E+00 OUTFLOW= .1231E+03 BASIN STORAGE=-.4344E+00 PERCENT ERROR=    .0


*** NORMAL END OF HEC-1 ***
```

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1*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*         SEPTEMBER 1990                *
*           VERSION 4.0                 *
*                                       *
*  RUN DATE  07/13/1997  TIME  16:54:29 *
*                                       *
*****************************************
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*****************************************
*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
*    HYDROLOGIC ENGINEERING CENTER      *
*         609 SECOND STREET             *
*       DAVIS, CALIFORNIA 95616         *
*           (916) 756-1104              *
*                                       *
*****************************************
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```
X    X  XXXXXXX   XXXXX          X
X    X  X        X     X        XX
X    X  X              X       X
XXXXXXX  XXXX         X     XXXXX
X    X  X             X       X
X    X  X        X    X       X
X    X  XXXXXXX   XXXXX       XXX
```

THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.
THE DEFINITION OF -ANSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

1 HEC-1 INPUT PAGE 1

```
LINE          ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

   1          ID     PROMONTORY MASTER DRAINAGE STUDY
   2          ID     WILLOW CREEK AND NUMBUG CREEK WATERSHEDS TO THE EL DORADO COUNTY LINE
   3          ID     RUNOFF FOR FUTURE CONDITIONS DUE TO 100 YEAR 24-HOUR SCS TYPE I STORM
   4          ID     FOR NON-PARTICIPANTS ASSUME FUTURE RUNOFF IS MITIGATED
   5          ID     (CHANNEL ROUTING BY MUSKINGUM CUNGE METHOD)
   6          ID     HEC 1 FILE 9706POND.DAT/OUT
   7          IT       5       0       0     300
   8          IO       5       1

   9          KK      B1  SUBBASIN B1
  10          KM          SUBBASIN B1 RUNOFF FOR 100 YEAR STORM
  11          BA   .0366
  12          BF      10        .1    1.05
  13          IN      20
  14          PB   6.977
  15          PC       0    .008    .017    .026    .035    .045    .055    .065    .076    .087
  16          PC    .099    .112    .126    .14     .156    .174    .194    .219    .254    .303
  17          PC    .515    .583    .624    .655    .682    .706    .728    .748    .766    .783
  18          PC    .799    .815    .833    .844    .857     .87    .882    .893    .905    .916
  19          PC    .926    .936    .946    .956    .965    .974    .983    .992       1
  20          LS       0      81
  21          UD    .108

  22          KK      B2  SUBBASIN B2
  23          KM          SUBBASIN B2 RUNOFF FOR 100 YEAR STORM
  24          BA   .0111
  25          LS       0      81
  26          UD    .114

  27          KK      B3  SUBBASIN B3
  28          KM          SUBBASIN B3 RUNOFF FOR 100 YEAR STORM
  29          BA   .0097
  30          LS       0      81
  31          UD    .114

  32          KK      B4  SUBBASIN B4
  33          KM          SUBBASIN B4 RUNOFF FOR 100 YEAR STORM
  34          BA   .0125
  35          LS       0      81
  36          UD     .12

  37          KK      B5  SUBBASIN B5
  38          KM          SUBBASIN B5 RUNOFF FOR 100 YEAR STORM
  39          BA   .0366
  40          LS       0      84
  41          UD    .186

  42          KK      B6  SUBBASIN B6
  43          KM          SUBBASIN B6 RUNOFF FOR 100 YEAR STORM
  44          BA   .1555
  45          LS       0      84
  46          UD    .186
```

1 HEC-1 INPUT PAGE 2

```
LINE          ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

  47          KK      B7  SUBBASIN B7
  48          KM          SUBBASIN B7 RUNOFF FOR 100 YEAR STORM
  49          BA   .0391
  50          LS       0      84
  51          UD     .18

  52          KK      B8  SUBBASIN B8
  53          KM          SUBBASIN B8 RUNOFF FOR 100 YEAR STORM
  54          BA   .2161
  55          LS       0      85
  56          UD     .18

  57          KK      B9  SUBBASIN B9
  58          KM          SUBBASIN B9 RUNOFF FOR 100 YEAR STORM
  59          BA   .0864
  60          LS       0      85
  61          UD    .186

  62          KK     B10  SUBBASIN B10
  63          KM          SUBBASIN B10 RUNOFF FOR 100 YEAR STORM
  64          BA   .0406
  65          LS       0      85
  66          UD    .162

  67          KK     B11  SUBBASIN B11
  68          KM          SUBBASIN B11 RUNOFF FOR 100 YEAR STORM
  69          BA   .2469
  70          LS       0      85
  71          UD    .228

  72          KK     B12  SUBBASIN B12
  73          KM          SUBBASIN B12 RUNOFF FOR 100 YEAR STORM
  74          BA   .0366
  75          LS       0      84
  76          UD     .15
```

```
   77          KK       C1  SUBBASIN C1
   78          KM           SUBBASIN C1 RUNOFF FOR 100 YEAR STORM
   79          BA    .0255
   80          LS        0      84
   81          UD      .12

   82          KK       C2  SUBBASIN C2
   83          KM           SUBBASIN C2 RUNOFF FOR 100 YEAR STORM
   84          BA    .0202
   85          LS        0      84
   86          UD      .102

   87          KK       C3  SUBBASIN C3
   88          KM           SUBBASIN C3 RUNOFF FOR 100 YEAR STORM
   89          BA    .0525
   90          LS        0      84
   91          UD      .15
1                                        HEC-1 INPUT                                        PAGE  3
  LINE          ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

   92          KK       C4  SUBBASIN C4
   93          KM           SUBBASIN C4 RUNOFF FOR 100 YEAR STORM
   94          BA    .7781
   95          LS        0      85
   96          UD      .372
               *

   97          KK     POND  ROUTE THROUGH DETENTION POND
   98          KM           POND OUTLET WITH 12", 36" AND 42" PIPES
   99          RS        1    ELEV      415
  100          SV        0     0.37     2.48     5.77     9.41    13.50    17.92    22.81
  101          SE      415      414      418      420      422      424      426      428
  102          SQ        0       84      145      187      222      252      279      303
  103          SE      415      414      418      420      422      424      426      428
               *

  104          KK       C5  SUBBASIN C5
  105          KM           SUBBASIN C5 RUNOFF FOR 100 YEAR STORM
  106          BA    .0336
  107          LS        0      87
  108          UD      .162

  109          KK       D1  SUBBASIN D1
  110          KM           SUBBASIN D1 RUNOFF FOR 100 YEAR STORM
  111          BA    .0742
  112          LS        0      85
  113          UD      .192

  114          KK       D2  SUBBASIN D2
  115          KM           SUBBASIN D2 RUNOFF FOR 100 YEAR STORM
  116          BA    .0502
  117          LS        0      86
  118          UD      .174

  119          KK     COMB  COMBINE HYDROGRAPHS
  120          KM           COMBINE D1 AND D2
  121          HC        2

  122          KK       D3  SUBBASIN D3
  123          KM           SUBBASIN D3 RUNOFF FOR 100 YEAR STORM
  124          BA      .35
  125          LS        0      86
  126          UD      .396

  127          KK     COMB  COMBINE HYDROGRAPHS
  128          KM           COMBINED D1, D2 & D3
  129          HC        2

  130          KK     CHAN  CHANNEL ROUTING MUSKINGUM-CUNGE
  131          KM           ROUTE D1 - D3 COMBINED HYDROGRAPHS
  132          RD     1500   .0125     .08                TRAP      25       40
1                                        HEC-1 INPUT                                        PAGE  4
  LINE          ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

  133          KK       D4  SUBBASIN D4
  134          KM           SUBBASIN D4 RUNOFF FOR 100 YEAR STORM
  135          BA    .0683
  136          LS        0      86
  137          UD      .192

  138          KK     COMB  COMBINE HYDROGRAPHS
  139          KM           COMBINED D1, D2, D3 & D4
  140          HC        2

  141          KK       D5  SUBBASIN D5
  142          KM           SUBBASIN D5 RUNOFF FOR 100 YEAR STORM
  143          BA    .0275
  144          LS        0      86
  145          UD      .174

  146          KK     COMB  COMBINE HYDROGRAPHS
  147          KM           COMBINED D1-D5
  148          HC        2

  149          KK       D6  SUBBASIN D6
  150          KM           SUBBASIN D6 RUNOFF FOR 100 YEAR STORM
  151          BA    .0245
  152          LS        0      86
  153          UD      .174

  154          KK        E  SUBBASIN E
  155          KM           SUBBASIN E RUNOFF FOR 100 YEAR STORM
  156          BA    .3672
  157          LS        0      85
  158          UD      .486
               *

  159          KK    POND2  ROUTE THROUGH DETENTION POND
  160          KM           POND OUTLET WITH 1-12", 36" AND 36" PIPES
  161          RS        1    ELEV      539
  162          SV        0      .09      .64     1.60     2.80     4.32     6.22     8.58
  163          SE      539      540      542      544      546      548      550      552
  164          SQ        0    36.6     63.5     81.8     96.9    109.8    169.7    199.5
  165          SE      539      540      542      544      546      548      550      552
               *

  166          KK        A  SUBBASIN A
  167          KM           SUBBASIN A RUNOFF FOR 100 YEAR STORM
  168          BA    .0128
  169          LS        0      80
  170          UD      .15
  171          ZZ
```

```
*****************************************
*                                       *
*          SEPTEMBER 1990               *
*           VERSION 4.0                 *
*                                       *
*  RUN DATE  07/13/1997  TIME  16:54:29 *
*                                       *
*****************************************

*****************************************
*  HYDROLOGIC ENGINEERING CENTER        *
*       609 SECOND STREET               *
*     DAVIS, CALIFORNIA 95616           *
*       (916) 756-1104                  *
*****************************************
```

PROMONTORY MASTER DRAINAGE STUDY
WILLOW CREEK AND HUMBUG CREEK WATERSHEDS TO THE EL DORADO COUNTY LINE
RUNOFF FOR FUTURE CONDITIONS DUE TO 100 YEAR 24-HOUR SCS TYPE I STORM
FOR NON-PARTICIPANTS ASSUME FUTURE RUNOFF IS MITIGATED
(CHANNEL ROUTING BY MUSKINGUM CUNGE METHOD)
REC 1 FILE 9706POND.DAT/OUT

```
  ID          OUTPUT CONTROL VARIABLES
                IPRNT        5  PRINT CONTROL
                IPLOT        1  PLOT CONTROL
                QSCAL        0.  HYDROGRAPH PLOT SCALE

  IT          HYDROGRAPH TIME DATA
                NMIN         5  MINUTES IN COMPUTATION INTERVAL
                IDATE        1    0  STARTING DATE
                ITIME           0000  STARTING TIME
                  NQ          300  NUMBER OF HYDROGRAPH ORDINATES
                NDDATE       2    0  ENDING DATE
                NDTIME          0055  ENDING TIME
                ICENT           19  CENTURY MARK

              COMPUTATION INTERVAL      .08 HOURS
                 TOTAL TIME BASE    24.92 HOURS

        ENGLISH UNITS
             DRAINAGE AREA          SQUARE MILES
             PRECIPITATION DEPTH    INCHES
             LENGTH, ELEVATION      FEET
             FLOW                   CUBIC FEET PER SECOND
             STORAGE VOLUME         ACRE-FEET
             SURFACE AREA           ACRES
             TEMPERATURE            DEGREES FAHRENHEIT
```

1

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
HYDROGRAPH AT	B1	40.	10.00	13.	9.	9.	.04		
HYDROGRAPH AT	B2	16.	10.00	9.	7.	7.	.01		
HYDROGRAPH AT	B3	15.	10.00	9.	7.	7.	.01		
HYDROGRAPH AT	B4	17.	10.00	9.	7.	7.	.01		
HYDROGRAPH AT	B5	40.	10.00	14.	9.	9.	.04		
HYDROGRAPH AT	B6	150.	10.00	41.	19.	19.	.16		
HYDROGRAPH AT	B7	43.	10.00	14.	9.	9.	.04		
HYDROGRAPH AT	B8	118.	10.00	32.	16.	16.	.12		
HYDROGRAPH AT	B9	89.	10.00	26.	14.	13.	.09		
HYDROGRAPH AT	B10	66.	10.00	15.	10.	9.	.04		
HYDROGRAPH AT	B11	235.	10.08	63.	28.	27.	.25		
HYDROGRAPH AT	B12	41.	10.00	14.	9.	9.	.04		
HYDROGRAPH AT	C1	32.	10.00	12.	8.	8.	.03		
HYDROGRAPH AT	C2	27.	10.00	10.	8.	7.	.02		
HYDROGRAPH AT	C3	57.	10.00	17.	10.	10.	.05		
HYDROGRAPH AT	C4	623.	10.17	185.	76.	73.	.78		
ROUTED TO	POND	297.	10.83	185.	76.	73.	.78	427.53	10.83
HYDROGRAPH AT	C5	41.	10.00	14.	9.	9.	.03		
HYDROGRAPH AT	D1	77.	10.08	23.	13.	12.	.07		
HYDROGRAPH AT	D2	56.	10.00	18.	11.	10.	.05		
2 COMBINED AT	COMB	133.	10.00	40.	23.	22.	.12		
HYDROGRAPH AT	D3	285.	10.25	88.	38.	37.	.35		
2 COMBINED AT	COMB	397.	10.17	129.	61.	59.	.47		
ROUTED TO	CHAN	395.	10.25	129.	61.	60.	.47		
HYDROGRAPH AT	D4	73.	10.08	22.	12.	12.	.07		
2 COMBINED AT	COMB	447.	10.25	151.	73.	72.	.54		

	HYDROGRAPH AT	D5	34.	10.00	12.	8.	8.	.03		
	2 COMBINED AT	COMB	471.	10.25	161.	82.	80.	.57		
	HYDROGRAPH AT	D6	31.	10.00	12.	8.	8.	.02		
	HYDROGRAPH AT	E	266.	10.33	90.	39.	38.	.37		
	ROUTED TO	POND2	185.	10.75	90.	39.	38.	.37	551.02	20.75
	HYDROGRAPH AT	A	17.	10.00	9.	7.	7.	.81		

1

SUMMARY OF KINEMATIC WAVE - MUSKINGUM-CUNGE ROUTING
(FLOW IS DIRECT RUNOFF WITHOUT BASE FLOW)

ISTAQ	ELEMENT	DT	PEAK	TIME TO PEAK	VOLUME	INTERPOLATED TO COMPUTATION INTERVAL DT	PEAK	TIME TO PEAK	VOLUME
		(MIN)	(CFS)	(MIN)	(IN)	(MIN)	(CFS)	(MIN)	(IN)
CHAN	MANE	5.00	395.44	615.00	4.86	5.00	395.44	615.00	4.86

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1226E+03 EXCESS= .0000E+00 OUTFLOW= .1231E+03 BASIN STORAGE= -.4344E+00 PERCENT ERROR= .0

*** NORMAL END OF HEC-1 ***

	IPLOT	1	PLOT CONTROL
	QSCAL	0.	HYDROGRAPH PLOT SCALE

IT HYDROGRAPH TIME DATA

	NMIN	5	MINUTES IN COMPUTATION INTERVAL
	IDATE	1 0	STARTING DATE
	ITIME	0000	STARTING TIME
	NQ	300	NUMBER OF HYDROGRAPH ORDINATES
	NDDATE	2 0	ENDING DATE
	NDTIME	0055	ENDING TIME
	ICENT	19	CENTURY MARK

COMPUTATION INTERVAL .08 HOURS
TOTAL TIME BASE 24.92 HOURS

ENGLISH UNITS

DRAINAGE AREA	SQUARE MILES
PRECIPITATION DEPTH	INCHES
LENGTH, ELEVATION	FEET
FLOW	CUBIC FEET PER SECOND
STORAGE VOLUME	ACRE-FEET
SURFACE AREA	ACRES
TEMPERATURE	DEGREES FAHRENHEIT

1

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
HYDROGRAPH AT	B1	22.	10.00	7.	5.	5.	.04		
HYDROGRAPH AT	B2	9.	10.00	6.	3.	3.	.01		
HYDROGRAPH AT	B3	9.	10.00	4.	3.	3.	.01		
HYDROGRAPH AT	B4	9.	10.00	6.	4.	3.	.01		
HYDROGRAPH AT	B5	23.	10.08	8.	5.	5.	.04		
HYDROGRAPH AT	B6	88.	10.08	24.	11.	11.	.16		
HYDROGRAPH AT	B7	24.	10.08	8.	5.	5.	.04		
HYDROGRAPH AT	B8	69.	10.08	19.	9.	9.	.12		
HYDROGRAPH AT	B9	52.	10.08	15.	8.	7.	.09		
HYDROGRAPH AT	B10	27.	10.00	9.	5.	5.	.04		
HYDROGRAPH AT	B11	139.	10.08	37.	16.	16.	.25		
HYDROGRAPH AT	B12	24.	10.00	8.	5.	5.	.04		
HYDROGRAPH AT	C1	18.	10.00	6.	4.	4.	.03		
HYDROGRAPH AT	C2	15.	10.00	6.	4.	4.	.02		
HYDROGRAPH AT	C3	33.	10.00	10.	6.	6.	.05		
HYDROGRAPH AT	C4	365.	10.17	111.	45.	44.	.78		
HYDROGRAPH AT	C5	25.	10.00	8.	5.	5.	.03		
HYDROGRAPH AT	D1	45.	10.00	13.	7.	7.	.07		
HYDROGRAPH AT	D2	33.	10.00	10.	6.	6.	.05		
2 COMBINED AT	COMB	78.	10.00	23.	13.	12.	.12		
HYDROGRAPH AT	D3	170.	10.25	56.	23.	22.	.35		
2 COMBINED AT	COMB	236.	10.17	77.	35.	34.	.47		
ROUTED TO	CHAN	236.	10.33	77.	35.	35.	.47		
HYDROGRAPH AT	D4	44.	10.08	13.	7.	7.	.07		
2 COMBINED AT	COMB	262.	10.33	90.	42.	41.	.54		
HYDROGRAPH AT	D5	20.	10.00	7.	4.	4.	.03		
2 COMBINED AT	COMB	275.	10.25	96.	46.	46.	.57		
HYDROGRAPH AT	D6	18.	10.00	6.	4.	4.	.02		
HYDROGRAPH AT	E	156.	10.33	54.	23.	22.	.37		
HYDROGRAPH AT	A	9.	10.00	4.	4.	3.	.01		

1

SUMMARY OF KINEMATIC WAVE - MUSKINGUM-CUNGE ROUTING
(FLOW IS DIRECT RUNOFF WITHOUT BASE FLOW)

ISTAQ	ELEMENT	DT	PEAK	TIME TO PEAK	VOLUME	DT	INTERPOLATED TO COMPUTATION INTERVAL PEAK	TIME TO PEAK	VOLUME
		(MIN)	(CFS)	(MIN)	(IN)	(MIN)	(CFS)	(MIN)	(IN)

CHAN MANE	5.00	236.07	620.00	2.81	5.00	236.07	620.00	2.81

CONTINUITY SUMMARY (AC-FT) - INFLOW= .7093E+02 EXCESS= .0000E+00 OUTFLOW= .7118E+02 BASIN STORAGE=-.2321E+00 PERCENT ERROR= .6

*** NORMAL END OF HEC-1 ***

APPENDIX C

THE PROMONTORY 404 PERMIT AND WETLAND MITIGATION PLAN

DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, SACRAMENTO
CORPS OF ENGINEERS
1325 J STREET
SACRAMENTO, CALIFORNIA 95814-2922

REPLY TO
ATTENTION OF

August 9, 1994

Regulatory Section (199001102)

RECEIVED
FEB 27 1997
ENVIRONMENTAL SCIENCE ASSOC.

Mr. Michael J. McDougall
Palisades Development, Inc.
4993 Golden Foothill Parkway, Suite 5
El Dorado Hills, California 95762

Dear Mr. McDougall:

Attached is the completed Section 404 permit for the Promontory Project, Department of the Army permit #199001102.

If you have any questions, please call Jim Monroe at (916) 557-5266.

Sincerely,

Tom Coe
Chief, Central Valley Office

Enclosures

-17
WETL

DEPARTMENT OF THE ARMY PERMIT -

Permittee: Palisades Development, Inc.
4993 Golden Foothill Parkway, Suite 5
El Dorado Hills, California

Permit Number: 199001102

Issuing Office: U.S. Army Engineer District, Sacramento
Corps of Engineers
1325 J Street
Sacramento, California 95814-2922

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description: Placement of fill into 2.5 acres of seasonal wetland and 4.85 acres of unvegetated, intermittent streams, to construct a residential subdivision, with supporting infrastructure, on an approximately 1,000 acre site. The project will include approximately 88 acres of open space preserve with 4.67 acres of created seasonal wetland; 2.2 acres of preserved seasonal wetland; 6.25 acres of created riparian woodland; 2.25 acres of preserved, unvegetated, intermittent streams; and 14.10 acres of created oak woodland buffer.

All work is to be completed in accordance with the attached plans.

Project Location: The project site is located at Sections 27, 28, 33, and 34, Township 10 North, Range 8 East, and Sections 3, 4, and 10, Township 9 North, Range 8 East, M.D.B. & M., at Assessor's Parcel Numbers 067-040-03, 086-070-01, and 106-020-04, El Dorado County, California.

Permit Conditions:

General Conditions:

1. The time limit for completing the work authorized ends on April 15, 1999. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.

2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must

immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.

5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Special Conditions:

1. The permittee shall create 4.67 acres of seasonal wetland habitat, 6.25 acres of riparian woodland habitat, and 14.10 acres of oak woodland buffer, as described in the document *The Promontory: WETLAND MITIGATION PLAN*, by Zentner & Zentner, April, 1991, hereinafter referred to as the "Mitigation Plan". Permit general and special conditions shall supersede conflicting conditions within the Mitigation Plan.

2. Construction of the mitigation habitat prescribed by this permit shall commence at least concurrently with or in advance of the start of construction of the proposed development project and be completed within two years of the start of any construction on the project site. The permittee shall notify the District Engineer of the start date and the completion date of the mitigation construction, in writing and no later than ten (10) calendar days after each date.

3. The applicant shall revise the Mitigation Plan to specify the stem density of the plant species proposed to be established in the oak woodland buffer and a detailed planting design for the mitigation area no later than the start of construction of infrastructure intended to support the permitted project. The plans shall be submitted on 24" x 36" bluelines or similar format. The scale of the drawings shall be 1 inch = 100 feet.. The permittee shall submit the plan within 180 days of permit issuance and no later than 60 days prior to the commencement of construction of infrastructure intended to support the permitted project, to the Corps, U.S. Fish and Wildlife Service, and the California Department of Fish and Game. The final wetland mitigation and monitoring plan shall be approved by the Corps, in consultation with the U.S. Fish and Wildlife Service and the California Department of Fish and Game.

4. The monitoring period for oak woodland habitat described in the Mitigation Plan shall be for a period of ten years, with monitoring to occur during years 1-4, 6, 8, and 10.

5. The monitoring period shall commence upon completion of the construction of the mitigation wetlands. In addition to the monitoring criteria specified in the Mitigation Plan, continued success of the mitigation wetlands, without human intervention other than the normal operating procedures proposed in the permittee's wetland mitigation and monitoring plan, must be demonstrated for three consecutive years, once the success criteria for each habitat type has been met. The mitigation plan will not be deemed successful until this criteria has been met.

6. Trails within the buffer areas shall occur only on one side of a wetland preserve area and are to encroach no further than 10 feet into the 50 foot buffers. Exceptions to this restriction for educational or passive recreational viewing stations within the preserve may only be approved on a case by case basis. Design and siting of the trail system shall be submitted to the Corps for approval prior to its construction.

7. The permittee shall realign the on site access roads so as to avoid the site identified as Area "G" on Figure Four of the Mitigation Plan, "Areas of Wetland Fill/Preservation". The access road shall be aligned to cross at the upstream end of the drainage and shall use a bridging structure that provides a natural substrate bottom and a two foot minimum clearance at both ends. The proposed design must be submitted to the Corps for approval no later than 90 calendar days prior to implementation. Fill may be placed in Areas "F" and "K". The proposed extent of wetland mitigation habitat shall remain as specified in special condition 1.

8. Where any roads pass through the on site mitigation area, the road shall be culverted using a bridging structure that provides a natural substrate bottom and a two foot minimum clearance at both ends. The proposed design must be submitted to the Corps for approval no later than 90 calendar days prior to implementation.

9. In the event that the alignment of the proposed "Russell Ranch Road" passes over the footprint of Area "G", the permittee's culverting mechanism shall use a bridging structure that provides a natural substrate bottom and a two foot minimum clearance at both ends. The proposed design must be submitted to the Corps for approval no later than 90 calendar days prior to implementation. Additional wetland mitigation habitat shall be provided on site, at a ratio of 1.1:1 mitigation habitat to habitat impacted by construction of the road, with additional oak woodland buffer as appropriate. The permittee shall provide notice to the District Engineer within 30 days of determination of the final alignment of Russell Ranch Road. The extent and location of the additional mitigation shall be approved by the Corps prior to implementation.

10. The following actions shall be taken prior to the start of construction of any actions authorized by this permit:

A. Formation and recordation of the forming of a Landscape and Lighting District, or other suitable financing mechanism, to fund long term maintenance of the on site mitigation and preservation areas, shall be taken prior to the sale of any small lot within the proposed project. Identification of the funding mechanism to be used shall be made to, and approved by the Corps, prior to its establishment.

B. Recordation of deed restrictions maintaining the on site mitigation and preservation areas as wetland preserve and wildlife habitat in perpetuity shall be taken prior to the sale of any lot within the proposed project. Copies of the proposed deed restriction language shall be provided to the Corps of Engineers for approval prior to recordation. Copies of the recorded documents shall be provided to the Corps of Engineers no later than 30 days subsequent to recordation.

C. Copies of the recorded documents shall be provided to the Corps of Engineers no later than 30 days prior to the start of construction of any of the activities authorized by this permit.

Further Information:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

( ) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).

(X) Section 404 of the Clean Water Act (33 U.S.C. 1344).

( ) Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

2. Limits of this authorization.

a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.

b. This permit does not grant any property rights or exclusive privileges.

c. This permit does not authorize any injury to the property or rights of others.

d. This permit does not authorize interference with any existing or proposed Federal projects.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data. The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant.

Circumstances that could require a reevaluation include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of this permit.

b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (see 4 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General Condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

angelo K. Tsakopoulos
by Ron Bertolina Attorney-in-Fact — 7/19/94
Permittee — Date

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

Issued for and in behalf of Colonel John N. Reese, District Engineer.

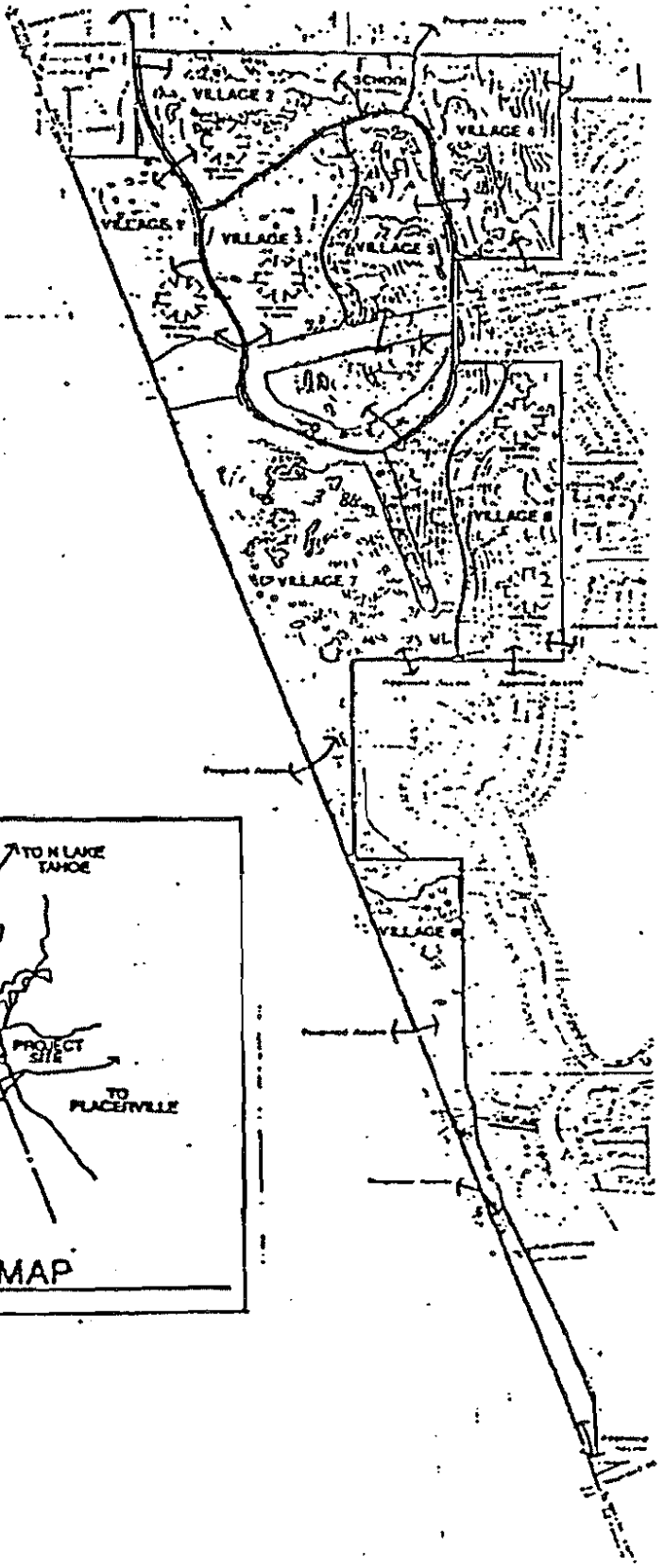
Art Champ, Chief, Regulatory Section — 8/8/94
Art Champ, Chief, Regulatory Section — Date

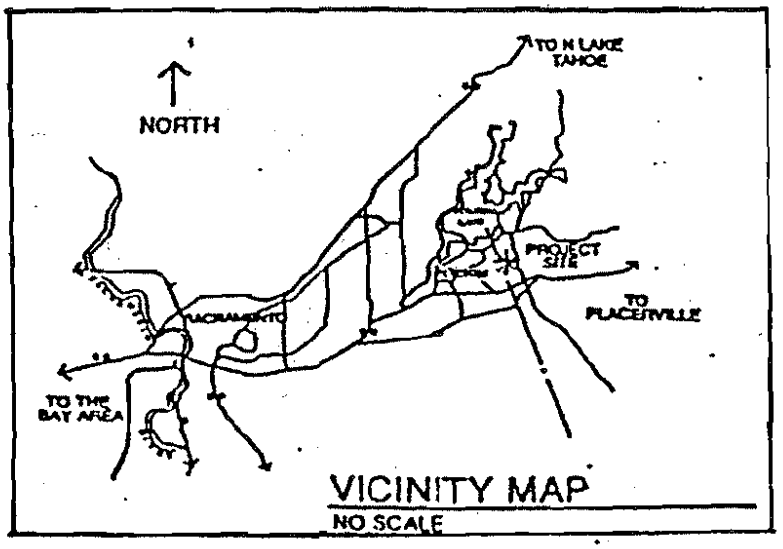
When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

Permittee — Date

19900102

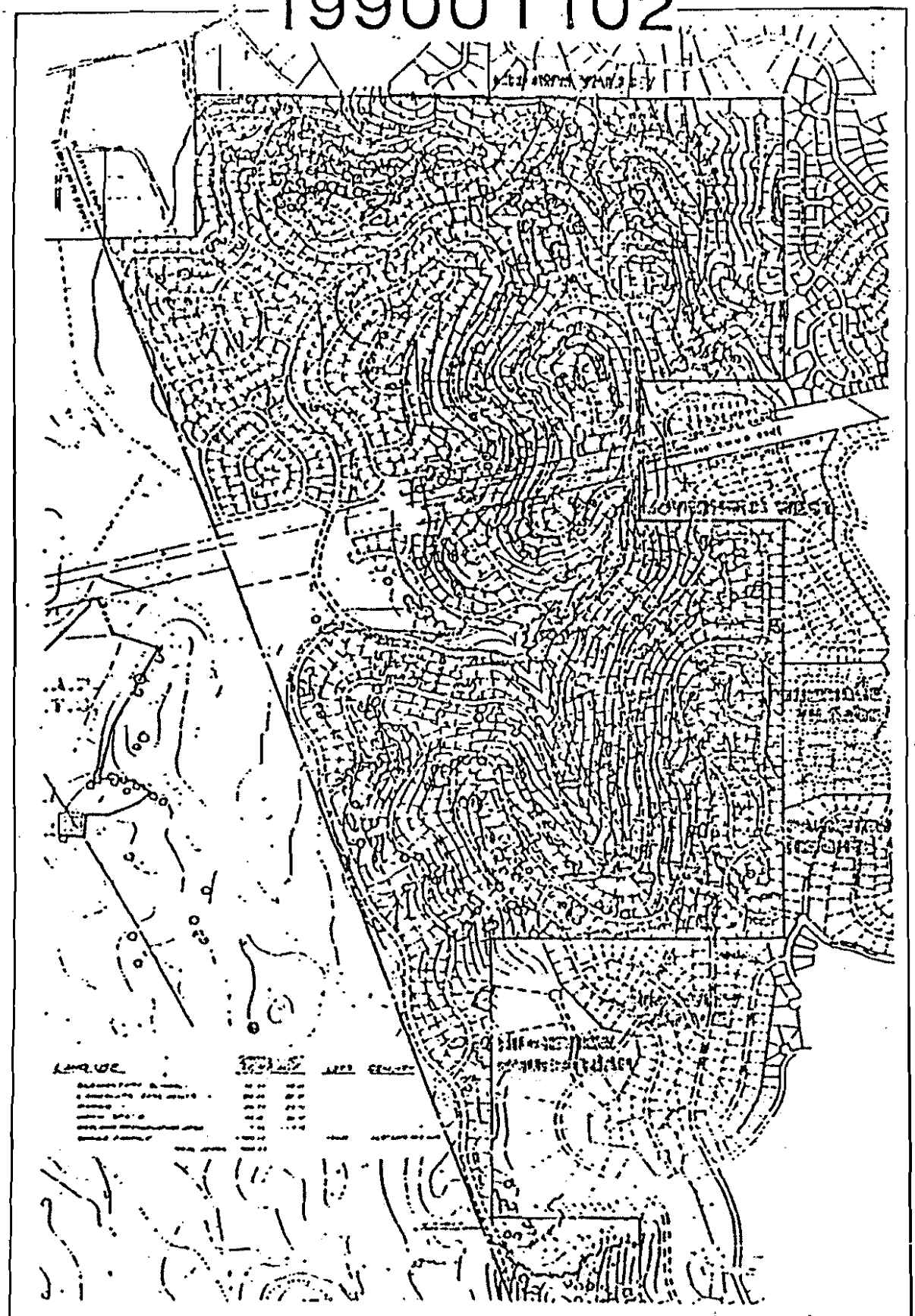
19900102





VICINITY MAP
NO SCALE

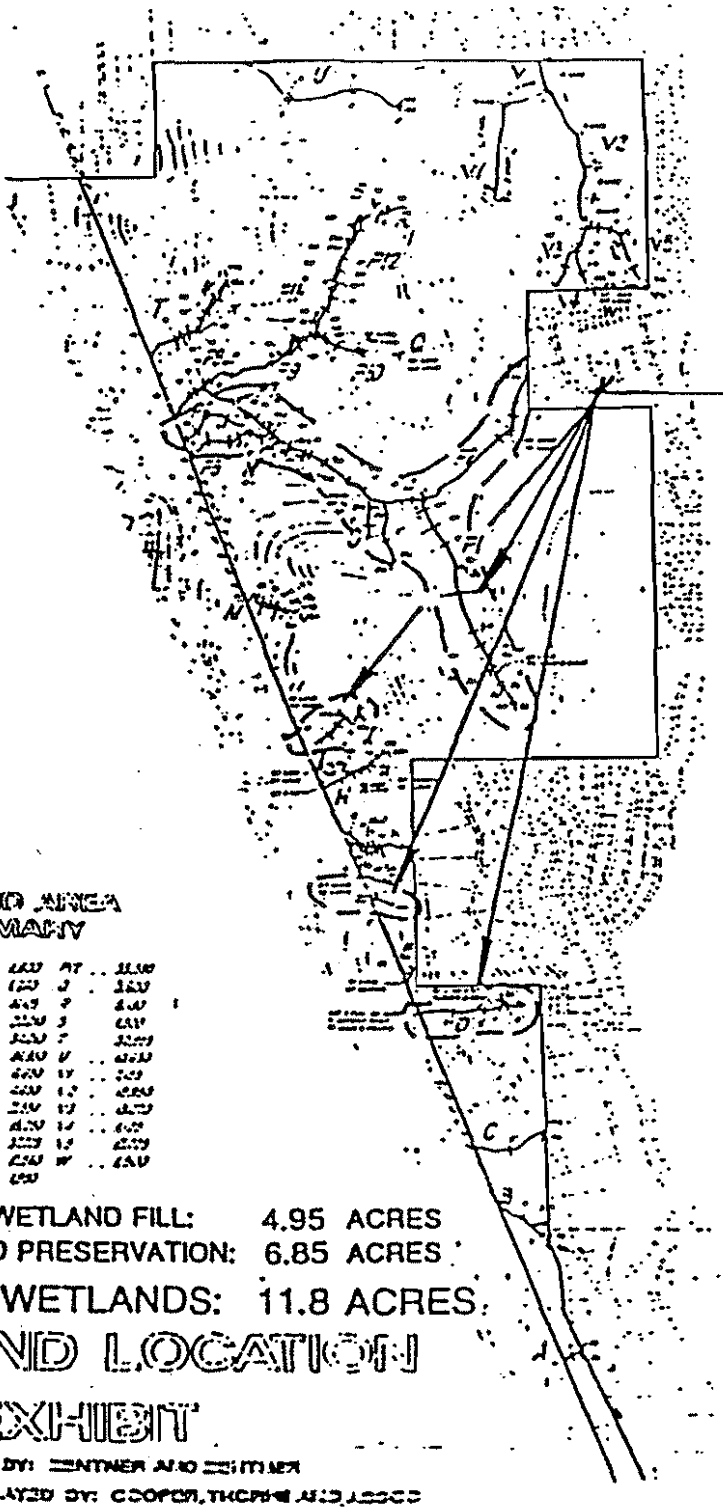
199001102



ENCLOSURE 3 of 6

FIGURE THREE
DEVELOPMENT PLAN

19901102



WETLAND AREA
SUMMARY

TOTAL WETLAND FILL: 4.95 ACRES
TOTAL WETLAND PRESERVATION: 6.85 ACRES
TOTAL WETLANDS: 11.8 ACRES

WETLAND LOCATION EXHIBIT

AS EXPOSED BY: [illegible]
PREPARED AND ILLUSTRATED BY: COOPER, THORPE AND ASSOCIATES

RUSSELL RANCH

SAN DIEGO COUNTY, CALIFORNIA

ENCLOSURE 4 of 6

FIGURE FOUR
AREAS OF WETLAND FILL/ PRESERVATION

19900102

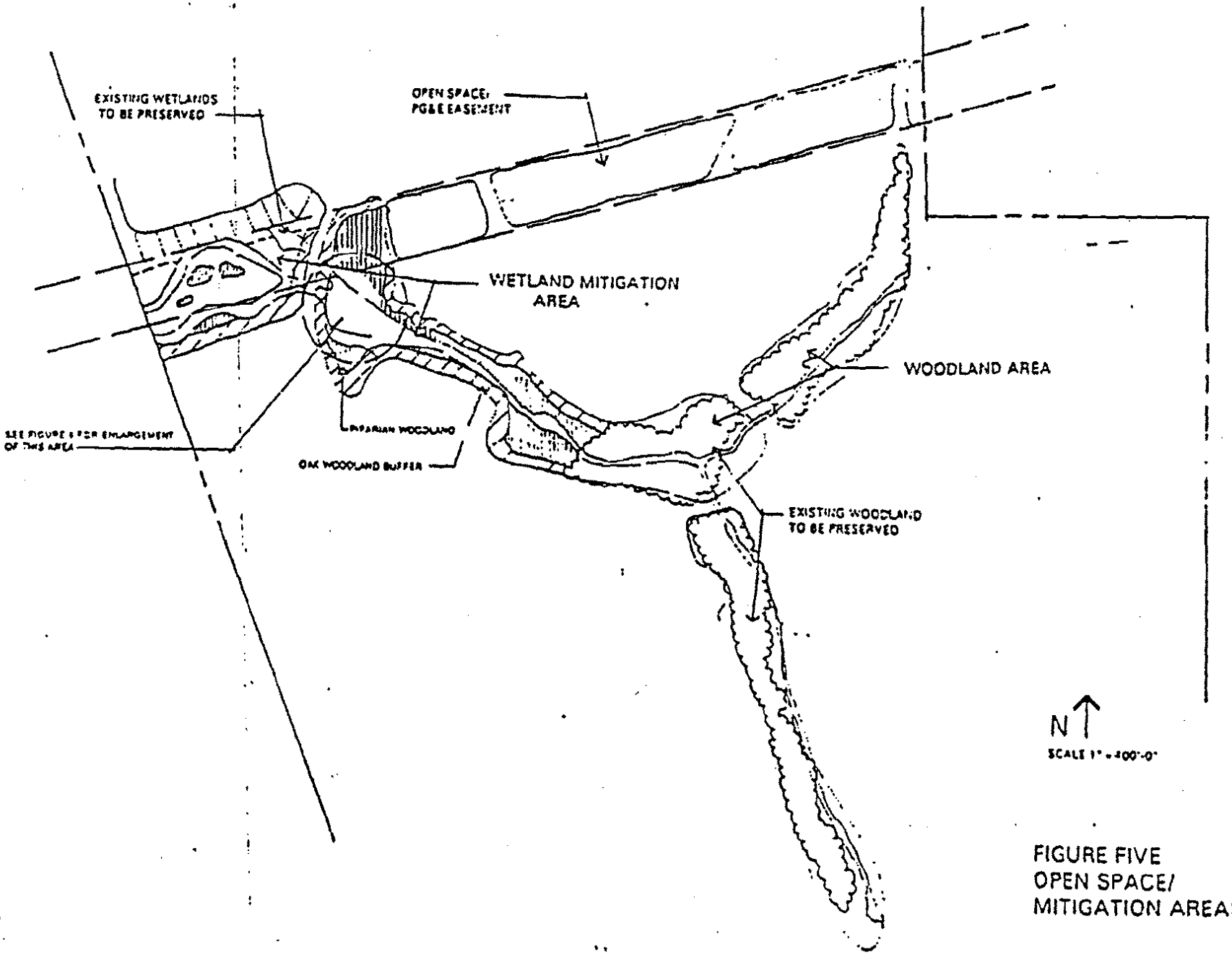


FIGURE FIVE
OPEN SPACE/
MITIGATION AREAS

19901102

ENCLOSURE 6 of 6

PLANT LIST

SYMBOL	NAME
	JUGLANS HINDSII
	POPULUS FREMONTII
	SALIX HINDSIANA
	SALIX LAEVIGATA
	SALIX LASIOLEPIS

FIGURE SIX
PROPOSED
MARSH/LOW TERRACE
RIPARIAN WOODLAND
SCALE: 1"=40'-0"

The Promontory

WETLAND MITIGATION PLAN

EXECUTIVE SUMMARY

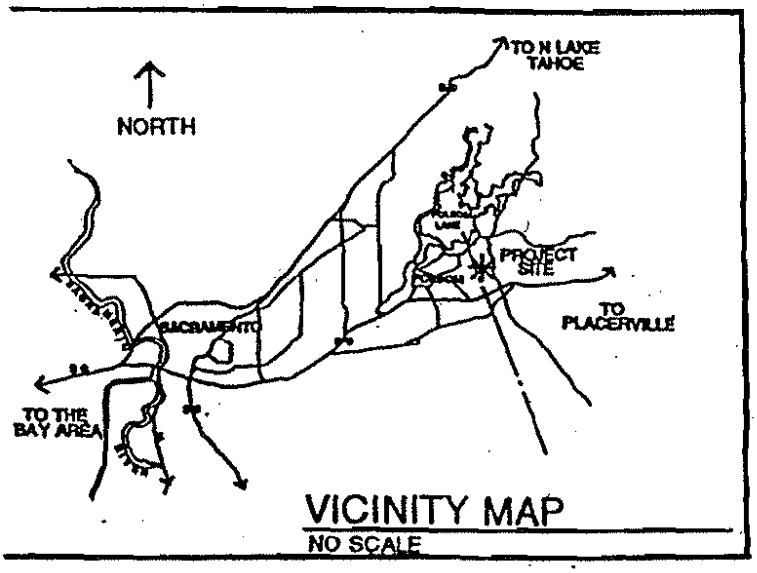
The Promontory site consists of approximately 1000 acres located on the western edge of El Dorado County in El Dorado Hills, California. The site is bordered by the El Dorado County line to the west, Green Valley Road to the north and existing residential development to the east. The southernmost border abuts Highway 50. The site consists of west-facing rolling hills with a large natural bowl comprising the northern two-thirds of the site.

Proposed residential development on this site will result in the loss of 7.39 acres of wetlands, including both marsh and riparian waterways. This mitigation plan proposes the creation of 10.92 acres of wetland habitat and 14.10 acres of oak woodland buffer to offset habitat values lost to development. This wetland and buffer creation is described as follows:

1. Created marshlands and low terrace woodlands will be built around the largest preserved marsh by excavating adjacent uplands to the same elevation and using weirs to back up winter flows.

2. High terrace riparian and oak woodland will be planted on existing slopes above the marsh/low terrace woodland and will provide habitat diversity and shelter. This buffer will be a minimum of 50 feet in width and will be located between the created and preserved habitats and adjacent development areas. A walking trail will be provided on the north side of the the woodland buffer which will tie into a trail over the hill through the PG&E easement.

Additionally, in the upland areas 15.7 acres of blue oak woodland will be preserved and 8.4 acres of grassland will be preserved within an adjoining PG&E easement.



THE PROMONTORY

PALISADES DEVELOPMENT

FIGURE ONE

LAND USE PLAN

I. Introduction

A. Purpose

Palisades Developments has proposed the construction of residences and supporting infrastructure on 904 acres in the western edge of El Dorado County north of Highway 50 and south of Green Valley Road (Figure 1). The site now contains 11.8 acres of wetlands and waters of the United States with approximately 4.7 acres being marsh and the remaining 7.1 acres being unvegetated riparian waterway. These wetlands are found in and adjacent to a number of drainages, all of which are above the headwaters line (the point where average annual flows exceed 5 cubic feet per second or cfs). These drainages flow to either Humbug Creek to the north or Willow Creek to the west.

Residential development will result in the fill of 7.39 acres of these wetlands, including 2.89 acres of marsh and 4.5 acres of unvegetated riparian waterway. The remaining 1.81 acres of marsh and 2.6 acres of riparian area, a total of 4.41 acres, will be preserved and enhanced. A 40.78-acre open space area near the western edge of the site will include 1.9 acres of the preserved wetlands (0.4 acres of the preserved riparian waterways will be preserved elsewhere on-site next to preserves on the adjacent Dame property), 15.7 acres of preserved blue oak woodland, 10.92 acres of created wetlands, and 12.26 acres of riparian woodland buffer. Additionally, 8.4 acres of grassland will be preserved within an adjoining PG&E easement.

This report describes the elements of the mitigation program and is provided in support of a Nationwide Permit 26 application being submitted to the Sacramento District of the Corps of Engineers.

B. Project Goals

The goals for the development of the mitigation project include the following.

1. Provide for no net loss of wetland acreage or function.

2. Provide for appropriate public access and enjoyment of the restoration project.

3. Provide for an appropriate maintenance and management program for long-term use.

C. Site Description

1. Topography

The project site consists of a long slope, generally facing west, formed by the hills found on the western border of El Dorado County. This slope includes a large natural bowl making up the northern two-thirds of the site including most of the more level areas on-site.

The eastern edge of the site abuts the existing residential development of El Dorado Hills and reaches an elevation of just over 1000 feet. The northern portion of the site is also adjacent to existing residential development but reaches heights of only 600 to 700 feet. The southern portion of the site consists of a long, slender panhandle generally between 600 and 700 feet in elevation. The central and western portions of the site consist of the large, natural bowl mentioned above. This area is typically between 400 and 500 feet in elevation.

2. Hydrology

The site is drained by numerous small waterways typically dry except during major storms. The northern quarter of the site drains to Humbug Creek which drains other lands to the north and flows to the west to its confluence with Willow Creek several miles downstream. Humbug Creek in this area and for most of its course is not technically "improved" but has generally been so altered and deepened by gold mining and subsequent re-excavation that it will typically contain the 100-year flood with little difficulty.

The southern remainder of the site drains to Willow Creek which flows through the Dame and Teichert properties in an unimproved condition before reaching the Lexington Hills subdivision, where the channel has been improved to carry the 100-year storm. The unimproved conditions found on downstream lands are similar to that found on the project site: Willow Creek generally consists of a shallow swale bordered by varying widths of seasonal and perennial marshlands. Overland flow of the Creek is common during almost any flood event.

Further detail on off-site flows and water surface elevations can be found in the Corps permit application prepared by Huffman & Associates for the Dame property, which is immediately to the west of this site.

3. Soils

The soils at the site were reviewed by Zentner & Zentner with a series of soil pits dug by hand in just over 50 locations throughout the site to depths of 1 to 3 feet. The soils are primarily silty clays and are similar to those mapped in the SCS survey. There is no apparent significant soil salinity or alkalinity problems on the site. The extent of clay in the soil suggests that auguring holes for newly planted trees would be important. No soil fertilization tests were conducted to determine if fertilizer use would be warranted. The closely grazed slopes have probably not contributed substantial amounts of nutrients to the soil in recent decades, however.

3. Vegetation

The site contains three vegetation associations: grassland pasture; oak woodland; and freshwater marsh. A fourth component, riparian woodland, would be present if grazing had not almost eliminated woodland reproduction.

a. Grassland Pasture

The project site is dominated by annual grasses used as a pasture for stock grazing. The grassland is composed primarily of exotic annual grasses and forbs such as wild oat (Avena fatua), soft chess (Bromus mollis), yellow-star thistle (Centaurea solstitialis), Italian ryegrass (Lolium perenne), and black mustard (Brassica nigra).

Dominance by annual grasses and forbs is common on grazed sites with heavy clay soils. Generally, these areas offer few opportunities for restoration projects. The heavy annual cover provides a significant seed source for weeds in both the restoration area and adjacent lands bordering on residences. The presence of yellow star thistle is especially disturbing as it can rapidly dominate newly graded areas. The thistle can provide a significant deterrent to public access and its presence makes weeding and maintenance of restoration planting extremely difficult. Further, development of a weed cover will convince local homeowners that the restoration area is a "weed lot". Finally, the annual grasses and forbs which dominate the weed associations can create a fire hazard.

b. Oak Woodland

Dominating the upper slopes of the site is a sparse to dense oak woodland made up of live oak (Quercus wislizenii), blue oak (Quercus douglasii), and California buckeye (Aesculus californicus). A dense blue oak woodland occurs on almost 16 acres in the two largest tributaries located in the north central portion of the site. Understory species consist of the same annual grassland plants noted above.

c. Freshwater Marsh

Freshwater marshes are found on-site where the drainageways flatten out and infiltrate the adjacent meadows, creating a wet meadow condition. Dominant marsh species include Juncus balticus, Carex densa and Cyperus eragrostis. Cover in these areas is typically 80 to 100% with 6 to 8 species in any one releve sample (the attached wetland delineation contains a more complete species list). A potentially occurring association would include a creeping wild rye-wild rose association on the higher terraces and channel slopes directly adjacent to the drainageways.

d. Riparian Woodlands

Approximately 7.1 acres on-site have been identified as riparian waterway although these wetlands are not vegetated and the site is almost completely bereft of riparian woodlands. In a few locations where the creek banks are steep and cattle have not been able to graze, riparian shrub species such as wild rose (Rosa californica) have been able to maintain themselves.

Other, adjacent sites, while also grazed, support an intermittent riparian corridor consisting primarily of valley oak Quercus lobata), Fremont cottonwood (Populus fremontii) and arroyo willow (Salix lasiolepis). Historically, the site may have supported a corridor of riparian vegetation similar in nature.

4. Avifauna

While bird surveys have not yet been completed for this site, surveys at the Lexington Hills site downstream over the past year are pertinent. Species expected in the project site would be those found along the marsh portions of the Willow Creek corridor in Lexington Hills as shown in Table One.

TABLE ONE

Avifauna Survey Results on Willow Creek at Lexington Hills

Great Blue Heron	Great Egret	Green-backed Heron
Mallard	Cinnamon Teal	Killdeer
Greater Yellowlegs	Water Pipit	Brewer's Blackbird
Red-winged Blackbird	Black Phoebe	Song Sparrow
Green-backed Heron	Common Moorhen	Black Phoebe
White-crowned Sparrow	Song Sparrow	Red-winged Blackbird

The project site, due to the absence of woodlands or significant areas of ponding, would contain relatively fewer species compared to adjacent areas. Additionally, the lack of significant open water areas restricts the number of waterfowl.

5. Wetlands

a. Methods

Wetlands on the project site were identified by Zentner & Zentner using the wetland delineation techniques as set forth in the Unified Federal Manual for delineating Jurisdictional Wetlands. Wetlands are defined by the presence of plant, soil, and hydrology indicators under normal circumstances.

Vegetation indicators used included the hydrophytes (wetland plants) identified in the regional wetland plant lists developed by the U.S. Fish and Wildlife Service (FWS). A site must contain a "predominance" (over 50%) of hydrophytes for that site to be a wetland. Hydric (wetland) soils were determined by digging soil pits and examining: (1) the soil series for its inclusion on the hydric soils list prepared by the US Soil Conservation Service; (2) the soil colors, using a Munsell Soil Color Chart: (3) soil mottling; and (4) other reducing characteristics.

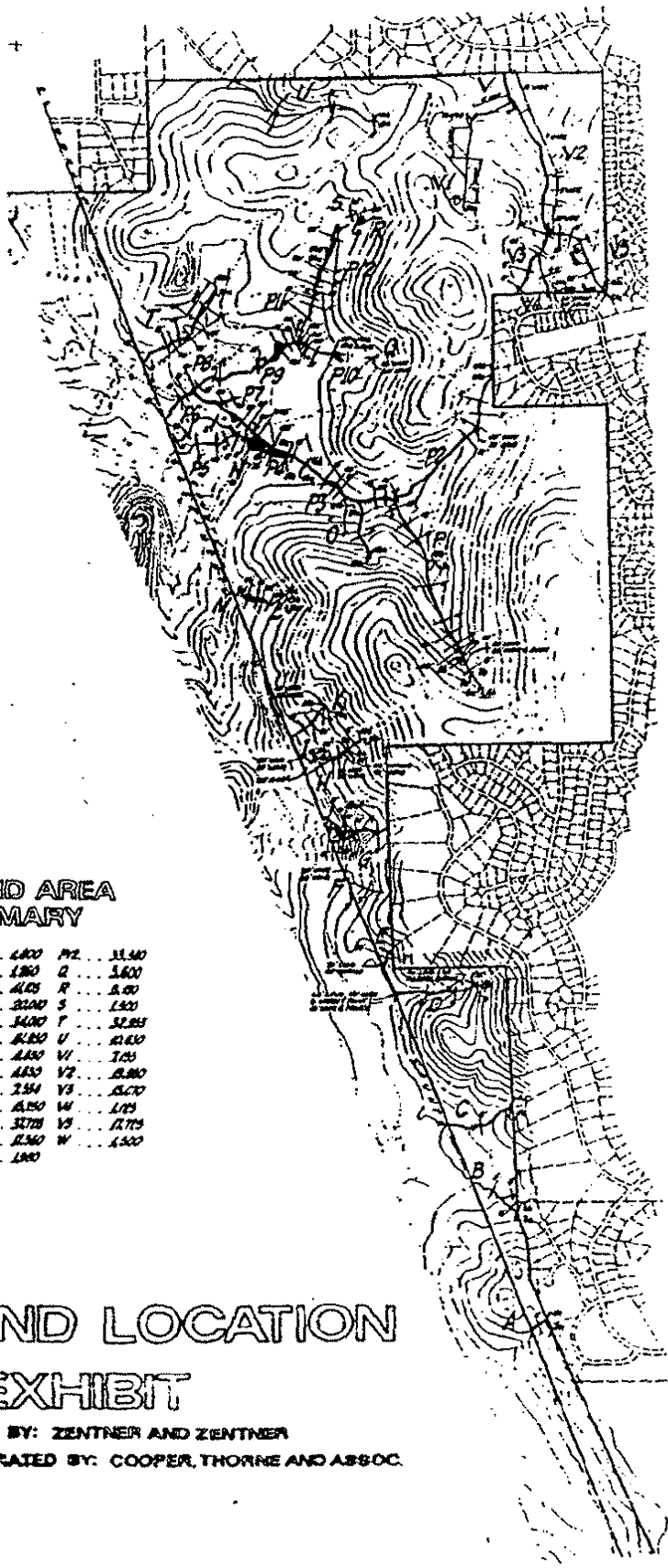
Hydrologic indicators are typically the most difficult to identify. The most common used on this site include matted detritus (indicative of plant stems decomposing in standing water) and algal mats (the residue of algae once found floating on ponded waters).

b. Results

The project area includes two major types of wetland: riparian waterways and freshwater marsh (Figure 2). This map has been submitted to and confirmed by the Corps of Engineers.

The riparian waterways include the oversteepened drainages on-site and their tributaries with an identifiable bed and bank, consisting of 7.1 acres on-site. These areas were defined by walking the length of the drainage and its tributaries on the project site and determining their width at the line of "ordinary high water" during winter. Evidence of ordinary high water included scour lines, bar deposits, and drift lines of litter and debris. Normally, these areas would also include riparian woodland vegetation, but that has been almost entirely eliminated by grazing and other practices.

The freshwater marsh areas consist of small, isolated seeps on the upper slopes of the site and wet meadows along the drainageways at the lower terraces, a total of 4.7 acres on-site. These are dominated primarily by baltic rush (Juncus balticus), Italian ryegrass (Lolium perenne) and bermuda grass (Cynodon dactylon). Soil sampling conducted at each of these sites found hydric soils (10 YR 2/1 or 3/2 with mottling). Hydrologic indicators (algae mats or matted detritus) were found in each of the wetlands. Appendix A contains the wetland delineation report.



WETLAND AREA SUMMARY

AREA DESIGNATION	SQUARE FEET				
A	819	N	4,400	P12	33,540
B	4,825	O	1,350	Q	5,600
C	4,440	P1	41,025	R	8,100
D	8,640	P2	22,040	S	1,500
E	4,425	P3	34,000	T	32,885
F	3,770	P4	61,850	U	61,650
G	12,280	P5	4,850	V1	7,105
H	15,300	P6	4,850	V2	15,880
I	4,000	P7	2,594	V3	15,670
J	800	P8	15,250	V4	1,075
K	2,550	P9	32,725	V5	17,775
L	12,300	P10	12,560	W	4,500
M	800	P11	1,980		

WETLAND LOCATION EXHIBIT

AS DEFINED BY: ZENTNER AND ZENTNER

PREPARED AND ILLUSTRATED BY: COOPER, THORNE AND ASSOC.

RUSSELL RANCH

EL DORADO COUNTY, CALIFORNIA

FIGURE TWO
WETLAND AREAS

II. DEVELOPMENT PLANS

A. Project Description

The Promontory is a proposed residential development which will provide 1,395 homes and appurtenant infrastructure (Figure 3). The development is almost surrounded by approved or constructed homes. On the northern border, low density residential units exist. Along the eastern border, approved and improved homes exist. Along the southern border is Highway 50 and several approved residential projects. Along the western border is the proposed Dame development.

B. Wetland Fill and Preservation

The ecologically sensitive wetland areas in The Promontory were identified early in the design process. Every atttempt to reasonably avoid existing wetland areas has been made. Natural drainage corridors which contain dense blue oak woodlands are preserved in their existing condition. However, in some areas disturbance of wetland areas is unavoidable. The majority of the wetlands which will be disturbed are significantly altered due to grazing and other impacts and are not as significant as the wetlands preserved. The most ecologically sensitive wetland areas have been preserved and are part of this mitigation plan.

As a result, approximately 7.39 acres of wetlands will be filled, including 2.89 acres of freshwater marsh and 4.5 acres of unvegetated riparian waterway. Figure 4 shows the wetland fill proposed by the project.

About 1.8 acres of marsh will be preserved in the central open space area. 2.2 acres of riparian waterway will be preserved within the central open space preserve and 0.4 acres of riparian waterway will be preserved in several small drainages adjacent to the Dame property. All preservation areas connect hydrologically and are adjacent to wetland preserve or creation sites on the Dame property.

C. Project Need

Demand for housing is extremely high in the project area. To define altenative sites for the project, we reviewed a market area consisting of the Latrobe and El Dorado Hills area. Within this area, three sites were analyzed. The first site is 2,000 acres in El Dorado Hills located south of Highway 50. The second site is 2,500 acres located near the Latrobe area and the third site, which is the The Promontory subject site, is approximately 1,000 acres and is located just north of Highway 50.

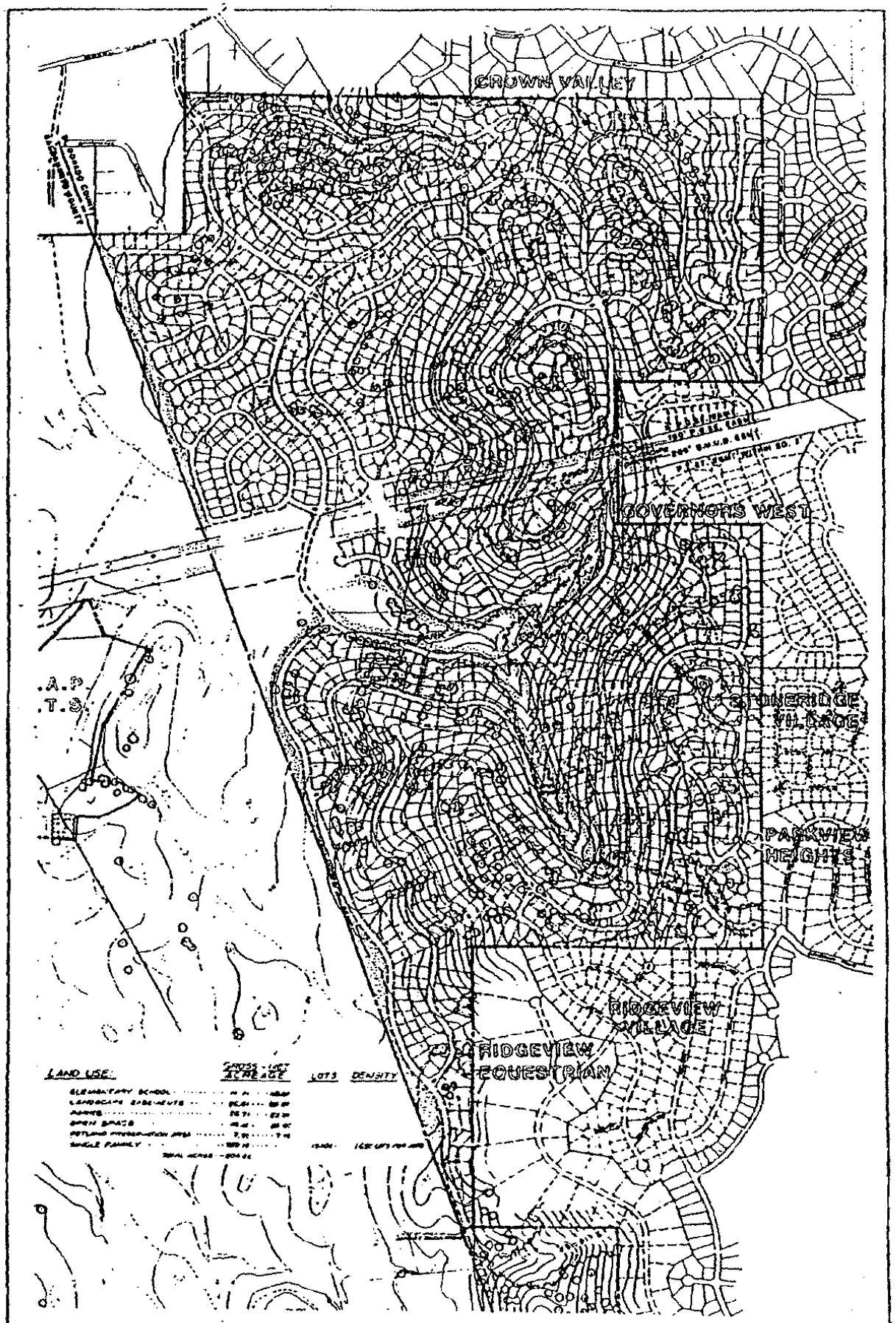
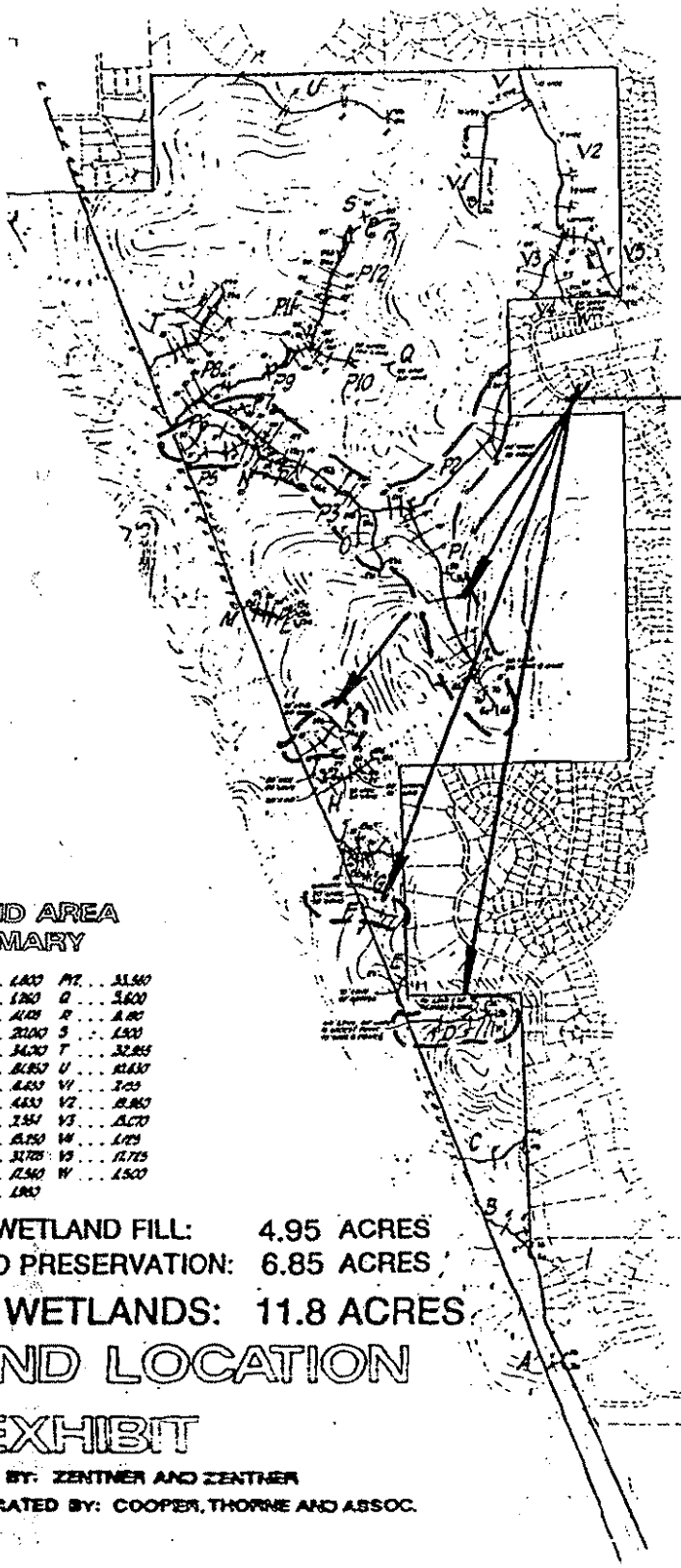


FIGURE THREE
DEVELOPMENT PLAN



WETLAND AREA SUMMARY

AREA DESIGNATION	WETLAND AREA (SQ. FT.)					
A	873	N	1,800	P12	33,560
B	486	O	1,260	Q	3,600
C	4,340	P1	41,128	R	4,180
D	8,640	P2	20,000	S	1,900
E	4,429	P3	34,700	T	32,865
F	1,770	P4	16,857	U	10,630
G	17,080	P5	4,459	V1	3,159
H	13,530	P6	4,430	V2	18,860
I	4,000	P7	2,561	V3	5,670
J	800	P8	6,150	V4	1,129
K	2,330	P9	31,725	V5	17,725
L	6,570	P10	12,560	W	1,500
M	800	P11	1,980		

TOTAL WETLAND FILL: 4.95 ACRES
TOTAL WETLAND PRESERVATION: 6.85 ACRES
TOTAL WETLANDS: 11.8 ACRES

WETLAND LOCATION EXHIBIT

AS DEFINED BY: ZENTNER AND ZENTNER
PREPARED AND ILLUSTRATED BY: COOPER, THORNE AND ASSOC.

RUSSELL RANCH

EL DORADO COUNTY, CALIFORNIA

FIGURE FOUR
AREAS OF WETLAND FILL / PRESERVATION

These sites were analyzed for their development constraints and available infrastructure. The constraints commonly encountered when a development of this scale is proposed relates to the amount of community opposition to the project; the necessity of rezoning for the proposed development; and costs to upgrade the existing infrastructure or install new infrastructure, such as roads, sewer and water trunk lines and sewer treatment plants.

The 2,000 acre site located south of Highway 50 has the natural amenities desired for the project site. However, development constraints make this project unpractiable. First, the site is located in a rural area completely surrounded by agricultural and grazing lands, and community opposition to higher density single family units is significant. Second, the infrastructure to the subject site is not available and the costs to extend the existing infrastructure one mile from the urban area to the site make development infeasible.

The second site is approximately 2,500 acres and is located south of Highway 50 in the Latrobe area. The community of Latrobe is approximately 6 miles south of Highway 50 on Latrobe/Green Valley Road. This site is bounded by agriculture and grazing lands to the north, south and east and the Sacramento County line to the west. This project has natural amenities desired for the project but also has development constraints. These include opposition to high density residential development and the preference to keep the property in agricultural use. Also, providing infrastructure makes development infeasible. This site does not have the water or sewer treatment facilities within close proximity and would require on-site construction of these facilities. The cost for providing this infrastructure makes development infeasible.

The third site, which was selected as the subject site, is approximately 1,000 acres located north of Highway 50 in El Dorado Hills. The project is bounded by the community of El Dorado Hills to the east and north, Green Valley Road to the north, Highway 50 to the south and the Folsom City limits to the west. This site was selected as the development site because of the existing infrastructure, current zoning and presence of the natural amenities.

The areas north, south and west of the project site are currently developed and infrastructure such as roads, sewer, water and utilities are available to the site. This site has been identified in the community plans as high density residential development. This designation for the project site may reduce opposition in obtaining a community consensus.

Formal wetland delineation analyses for these three sites were not conducted at the time of selection. However, considerable wetland areas with marshes, vernal pools and riparian habitats are located in the foothill basins south of Highway 50 near the other two potential sites. The subject site, which is north of Highway 50, has

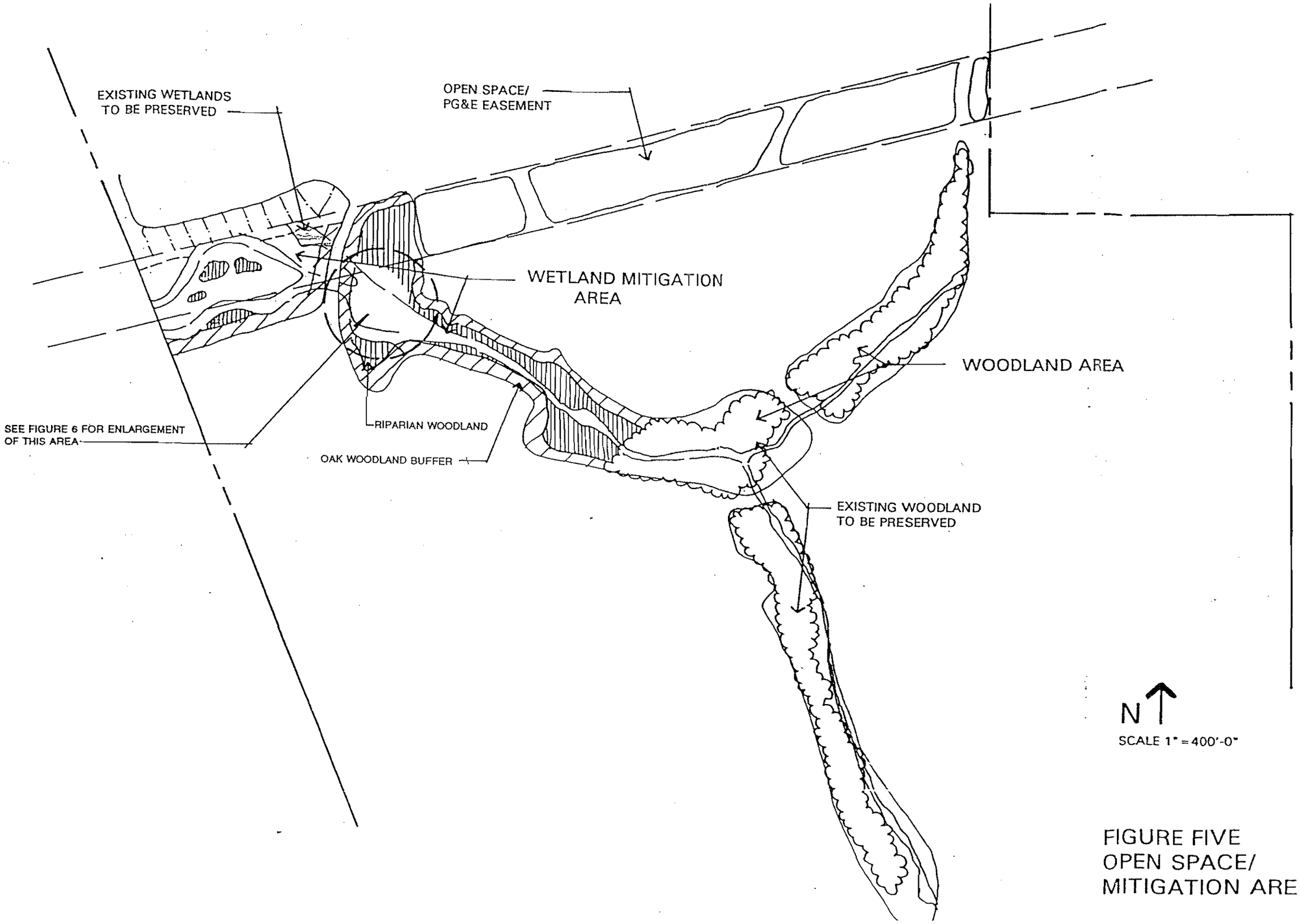


FIGURE FIVE
OPEN SPACE/
MITIGATION AREAS

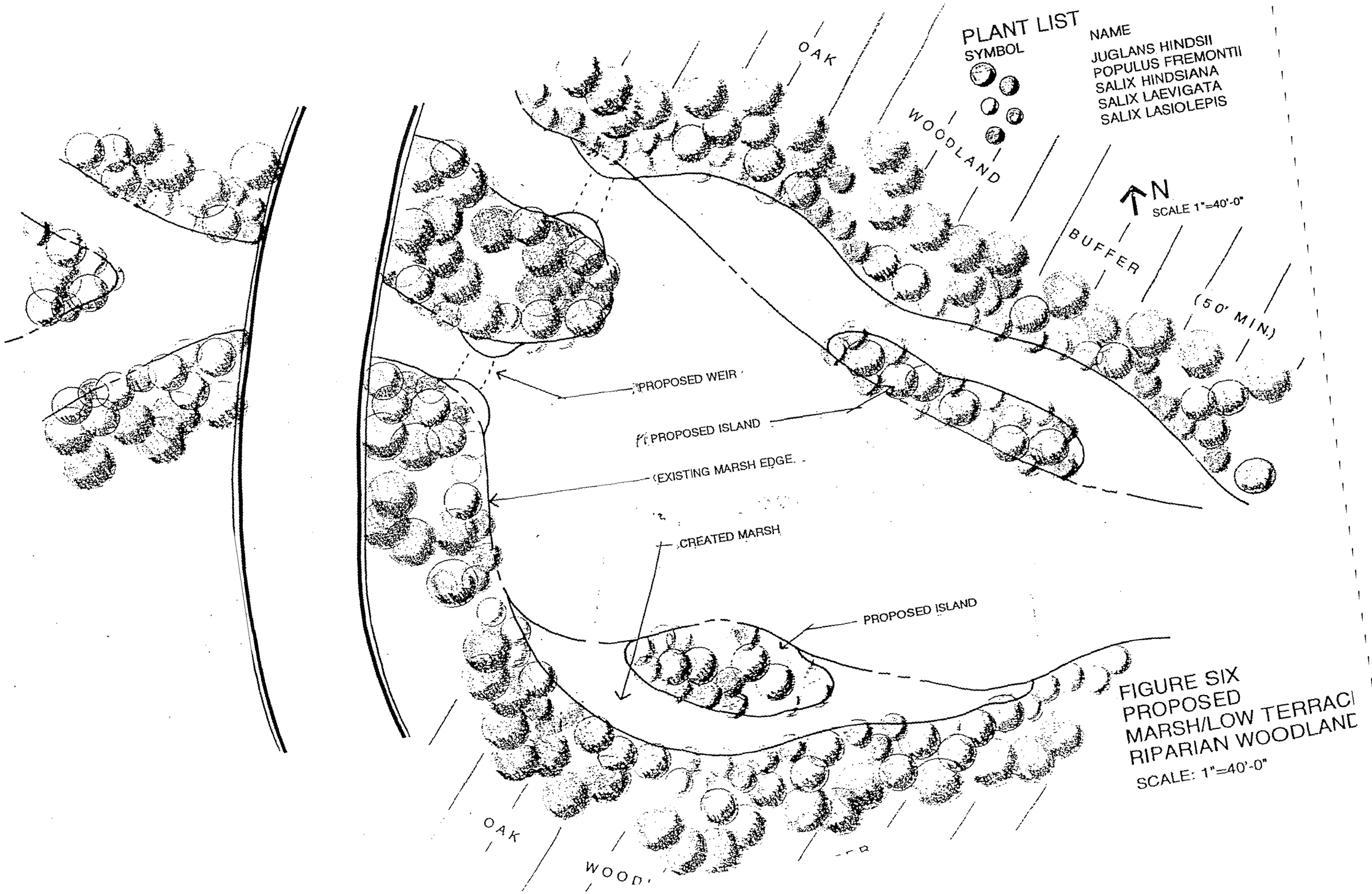


FIGURE SIX
PROPOSED
MARSH/LOW TERRACE
RIPARIAN WOODLAND
SCALE: 1"=40'-0"

wetland areas as noted in this plan, including drainage corridors. However, the wetland areas on the project site are not as signficant as those on the sites south of Highway 50.

III. RESTORATION PROJECT DESIGN AND IMPLEMENTATION

A. Introduction: Design

Figure 4 shows the area proposed for wetland preservation and mitigation in relation to the development project. Figure 5 shows a close-up of this area separated into two parts: the wetland mitigation area and the woodland area.

The wetland mitigation area consists of 19.23 acres which includes 1.81 acres of preserved marsh, 4.67 acres of created marsh, 6.25 acres of created riparian woodland, and 6.5 acres of oak woodland buffer. The preserved marsh is the largest Baltic rush marsh existing on-site (see Figure 4) and occupies some of the lowest ground of the project site. The land around this existing marsh has the most potential for wetland creation and habitat value. Marshlands will be built around this preserved marsh by excavating adjacent uplands to the same elevation and using weirs to back up winter flows. The oak woodland buffer is a minimum of 50 feet in width and is located between the created and preserved habitats and adjacent development areas.

Figure 6 provides a plan view of a portion of this area. As shown in the figure, the largest area of existing marsh on-site will be preserved with new marshland created adjacent to this preserved wetland. Weirs approximately 1.5 feet high and located at the narrowest flow points (just prior to the bridge culverts) will back up winter storm runoff allowing for the inundation of land outside existing wetlands. Low terrace riparian species will be planted in islands within the created and preserved marsh complex, mimicking local habitat patterns. High terrace riparian and oak woodland will be planted on existing slopes above the marsh/low terrace woodland area and provide habitat diversity and shelter and a 50-foot wide (minimum) buffer.

The 25.5-acre woodland area shown in Figure 5 consists of the existing area of dense blue oak woodland (about 15.7 acres), 2.2 acres of riparian wetland, and about 7.6 acres of non-native grassland. The 7.6 acres of woodland creation are not counted towards mitigation requirements as these areas are all on the exterior of the woodland area and, thus, provide bufferlands for the preserved areas.

Table Two provides the acreages of wetland and certain upland habitats to be preserved, filled, and created on-site. "Riparian" is that area of wetlands found in and immediately adjacent to the drainages which does or can support riparian wetlands vegetation (willows, rushes, etc.). "Marsh" are those areas elevationally below the riparian areas which support primarily emergents.

TABLE TWO

Habitat Preservation, Loss, and Creation (in acres)

Habitat Type	Preserved	Lost	Created
Wetland Habitats			
Riparian	2.6	4.5	6.25
Marsh	1.81	2.89	4.67
Totals	4.41	7.39	10.92
Upland Habitats			
Blue Oak Woodland	15.7	N/A	14.1

The following section describes each of the habitat areas in more detail.

B. Freshwater Marsh

Baltic rush (Juncus balticus) is the local marsh dominant. Baltic rush occurs where spring water levels are too high and/or summer drying is too severe to permit establishment of low terrace trees. Rush meadows are elevationally above the deergrass (Muhlenbergia rigens) zone although it is by no means clear that the rush could reestablish there from seed today.

When alluviation-sedimentation produce conditions too dry for Baltic rush establishment from seed, the species may persist for years as the dominant herb stratum vegetation. Baltic rush mats are resistant to invasion by introduced annual grasses, tolerant of grazing, deep rooted and, once established, expand vegetatively. Juncus balticus has been observed to dominate the soil root zone under existing rush meadows to a depth of six feet. These roots penetrate to permanent water or moist soil just above bedrock.

We will plant sprigs of Baltic rush on 10' centers throughout the proposed marsh area. Additionally, an effort will be made to reestablish rush meadows on preserved marsh lands dominated by Lolium by raising the water level via the weirs in early spring, holding the water level up until the period of riparian tree establishment has ended (early May) and then gradually lowering water levels. Based on our experience in the area, a variety of other species will establish naturally.

Additional efforts will be directed toward planting rare species in this zone such as Hibiscus californicus or native species which would either not establish in abundance or establish much later in the absence of direct planting: Paspalum distichum, Scirpus acutus-californicus, S. olynei, large statured species of Heleocharis and others.

C. Riparian Woodland

Riparian woodlands will occur as both low terrace plantings on islands in and adjacent to the marsh lands and as an edge around the marsh area. Species to be planted in these riparian areas include:

Juglans hindsii	California walnut
Populus fremontii	Fremont cottonwood
Salix hindsiana	Sandbar willow
Salix laevigata	Red willow
Salix lasiolepis	Arroyo willow
Cornus stolonifera	Red-osier dogwood
Vitis californica	Wild grape
Rosa californica	Wild rose
Hordeum brachyantherum	Meadow barley
Elymus glaucus	Blue wild rye
Elymus triticoides	Creeping wild rye
Rubus ursinus	Native blackberry

Reviews of this and other sites shows that planting densities for the low terrace riparian woodland initially should be quite high. Densities among the young woodland trees on-site reach 400 to 500 trees per acre (8- to 10-foot centers). Initial plantings will duplicate these densities.

D. Oak Woodland

The oak woodland area will occur as a buffer to the wetland mitigation area and between the preserved riparian and blue oak woodlands and the developed uplands adjacent to the woodland area. Species to be planted in the oak woodland area include:

Quercus wislizenii	Live oak
Quercus douglasii	Blue oak
Quercus lobata	Valley oak
Aesculus californica	California buckeye
Sambucus mexicana	Blue elderberry
Baccharis pilularis	Coyote bush
Rosa californica	Wild rose
Stipa pulchra	Purple needle grass
Elymus glaucus	Blue wild rye
Elymus triticoides	Creeping wild rye

Container plants, bare root seedlings, cuttings, acorns, plugs and seed will be planted and broadcast in a mixed planting at an average on 12' centers over the oak woodland zone. Planting densities will be highest on the upper edges of the project site to provide for the greatest buffering and visual effects.

Average densities of high terrace riparian woodlands vary from 200 to 300 trees per hectare (500 to 750 trees per acre) which creates a space of 87 to 58 square feet per tree, roughly equivalent to plantings on 10- to 12-foot centers.

Often neglected in restoration work, the herb stratum is nevertheless an important component of the riparian woodland. Creeping wild rye (Elymus triticoides) is still a widespread riparian grassland dominant in the region, perhaps because low elevation populations of this species are coarse textured and not preferred by cattle and the species is a vigorous sod former (Crampton 1974). Creeping wild rye can displace most introduced grass and broadleaf species (personal observation). Blue wild rye (E. glaucus) is a less frequent riparian and upland grass at low elevations which may have been more common in pristine times (Crampton (1975).

The most appropriate sites which appear capable of supporting stands of creeping and blue wild rye include primarily remnant alluvial terraces which are too high to support seasonal wetlands or where seasonal wetlands have been removed during a prior restoration and environmental conditions are no longer rush reestablishment. Creeping wild rye regenerates vigorously from plugs whereas blue wild rye regenerates well from seed (Amme and Pitschel 1989).

We will plant both plugs of creeping wild rye and seeds of blue wild rye and meadow barley. Plugs will be planted on approximately 5' centers.

E. Access

A walking trail will be provided on the north side of the wetland mitigation and the woodland areas which will tie into a trail over the hill through the PG&E easement. The trail will be an informal walkway without paving, no more than 6 feet wide, with decomposed granite or similar surface. The trail will be located within the oak woodland buffer provided in the wetland mitigation area and within the oak woodland area and will be confined to the upper one-third of the 50-foot buffer. That is, the trail will meander but this meandering will occur within the first 16 feet as measured from the upland edge of the development. Consequently, the trail will always be buffered from wetland areas by at least 34 feet of oak woodland. Vegetation along the trail will be chosen to provide views of the wetland while providing a rugged vegetative barrier to any intrusion.

IV. MONITORING

A. Summary

Table Three below shows the habitat types to be examined, the monitored elements, and the reference wetlands or "control" sites.

TABLE THREE

Monitoring Elements and Controls

Habitat Type	Monitored Element	Control
Woodland	Plant vitality	N/A
	Mortality rate	Planting Plan
	Bird use	Lexington Hills
Freshwater Marsh	Plant species richness	Preserve
	Plant cover	Preserve
	Bird use	Lexington Hills

B. Monitored Elements

1. Mortality

Mortality rates of the planted vegetation will be evaluated by annual field surveys. Individual trees and shrubs will be tagged during the first year after construction, catalogued in the database to relate location to physical and environmental conditions, and checked for survival and growth.

2. Plant Vigor

The analysis of plant vigor will require assigning each planted tree or shrub to one of five vigor classes. Class One plants exhibit vigorous growth, no die back of the crown, and relative absence of insect or other infestations. Class Three plants will exhibit moderate to strong vigor, no die-back of the crown without replacement shoots, and minimal infestations. Class Five plants will exhibit poor to no vigor, die-back of the crown with no replacement shoots, and large to extensive infestations.

3. Plant Species Richness and Cover

These factors will be assessed annually for both marsh and grassland habitats with whole sample releves of each distinct plant association. Data will be analyzed using COENOS or a similar program facilitating association identification and analysis.

4. Bird Use

Avifauna use of the site habitats will be monitored once per month for each year. Monitoring will be completed by walks through the project area, pausing to whistle-up birds and observe. The monitors will spend at least 2 hours per monitoring period and will note both species and activities.

C. Monitoring Period and Communications

After completion of the construction program, all elements noted above will be monitored for a period of 5 years. The monitoring may be increased an additional 3 years if all or a portion of the project is judged to be unsuccessful and re-creation efforts undertaken (see below under "Management" for more detail). The results of the monitoring, including photographs taken along permanent transect lines, shall be submitted in an annual report to the Corps, US Fish and Wildlife Service, EPA and the State Department of Fish and Game by October 15 of each year.

V. MANAGEMENT

A. Introduction

The applicant is responsible for demonstrating the successful completion of the habitat creation and enhancement program. Long-term management of the site is expected to rest with an assessment district or similar measure.

The remainder of this section describes the objectives to be used to determine success and the interaction of the applicants or their designee and the agencies.

B. Habitat Objectives

Table Four details the performance standards which will be applied to the project at the end of the fifth year of monitoring.

TABLE FOUR

Habitat Performance Standards

Habitat	Monitored Element	Standard
Woodland	Woodland survival	80% of planted
	Plant vigor	Class 3 or better
Freshwater Marsh	Plant species	80% of planted
	Plant cover	80% total cover

---

1. Woodland

The woodland survival standard requires that 80% of the planting sites planted during construction bear viable plants of the same species at the end of the monitoring period. The vigor test requires that all plants be at least of Class Three or better.

2. Marsh

The species richness must reflect at least 80% as many species as have been identified to date at the restoration site (see above discussion). Plant cover is to be measured by sampling at permanent stations, and represents a measure of how well the plugs are spreading over unplanted ground.

C. Judging Success

The applicant has the responsibility to create a successful restoration program and will manage the wetlands in an iterative manner, i.e., where the monitoring program shows an area is tending towards an unsuccessful conclusion, the applicant will take action to correct those trends. These actions would include re-planting and/or re-grading. For example, a portion of the plantings may fail due to inappropriate elevations (too high or too low). The mortality or lack of vigor in the plants would make this problem and the logical solution evident within the first few years of the monitoring.

The annual progress reports shall include all monitoring data and discuss the status of the restoration efforts during the previous year. At the end of the fifth year, the monitoring report will summarize the previous reports and evaluate the success of the project against the performance standards.

If a major adjustment to the program, i.e. regrading or similar action, has occurred in the recent past, the applicant can request that the final evaluation be suspended for a specified period of time.

Where the restoration program or a portion of the restoration program fails to meet the performance standard, it will be the applicant's responsibility to correct the unsuccessful portions of the project. Corrective measures will include techniques which have been shown to be successful at this site or other areas and would include significant re-grading or re-planting. These unsuccessful portions of the project will then be monitored for a further period of three years and evaluated using the same performance standards.

VI. HABITAT CONSTRUCTION SPECIFICATIONS

A. Task Summary and Sequence

General tasks which will be included in the following discussion of grading include: flagging wetlands to be preserved, exotic plant removal, grading spoils disposal, and auguring the planting holes. General tasks which will be included in the discussion of the planting plan include: salvaging of the marsh plants, installing the irrigation system, and planting marsh plugs, trees, and shrubs at the restoration site. All tasks will be reviewed by a qualified ecologist, with experience in the areas of habitat development and wetland restoration/rehabilitation hereafter termed the "ecological monitor", whose duty is to ensure the project is built in accordance with the approved restoration plan.

These tasks will not occur in the order listed above. The sequence of tasks is shown in Table Five below.

TABLE FIVE

Sequence of Habitat Construction Tasks

1. Install protective flagging and stakes for retained vegetation.
2. Remove all invasive exotic plants and on-site garbage.
3. Grade restoration site to specifications.
4. Dispose excavated materials at designated fill sites
5. Salvage marsh plants.
6. Plant salvaged species in designated marsh zones after excavations.
7. Auger all planting basins.
8. Install irrigation system.
9. Plant commercial species in designated zones.
10. Hydroseed exposed soils.

11. Prepare as-builts and construction report.

Protective flagging and stakes for retained vegetation will be installed prior to commencement of all other work. Garbage and invasive exotic plant removal will occur soon thereafter.

Grading, excavation, and marsh plant transplanting work will occur simultaneously. Auguring will occur immediately following the final excavation work and marsh transplant placement. Installation of the irrigation system will be concurrent with the auguring or follow shortly thereafter. This will be followed by planting of willow and berry cuttings and commercially-grown native plant stock. This work should start as soon as practicable after excavation concludes in the early fall.

B. Grading Specifications

1. Habitat Protection

Prior to any grading activities, all existing habitats which will be left undisturbed within the general work area and along all travel ways shall be staked and flagged and the flagging approved by the Ecological Monitor. Flagging will be highly visible and replaced as necessary to be continuously in place during construction activities. Stakes will be at least three feet tall.

This flagging shall extend around the protected area perimeters or along their entire lengths to prevent any unwanted intrusions and/or damage. Complete replacement or repair of accidentally damaged plants or areas will occur. All fencing and flagging will be removed at the end of all construction work.

2. Exotic and Garbage Removal

All invasive exotic plants will be removed manually, including the roots, prior to any grading or excavation work. These materials will be disposed of properly off site or burned on site with appropriate permits. These plants include, but are not limited to, all brooms, pampas grass, gorse, and reed canary grass. Non-native blackberry may be removed if its removal does not effect other, native vegetation.

All garbage on the restoration site or discovered during excavations or grading shall be removed to an approved disposal site. This includes, but is not limited to, old barbed wire fences, etc.

3. Grading

All grading near the corridor will be monitored by the Ecological Monitor and follow the guidance of the approved grading plan which shall be developed in conformance with the above descriptions.

Any logs or root wads (also termed large organic debris or LOD) discovered in the excavations shall be placed in a random fashion along the restoration site to provide added cover for wildlife and to help buffer the newly-planted vegetation. Final LOD placement shall be done according to the directions of the ecological monitor.

4. Soil Disposal

Soils excavated from the restoration site will be disposed of outside any wetland areas not permitted for fill in accordance with the map approved by the Corps of Engineers.

5. Marsh Plant Salvage and Planting

All appropriate plants in the wetland areas permitted for fill or excavation shall be salvaged for re-planting in the corridor. If excavation has not proceeded to the point where salvaged plants can be planted, they will be kept shaded and watered. Salvaged plants cannot be kept outside of planting areas for more than 45 days.

Additionally, marsh plants may be salvaged from selected locations outside the project site in the Creek corridor. Salvage will occur only with a trenching backhoe and remove no more than 30% of any one stand. Planting conditions will be similar to those described above. Also see below under the planting program for further specifications.

6. Auguring

All woodland planting points will be augured to a depth of 5 feet for trees and 3 feet for shrubs. Auguring will allow for rapid deep root penetration, ensuring maximum survival.

7. Installation of the Irrigation System

Installation of a below-ground irrigation system will follow or be concurrent with auguring. All plastic members of the system will be buried at least 4 inches below ground with the exception of spaghetti tubing which may be placed at a depth of at least 2 inches. The system will include both drip (for tree and shrub) and quick couplers in the valve boxes for hand irrigation of the grasses. The irrigation system will be removed after five years and irrigation water steadily decreased during the third and fourth years.

C. Planting Specifications

1. Plant Propagation

Unless specifically noted below, it is the goal of this program that all plant materials, i.e., container stock, cuttings, seeds, or plugs are to be planted from stock gathered within the immediate vicinity of the project site, i.e, within a 10-mile radius.

2. Plant Salvage

Prior to any filling or construction activities in wetlands at the fill sites, all marsh plants or other species which may be potentially salvaged will be salvaged in the form of plugs or similar grouping. Specifications for salvage of all species are included in the following section. Areas with garbage, rotten woody debris, and cattails will be avoided and where possible, kept separate from the marsh transplant stock. LOD that are exposed in the excavations will be hauled to appropriate points and incorporated into the planting areas.

3. Planting Stock

Plant material will be planted as container stock, bare root seedlings, cuttings, canes, acorns, plugs, and seed. All container plants are assumed to be liner or similar-sized stock. The only exceptions are 1-gallon or larger plants used on the upper slopes and tops-of-slope areas of the Creek corridor to increase buffer capabilities and aesthetics.

Container stock will be purchased from a local native plant nursery and planted in a hole twice as deep and wide as the root ball(See figure 8). The root collar of the plants will be level with the surrounding soil level. Slow-release fertilizer, e.g. agriform

or osmocote, will be added to each planting hole prior to planting the acorn or seedling.

Bare root seedlings will be purchased from a native plant nursery. These seedlings will be planted in a hole deep and wide enough to accommodate the root system without "J" rooting the tap root. A slow-release fertilizer (preferably Treestarter) will be placed in each hole just prior to planting.

Dormant cuttings will be salvaged from healthy shrubs in the Creek corridor or the surrounding creek channels. These cuttings will be 12" to 16" inches long (or longer from species such as the willows) and from vigorous young growth. The basal 3" of the cutting will be dipped in a mild rooting hormone powder just prior to sticking the cutting 2/3 of its length in the sand in a mixed planting at 2' X 2' spacing.

Canes will be salvaged from nearby Creek channels. They will be nearly dormant and leafless canes, 24" to 30" long, in healthy condition. A shallow trench 3/4 of the cane length will be made and the cane laid in the trench and covered with one end exposed above the soil. The trenches will be oriented on the contour (perpendicular to the slope) when placed on the marsh basin side slopes.

Acorns will be collected from the site and adjoining areas and planted in hand-dug holes and a 1-foot area surrounding the holes cleared of vegetation.

Plugs will be salvaged from the fill site using backhoes and excavators. Each plug will be about 1' X 1' in size, and will retain as much substrate as possible (at least 4-8"). Plugs will be planted so that the base of the stems are level with the ground surface.

VII. MAINTENANCE

A. Purpose

Most native plants are pre-adapted to their growing conditions and do not require substantial maintenance. "Pre-adapted to their growing conditions" means simply that most native plants will occur only where conditions are relatively optimal for their growth. These conditions occur either where seed has dropped and, out of hundreds or thousands of dispersed seeds, found a viable growing point or where a whole plant or a portion of the plant has been transported to a new and viable site. Essentially, a natural plant community should require no maintenance to encourage its development; normal maintenance activities might actually create more harm than benefit as discussed below.

However, the species to be planted will not be propagated "naturally". They will be propagated in anticipation that a native plant community, one adapted to the site conditions, will develop. Maintenance activities will be needed to ensure that: (1) the community develops as a native plant community, without the introduction of harmful exotic species; and (2) the development of this native community does not create potential hazards for adjacent neighborhoods. These goals provide the operating impetus for this maintenance manual.

B. General Maintenance Requirements

1. Litter clean-up and patrolling once a month; including removal of cuttings, debris and other litter throughout the project area.

2. Correction of any vandalism, fire, and flood damage.

3. Preparation of a maintenance manual for long-term maintenance of the project area.

C. Woodland Maintenance Requirements

The clay soils of this area are not be naturally conducive to large stands of woodland. Consequently, each of the trees and shrubs rests in a hole augured to 5 feet (for trees) or 3 feet (for shrubs. Mulching, proper irrigation, and pest (primarily small mammal) control will probably be the most important factors in the growth of these trees and shrubs. The following section on maintenance details provides more

specific guidelines on each of these elements.

a. Planting Basins

4. Basins shall be maintained once a month to a depth of at least 3 inches and their edges maintained to contain water. Mulch will be added as needed and they shall be weeded of obnoxious plants or debris.

5. Basins shall be enlarged as needed to accommodate tree and shrub growth.

Discussion: Although native trees and shrubs are rarely found within planting basins, the basins are needed for several reasons. First, the basins ensure that the plants receive enough water. The soils have a high content of clay which reduces water availability in the soil. Consequently, each of the trees and shrubs is planted in an augured hole; 5 feet deep for the trees and 3 feet deep for the shrubs. Auguring ensures that water is contained in the basin and goes where it is needed most.

6. Plants shall be inspected monthly and any needed maintenance recorded. Any mulch required should be added at this time.

Discussion: Mulches will reduce evaporative loss from the basins and reduce or eliminate weed growth. It is very important that all planting basins have a sufficient amount of mulch (defined here as 3 inches) from April to October. This period provides the greatest amount of stress and weed growth.

Rains may remove much of the mulch in any specific basins or in most of the basins during winter or spring storms. Removal of the mulch is not considered a problem as the plants are not subject to water stress at this time. Weeds will begin to grow during this period, however, and may need manual control.

7. An area within a one foot radius adjacent to the basins shall be kept free of obnoxious weeds twice a year through manual controls.

Discussion: It is generally not necessary to weed native plant communities to ensure their establishment. However, during the first 2 to 3 years after planting, it will be possible for weedy plants to grow as tall as or taller than the planted trees and shrubs and to compete with the target species for water or nutrients.

However, very few people, except experienced horticulturalists or plant ecologists, will recognize the difference between native plants which are relatively benign and those weeds which can harm the restoration success. Consequently, this Plan proposes manual removal of all non-target plants within the planting basins and between the plant pits.

Manual removal may occur as string-trimming, hand weeding, or similar practices. Herbicide use or similar chemical treatment, however, cannot be permitted within the stream corridor due to potential damage to other plants and the corridor ecosystem.

Removal of weeds from the basins may cease as soon as the trees are at least 7 feet in height or the shrubs are 5 years old.

b. Irrigation

8. Irrigation shall be performed so as to maintain proper growth in all areas.

9. All observable irrigation equipment shall be checked monthly for proper operation. Weekly visual inspections of irrigated areas shall occur to define any potential problems.

Discussion: Proper irrigation frequency and amounts are crucial to the success of the plantings. However, the native species planted are adapted to low water regimes and can be harmed by too much water. The case of the native oaks and their aversion to overwatering is well known to landscape contractors throughout California.

Consequently, although the specifications call for a moist soil within one inch of the surface, this criterion must be carefully applied. Many of the target trees and shrubs are adapted to mesic (moist and/or shaded) conditions, and will require more water than other plants. Several species, especially the Fremont cottonwood, will use water almost continuously. The case of the oaks has already been discussed.

Because of such variation, the specifications provide general guidelines. Specific plant requirements should be discussed with ecological monitors, however. The irrigation system shall be valved accordingly, as much as possible, combining plants with similar water requirements. These requirements can be reviewed in the field until the maintenance contractor is familiar with the variation among species and develops a working understanding of proper soil moisture conditions for each one.

c. Pruning and staking

10. Trees and shrubs shall be pruned once per year to ensure proper growth.

11. All existing staking and ties shall be maintained until no longer necessary.

D. Grassland Maintenance Requirements

12. Establishing native grass and marsh species in an existing California annual grassland will be beneficial with regards to reduced maintenance requirements (fewer annual weeds), better wildlife habitat, reduced fire hazard but require several years of effort. A relatively simple restoration schedule, consisting of hand seeding and planting of grass and rush plugs, is described below.

YEAR I

Fall

1. Irrigate annual grassland in August-September to germinate annual species and prepare soil for rototilling.
2. Rototill or kill annual growth
3. Seed native grasses using high density (50 lbs/acre). Use seed or range drill.
4. Plant native grass plugs.
5. Irrigate. Beginning growth early will enable slower growing perennial species to utilize more of the thermal growing season and thereby produce larger plants more capable of competing with introduced annual species.

Winter

6. Cool season begins--no management necessary unless drought re-occurs.

Spring

7. Mow in mid-March when annual grasses begin to grow. This will interfere with annual species development but not with perennials, which are less productive (smaller, i.e, slower growing) and not likely to seed during their first year.
8. Irrigate (if mid-spring precipitation fails) to encourage growth of Stipa, to lower competition with annual grass species.
9. Mow in mid-April to further reduce annual species.
10. Irrigate after annuals set seed to keep perennials growing during early and mid-summer.
11. Let dry in August.

YEAR II

Fall

1. Mow and remove thatch in September to simulate fire. This begins the regular maintenance cycle.

Spring

2. Mow in early spring to discourage annual grasses which set seed early. This would be one of several mowings to simulate early season grazing.
3. Irrigate in late spring to reduce competition for water and increase survival of native perennial species.

YEAR III AND BEYOND

Fall

1. Mow or controlled burn to remove thatch.
2. Add plugs of new species (as stock becomes available), clear and re-plant any problem areas with seed and/or plugs.

Spring

3. Mow or use grazing to reduce seed supply of annuals.

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STATE OF CALIFORNIA

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD—
CENTRAL VALLEY REGION
OUTIER ROAD, SUITE A
SACRAMENTO, CA 95827-3098
PHONE: (916) 361-5600
FAX: (916) 361-5686

PETE WILSON, Governor

RECEIVED SEP 0 6 1991

4 September 1991

Ms. Mara J. Bresnick
Zentner & Zentner
2301 J Street
Sacramento, CA 95816

REQUEST FOR WATER QUALITY CERTIFICATION, THE PROMONTORY: WETLAND MITIGATION PLAN, CORPS APPLICATION NO. 199001102, EL DORADO COUNTY

Thank you for submitting the request for certification of conformance with applicable water quality standards for the subject report, dated 22 August 1991. Proposed residential development on this site will result in the loss of 7.39 acres of wetlands.

Water quality should be adequately protected if construction is conducted in accordance with all requirements of the Department of Fish and Game and any other regulatory agencies. Therefore, certification will not be necessary and we anticipate no further action by our agency on this project. Should further investigation reveal a potential water quality problem, we will proceed with formulation of waste discharge requirements.

If you have any questions, please call me at (916) 361-5673.

Twila L. Price

TWILA L. PRICE
Area Engineer

TLP

cc: Department of Fish and Game, Region II, Rancho Cordova
Mr. Tom Coe, U.S. Army Corps of Engineers, Sacramento

E OF CALIFORNIA — THE RESOURCES AGENCY
PETE WILSON, Governor

ICE OF HISTORIC PRESERVATION
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3 December 1991

Reply to: CoE 911030A

Col. Lawrence Sadoff, USA
District Engineer
US Army Corps of Engineers
1325 J Street
SACRAMENTO, CA 95814

Subject: PUBLIC NOTICE #9001102; "THE PROMONTORY" DEVELOPMENT, EL DORADO COUNTY

Dear Col. Thomas:

Thank you for sending me a copy of the Public Notice referenced above.

Palisades Development of El Dorado Hills is applying to the Army Corps of Engineers for a Section 404 permit to fill a 7.39 acre marsh and its tributaries. This will enable the development of approximately 1,000 acres of lands formerly known as the Russell Ranch.

It appears that the Corps of Engineers has restricted the boundaries of the undertaking's APE to include only the marsh area and the beds of its tributaries, although the project promises to affect a much greater land area.

The Corps should adequately identified all historic properties which could ultimately be affected by issuing the Section 404 permit. Can the preferred alternative proceed as shown without the Corps issuing a Section 404 permit?

When responding be sure to include a map which shows the project area, the Area of Potential Effect (36 CFR 800.2), and the proximity of historic properties. Please remember to use the reference number in the upper right corner of this page.

Are there any structures on or near the APE? Could they be fifty or more years old? If so, please include photographs of each such structure and its surroundings. Will the project require or result in moving, altering, abandoning, or demolishing any structures fifty or more years old?

If you have any questions, please telephone Nicholas Del Cioppo of my staff at (916) 653-9696.

Sincerely,

Kathryn Gualtieri
State Historic Preservation Officer