# EL DORADO COUNTY DEVELOPMENT SERVICES PLANNING COMMISSION STAFF REPORT

Agenda of:

April 26, 2007

Item No.:

12.

Staff:

Mel Pabalinas

# DESIGN REVIEW/REZONE/PLANNED DEVELOPMENT

APPLICATION NOS. Z06-0042/PD06-0027/DR90-0031R

APPLICANT:

Rauschenbach Marvelli Becker

REQUEST:

The project consists of the following requests:

- Rezone of property from Commercial (C) to Commercial-Planned Development (C- PD);
- Planned Development (PD) evaluating the project impacts associated Floor-Area-Ratio (FAR) exceeding the 0.25 maximum under General Plan Policy 2.2.1.5; and
- Revision to an approved design review for the expansion of the existing Bel Air Market from 50,345 square feet to 60,122 square feet and minor modifications to the building exterior;

LOCATION:

The project is located within the Goldorado Shopping Center, south of Palmer Drive, east of Cameron Park Drive, and north of U.S. Highway 50, in the Cameron Park area, Supervisorial District IV. (Exhibit A)

APN:

083-456-10 (Exhibit B)

ACREAGE:

4.14 acres

GENERAL PLAN:

Commercial (Exhibit C)

ZONING:

Commercial (Exhibit D)

ENVIRONMENTAL DOCUMENT:

Negative Declaration

SUMMARY RECOMMENDATION:

Conditional Approval

# BACKGROUND

Goldorado Shopping Center was conditionally approved under Design Review DR90-0031 on March 14, 1991. The shopping center consists of various commercial uses ranging from major anchor commercial tenants (Bel Air and Longs Drug store), to restaurants, shops, boutiques and banks. On March 19, 1997, a staff level revision to the approved design review (DR90-0031S) was approved for a minor expansion (1,200 square feet) to the front portion of the store.

# STAFF ANALYSIS

Staff has reviewed the project for compliance with the County's regulations and requirements. An analysis of the proposal and issues for Planning Commission consideration are provided in the following sections.

# **Project Description**

The project consists of the following:

Revision to Approved Design Review

The proposed revision include a 9,777 square feet expansion of the existing Bcl Air Market from 50,345 square feet to 60, 122 square feet, and a minor modification of the front elevation of the store. The expansion consists of areas in the front and rear mezzanine (storage/mechanical) rooms and offices totaling 1,800 square feet. The expansion to the ground floor area is to be 7,977 square feet and would include areas for coolers, freezers, and storage. The existing internal sales area would be reconfigured adding rows of shelving for products. The building expansion conforms to the setback requirement of the affected rear yard area of five feet (Exhibits E-G).

A new depressed loading dock, measuring 30 feet x 80 feet, would be constructed, one loading dock would be removed, minor re-landscaping would occur in the rear of the building, and a retaining wall shall be constructed along the exterior wall of the expansion. The proposed project would require an additional 39 parking stalls for the entire shopping center. Currently, the center contains 639 spaces which exceed the required amount of 603. The proposed expansion would require four additional parking spaces. The applicant is proposing to re-stripe the parking lot to accommodate the parking spaces.

Existing sewer and water infrastructures and services would continue to be provided by the El Dorado Irrigation District (EID). The Cameron Park Fire Protection District has indicated that, given the expansion of the facility, the existing fire suppression system (i.e., hydrants) on site would be adequate thereby not necessitating an upgrade. Internal electrical and plumbing upgrades would be verified during building permit process. There are no off-site improvements required for the project.

Modifications to the façade include rebuilding of the wooden trellis, renovation to gable feature, installation of a new automatic sliding door and aluminum framing, and replacement of various

attached wall signs. Table 1 details the proposed materials and paint colors of the exterior modifications and Table 2 details the proposed wall signs. The Cameron Park Design Review Committee reviewed and approved the project at its regular meeting held on September 11, 2006 (Exhibit H).

Table 1 - Proposed Exterior Materials and Paint Color

MATERIAL	MANUFACTURER	STYLE/COLOR
Foamed Shaped Cornice/Cement Plaster	Kelly Moore Paints	231 Spanish Sand
Cement Plaster	Kelly Moore Paints	KM3980-2 Western Wear
Metal Coping	Kelly Moore Paints	KM4182-3 Lescamela Vanilla
Foamed Shaped Cornice/Cement Plaster	Kelly Moore Paints	212 Saltillo
Rake Trim	Kelly Moore Paints	196 Villita
Trellis	Kelly Moore Paints	AC249-5 Rare Earth
Existing Concrete Tile Roof (To Remain)	Lifetile	California Mission Blend
Existing Split Face Block (To Remain)	Existing	Existing

Table 2 - Proposed Wall Sign Detail

Sign	Sign Area	Material/ Lighting
Bel Air	4 feet x 23 inches	Acrylite#207-0 GP Red Plexiglas; %" Red trimcap retainers; 5 inch returns painted red; illuminated with flexible LED
Bel Air Logo "B"	5 feet 7 ¼ inches x 7 feet ¾ inches	Aluminum reverse pan channel letter; brushed Gold Finish Returns; stud mounted to facia; halo backlit with amber flexible LED
Fresh Market	2 feet x 22 feet 3 inches	Acrylite #207 Red acrylic face; ¾" gold trimcap retainers; 5 inch gold returns; illuminated with flexible LED
U.S.P.S	3 feet 6 inches x 5 feet 3 inches	Acrylite #207 Red acrylic face; 3/2" gold trimcap retainers; 5 inch gold returns; illuminated with flexible LED
Pharmacy	22 inches x 19 feet 5 inches	Acrylite #207 Red acrylic face; ¾" gold trimcap retainers; 5 inch gold returns; illuminated with flexible LED
Peete's Coffee and Tea	2 feet 5 inches x 10 feet	8 inch return (dark brown); aluminum face
Future Bank	2 feet x 13 inches	To be determined

# Rezone and Planned Development

Pursuant to General Plan Policy 2.2.1.5, a rezone of the property from Commercial (C) to Commercial-Planned Development (C-PD) and planned development (PD) is required in order to evaluate the project effects with floor-area-ratio (FAR) exceeding the 0.25 maximum (for commercial development) within an integrated development. The proposed rezoning would establish a combination Planned Development (-PD) District with the underlying Commercial zoning for the subject property. With a PD overlay, proponents have the opportunity to utilize specific planning and

development techniques in order best implement the project. The proposed rezoning would remain in conformance to the Commercial General Plan Land Use Designation.

The proposed expansion of the Bel Air Market would result in an increase of the entire floor area within the entire Goldorado Shopping Center (resulting gross building area of 160,687 square feet over 612,090 net square feet of the entire development); as a result the FAR is increased 0.24 to 0.26. The policy states that the 0.25 FAR may be exceeded if the project is analyzed through the PD process and that project impacts are avoided, mitigated to the same or greater extent than the 2004 General Plan EIR, or are found not to be substantially more severe than impacts analyzed in the 2004 General Plan EIR.

In review of the FAR excess through the planned development, the most relevant impacts associated with the project would involve traffic, noise, and air quality. This is further supported in *Staff Report #4 for El Dorado County General Plan Adoption Hearings* where it states that, "F.A.R policies have the potential to generate sufficient traffic to cause inconsistencies with traffic level of service (LOS) policies, and to increase daily and peak hour traffic, to increase exposure to ground transportation noise sources, and to generate long-term operational air quality effects from the emissions of Reactive Organic Gases (ROG), Oxides of Nitrogen (NOx) and small particulate matter (PM10)." A supplemental traffic study (Kimley-Horn and Associates), noise (Kimley-Horn and Associates) and air quality (Sycamore Environmental Consultants) analysis have been prepared for the project (Attachments 3-5).

As further evaluated in the circulated mitigated negative declaration, the project anticipates 378 additional vehicular trips and 25 PM peak hour trips. The traffic study concludes that the amount of trips would not result in a substandard operation to the existing road network within the immediate vicinity of the project and, therefore, would have less than significant impact.

The project anticipates short-term noise impacts to occur during construction. Similarly, the noise associated with the operation of the project would be predominantly confined within the building. Furthermore, given the existing ambient noise from the surrounding commercial uses and its proximity to the US Highway 50, the project has an inherently elevated noise effect.

The noise analysis evaluated the impacts from the anticipated 378 vehicular trips from the project. The analysis concluded that the additional trips would result in an increase vehicular traffic noise in the amount of 0.1 dBA, which is not considered detectable by a typical human ear. Therefore, noise impacts from the project are considered less than significant.

The Air Quality Management District reviewed and commented on the potential air quality project impacts (Attachment 6). Based on the standard initial project screening for operational and construction emissions, it was concluded that the project would not trigger the threshold of significance for air quality impacts. This conclusion is further corroborated by the supplemental analysis conducted by Sycamore Environmental Consultants, citing the relatively minor expansion of the existing facility and strict adherence to district measures minimizing impact. Therefore, the project poses less than significant air quality.

# Site Description

The project is sited within the Goldrado Shopping Center located south of Palmer Drive, east of Cameron Park Drive, and north of U.S. Highway 50. The center consists of commercial anchors Bel Air and Long's Drug Stores and various tenants ranging from restaurants, boutiques, and banks. The center has on-site parking, loading areas, and landscaping. The shopping center is accessed at four locations off Palmer Drive and one located off Cameron Park Drive.

The site is within Ecological Preserve Area I which is an area with potential occurrence for specific "rare" endemic plants (Pine Hill plants) based on the soil composition (serpentine or gabbroic soil type). However, the proposed expansion would occur on existing pavement and would not impact any undisturbed or undeveloped soil.

# Adjacent Land Uses

	General Plan Designation	Zoning Designation	Overlny Zoning Designation	Existing Use
North	Commercial	Commercial	Design Control (DC)	Commercial
East	Commercial	Commercial	Design Control (DC)	Commercial
South	Commercial	Commercial	Design Control (DC)	Commercial
West	Commercial	Commercial	Design Control (DC)	Commercial

# General Plan

Land Use Element General Plan Policy 2.2.5.2 requires all discretionary projects to be reviewed for consistency with applicable General Plan Policies. The following discussion relates to the General Plan policies subject to the project:

Policy 2.2.1.2: To provide for an appropriate range of land use types and densities within the County...[corresponding] with the specific General Plan land use designations.

<u>Discussion:</u> The project is an expansion and modification of an existing grocery shopping store located on and surrounded by properties with similar a commercial land use designation.

Policy 2.2.1.5 (As amended under General Plan Amendment A06-001 approved by the Board of Supervisors on March 7, 2006, Resolution 61-2006): Establishes specific building intensity based on Floor-Area Ratio corresponding to the subject land use designation.

<u>Discussion:</u> The proposed facility expansion would result in an increase of the FAR exceeding the established 0.25 standard for the commercial development. The potential project impacts associated

with this excess has been evaluated through the planned development and circulated negative declaration and determined not to be significant.

Policy 2.2.3:1 The Planned Development (-PD) Combining Zone District, to be implemented through the zoning ordinance, shall allow residential commercial, and industrial land uses consistent with the density specified by the underlying zoning district with which it is combined. Primary emphasis shall be placed on furthering uses and/or design that provide a public or common benefit, both on- and off-site, by clustering intensive land uses to minimize impact on various natural resources, avoid cultural resources where feasible, minimize public health concerns, minimize aesthetic concerns, and promote the public health, safety, and welfare. A goal statement shall accompany each application specifically stating how the proposed project meets these criteria.

- A. The major components of a Planned Development in residential projects shall include the following:
  - Commonly owned or publicly dedicated open space lands of at least 30 percent of the total site. Within a community area, the commonly owned open space can be developed for recreational purposes such as parks, hall fields, or picnic areas. Commonly owned open space does not include space occupied by infrastructure (e.g., roads, sewer, and water treatment plants).
  - 2. Clustered housing units or lots designed to conform to the natural topography.
- B. Non-residential planned developments shall be accomplished through the Zoning Ordinance.

<u>Discussion:</u> Subject to Criteria B, the project has been reviewed and verified for conformance to the applicable development standards under Title 17 of the El Dorado County Zoning Code. Specific project conditions are applied to the project ensuring suitable design, development, and operation of the facility.

Policy 2.2.5.3 The County shall evaluate future rezoning: (1) To be based on the General Plan's general direction as to minimum parcel size or maximum allowable density; and (2) To assess whether changes in conditions that would support a higher density or intensity zoning district. The specific criteria to be considered include, but are not limited to, the following:

- Availability of an adequate public water source or an approved Capital Improvement Project to increase service for existing land use demands;
- Availability and capacity of public treated water system;
- 3. Availability and capacity of public waste water treatment system;
- 4. Distance to and capacity of the serving elementary and high school:
- 5. Response time from nearest fire station handling structure fires;
- 6. Distance to nearest Community Region or Rural Center;
- 7. Erosion hazard:
- 8. Septic and leach field capability;
- 9. Groundwater capability to support wells:

- 10. Critical flora and fauna habitat areas;
- 11. Important timber production areas;
- 12. Important agricultural areas;
- 13. Important mineral resource areas;
- 14. Capacity of the transportation system serving the area;
- 15. Existing land use pattern;
- 16. Proximity to perennial water course;
- 17. Important historical/archeological sites;
- 18. Seismic hazards and present of active faults; and
- 19. Consistency with existing Conditions, Covenants, and Restrictions

<u>Discussion:</u> The project is an expansion and minor modification to an existing Bel air Market located within the Goldorado Shopping Center in the Community of Cameron Park. The site is adequately served by an existing road network, public water and sewer, and drainage systems. The project would occur within the developed center and would not impact undisturbed lands. The site is not within the area subject to seismic hazards or active faults. The project has been reviewed and verified for consistency with the CC&R's for the Goldorado Shopping Center.

Based on the above supporting discussion staff finds that the project conforms to applicable policies of the General Plan.

# Zoning Code

The project site is zoned Commercial with Design Control (-DC) Overlay. The subject Bel Air store is within a regional shopping center, Goldorado Shopping Center. The project meets the applicable standards including signs, building setbacks, parking, and lighting.

Pursuant to Chapter 17.74 of the El Dorado Zoning Code (Design Review District), the project has been reviewed and approved by the Cameron Park Design Review Committee.

# Planned Development

The proposed expansion and modifications to the Bel Air store has been reviewed pursuant to Chapter 17.02 of the El Dorado Zoning Code (Planned Development) and verified conformance to applicable standards of the zoning code and General Plan policies. In accordance with Section 17.04.030 of the County Code, a development plan cannot be approved unless the Planning Commission can make the six specific findings Attachment 2.

1. That the planned development request is consistent with the General Plan;

<u>Discussion:</u> The proposed planned development for the project conforms to the standards of the zoning code and, as analyzed above, is consistent with the applicable General Plan policies.

2. That the proposed development is so designed to provide a desirable environment within its own boundaries;

<u>Discussion:</u> The project involves an expansion of an existing retail facility within an existing community shopping center (Goldorado Shopping Center). The entire center provides various commercial services and is adequately served by an existing on and off-site circulation network, pedestrian paths, parking, landscaping, and connectivity outside of the its boundaries.

3. That any exceptions to the standard requirements of the zone regulations are justified by the design or existing topography;

<u>Discussion:</u> There is no deviation from standard requirements.

4. That the site is physically suited for the proposed uses:

<u>Discussion:</u> The proposed expansion and modification of the Bel Air store is located an existing Goldorado Shopping Center, which is physically suited to accommodate the project.

5. That adequate services are available for the proposed uses, including, but not limited to, water supply, sewage disposal, roads and utilities; and

<u>Discussion:</u> The project site is located within Goldorado Shopping Center that is adequately served existing by EID's public water and sewer services, El Dorado County drainage system and public road networks, and other local fire protection and emergency services.

That the proposed uses do not significantly detract from the natural land and scenic values of the site.

<u>Discussion:</u> The project is commercial in nature within an existing community shopping center and would not impact any natural land or scenic values of the developed site.

Staff concludes that the required discussed findings may be made to conditionally approve the proposed development plan.

# Other Issues

Agency Comments

The project was circulated for review and comments to various affected agencies. A subsequent formal Technical Advisory Review (TAC) meeting was conducted discussing issues and other project related comments. The specific topics are discussed below and the comments are included in Attachment 6, and recommended conditions of approval are included in Attachment 1.

Air Quality: El Dorado County Air Quality Management District (AQMD) reviewed the project and determined that the project posed less than significant impacts to air quality.

<u>Traffic:</u> El Dorado County Department of Transportation reviewed the project and required preparation of a traffic analysis evaluating potential effects to the existing road network within the vicinity of the project site. Based on the Kimley-Horn and Associates analysis, the project was determined to have less than significant impact subject to the conditions of approval recommended by the Department of Transportation (Attachment 1).

County Surveyor and Cameron Park Community Services District: Both agencies had no comment on the project.

Cameron Park Design Review Committee (CPDRC): The project was reviewed by the CPDRC on September 11, 2006, and they recommended approval of the project (Attachment 8). The Committee posed concerns about the potential upgrade to the adjacent Longs Drug store and what measures would be required of the store.

In the event that Longs Drug store proposes modification to its current facility, an application for a design review revision would be required, subject to review and consideration by CPDRC, County staff, and other affected agencies.

# Conditions of Approval

Attachment 1 details the recommended conditions of approval subject to the project. Applicable conditions from the original design review approval have been incorporated. Several of these conditions are needed to ensure project compliance with the original approval. Conditions that are not applicable are shown with a strike through-while the conditions that are applied are shown with an <u>underline</u> and any addition to the condition is shown with a <u>double underline</u>.

### ENVIRONMENTAL REVIEW

In accordance to California Environmental Quality Act, an Initial Study/Negative Declaration was prepared to determine if the project would have significant effects on the environment. The document was circulated for a 30-day public review period. Based on the Initial Study, staff finds that the project would have less than significant effect on air quality, noise and traffic. No impacts to the remaining resources were identified in the checklist.

NOTE: This project is not located within or adjacent to an area which has wildlife resources (riparian lands, wetlands, watercourse, native plant life, rare plants, threatened and endangered plants or animals, etc.), and was referred to the California Department of Fish and Game. In accordance with State Legislation (California Fish and Game Code Section 711.4), the project is subject to a fee of \$1,850.00 after approval, but prior to the County filing the Notice of Determination on the project. This fee, less \$50.00 processing fee, is forwarded to the State Department of Fish and Game and is used to help defray the cost of managing and protecting the State's fish and wildlife resources. Under the revised statute effective January 1, 2007, a project proponent asserting a project will have no effect on fish and wildlife should contact the CDFG and the CDFG will review the project, make the appropriate determination, and in "no effect" cases, the CDFG will provide the project proponent with documentation of exemption from the filing fee requirement.

RECOMMENDATION: Recommend approval

# SUPPORT INFORMATION

# Attachments to Staff Report:

Attachment 3	Traffic Analysis
Attachment 4	Noise Analysis
Attachment 5	Air Quality Analysis
Attachment 6	Agency Comments

Exhibit A	Vicinity Map
Exhibit B	General Plan Land Use Map
	Zoning Map
Exhibit D	Overall Site Plan
Exhibit E	Detailed Site Plan
Exhibit F	Floor Plan
Exhibit G	Elevation Plan (with material/color details)
	Sign Plan



# EL DORADO COUNTY PLANNING DEPARTMENT 2850 FAIRLANE COURT PLACERVILLE, CA 95667

# ENVIRONMENTAL CHECKLIST FORM AND DISCUSSION OF IMPACTS

Project Title: Bcl Air Market Expansion (Z06-0042/PD06-0027/DR90-0031R)

Lead Agency Name and Address: El Dorado County, 2850 Fairlane Court, Placerville, CA 95667

Contact Person: Rommel Pabalinas, Scnior Planner Phone Number: (916) 358-3638

Property Owner's Name and Address: Best/SCV Cameron Park c/o Best Properties

2580 Sierra Blvd, Suite E Sacramento, CA 95825

Project Applicant's Name and Address: Rauschenbach Marvelli Becker Architects

c/o Mark Marvelli 2580 Watt Avenue Sacramento, CA 95825

Project Agent's Name and Address: Same as applicant

Project Engineer's / Architect's Name and Address: Same as applicant

Project Location: Located within the Goldorado Shopping Center, south of Palmer Drive east of Cameron Park

Drive, and north of U.S. Highway 50, in the Cameron Park area.

Assessor's Parcel No: 083-456-10

Zoning: Commercial (C)

Section: 2 &3 T: 9N R: 9E

General Plan Designation: Commercial (C)

# Description of Project:

#### Background

Goldorado Shopping Center was conditionally approved under Design Review DR90-0031 on March 14, 1991. The shopping center consists of various commercial uses ranging from major anchor commercial tenants (Bel Air and Longs Drug store), to various restaurants, shops, boutiques and banks. On March 19, 1997, a staff level revision to the approved design review (DR90-0031S) was approved for a minor expansion (1,200 square feet) to the front portion of the store.

#### Project Proposal

The project consists of the following:

1) Design Review Revision DR90-0031R: The proposed revision include a 9,777 square feet expansion of the existing Bel Air Market from 50,345 square feet to 60, 122 square feet, and a minor modification of the front elevation of the store. The expansion consists of areas in the front and rear mezzanine (storage/mechanical) rooms and offices totaling 1,800 square feet. The expansion to the ground floor area is to be 7,977 square feet and would include areas for coolers, freezers and storage. The existing internal sales area would be reconfigured adding rows of shelving for products. The building expansion conforms to the setback requirement of the affected rear yard area of five feet.

A new depressed loading dock, measuring 30 feet x 80 feet, would be constructed, one loading dock would be removed, minor re-landscaping would occur in the rear of the building, and a retaining wall shall be constructed along the exterior wall of the expansion. The proposed project would require an additional 39 parking stalls for the entire shopping center. Currently, the center contains 639 spaces which exceed the required amount of 603. The proposed expansion would require four additional parking spaces. The applicant is proposing to re-stripe the parking lot to accommodate the parking spaces. (Exhibit D)

Modifications to the façade include rebuilding of the wooden trellis, renovation to gable feature, installation of a new automatic sliding door and aluminum framing, and replacement of various attached wall signs.

 Rezone Z06-0042: Rezone of property from Commercial (C) to Commercial-Planned Development (C- PD) to establish a combination Planned Development (-PD) district with the underlying Commercial zoning for the subject property. 3) Planned Development Permit PD06-0027: A planned development for evaluating the excess in Floor-Area-Ratio (FAR) over the 0.25 maximum allowed required in General Plan Policy 2.2.1.5. The proposed expansion of the Bel Air Market would result in an increase of the entire floor area within the entire Goldorado Shopping Center (resulting gross building area of 160,687 square feet over 612,090 net square feet of the entire development); as a result the FAR is increased 0.24 to 0.26. The policy states that the 0.25 FAR may be exceeded if the project is analyzed through the PD process and that project impacts are avoided, mitigated to the same or greater extent than the 2004 General Plan EIR, or are found not to be substantially more severe than impacts analyzed in the 2004 General Plan EIR. A supplemental analysis of each impact has been provided by the applicant included as Attachment A.

# Improvements

In addition to the construction of the expansion and façade modifications, the applicant proposes to re-stripe the parking lot to meet the required stall count for the project and the entire center. As a result of the expansion, the perimeter landscaping in the rear will be reconfigured affecting approximately seven ornamental trees, which shall be replaced by new ornamental trees. A retaining wall will be installed bordering the exterior wall of the expansion. Existing sewer and water infrastructures and services shall continue to be provided by El Dorado Irrigation District (EID). Cameron Fire Protection District indicated that, given the expansion of the facility, the existing fire suppression system (i.e., hydrants) on site is adequate, thereby not necessitating any upgrade other than the internal system. Internal electrical and plumbing upgrades shall be verified during building permit process. There are no off-site improvements required for the project.

# Agency Comments

The project was distributed for agency consultation on August 29 and December 1, 2006; a subsequent Technical Advisory Committee (TAC), discussing various project comments and issues, was conducted with the applicant and responding agencies on October 9, 2006 and December 27, 2006. Comments are provided with this document as Attachment C.

Cameron Park is designated by the County as an area requiring a design review of various commercial, industrial, and multifamily projects to ensure quality architectural design, site layout, and safety. The reviewing and advisory body appointed in this area is the Cameron Park Design Review Committee (CPDRC). The CPDRC reviewed and recommended approval of the project on September 11, 2006 (Attachment C).

# Project Site and Surrounding Property Information

#### Setting

The project site is within the Goldorado Shopping Center located south of Palmer Drive, east of Cameron Park Drive, and north of Highway 50. The site is developed with commercial anchor and in-line tenants with uses ranging from restaurants, grocery and drug stores, bouriques and banks. The center is served by an on-site parking, loading areas, and landscaping. The shopping center is accessed at four points off Palmer Drive and one at Cameron Park Drive (Exhibit A). The site is within Ecological Preserve Area 1 which is an area with potential occurrence for specific "rare" endemic plants (Pine Hill plants) based on the soil composition (serpentine or gabbroic soil type). However, the proposed expansion would occur on existing pavement and would not impact any undisturbed or undeveloped soil.

# Site Information

Tables 1 and 2 details the specific land use information for the site and the surrounding properties.

Table 1. Project Site Land Use Information

	Goldorado Shopping Center	Project Site
General Plan Designation	Commercial	Commercial
Zoning and Overlay Designations	Commercial and Design Control Overlay	Commercial and Design Control Overlay
Current Use	Commercial	Commercial (Bel Air Store)
Size (in acres)	14.05	4.14
Rare Plant Mitigation Arca	Mitigation Area 1	Mitigation Area I
School District	Buckeye Union	Buckeye Union
Fire District	Cameron Park Fire District	Cameron Park Fire District
Water/Sewer District	El Dorado Irrigation District (EID)	El Dorado Irrigation District (EID

Table 2. Surrounding Properties Land Use Information

	General Plan Designation	Zoning Designation	Overlay Zoning Designation	Existing Use
North	Commercial	Commercial	Design Control (DC)	Commercial
East	Commercial	Commercial	Design Control (DC)	Commercial
South	Commercial	Commercial	Design Control (DC)	Commercial
West	Commercial	Commercial	Design Control (DC)	Commercial

Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.):

- 1. El Dorado County Department of Transportation
- 2. El Dorado County Development Services (Building Division)
- 3. El Dorado County Air Quality Management District
- 4. Cameron Park Fire Protection District

# ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

Aesthetics	Agriculture Resources	Air Quality
Biological Resources	Cultural Resources	Cicology / Soils
Hazards & Hazardous Materials	Hydrology / Water Quality	Land Use / Planning
Mineral Resources	Noise	Population / Housing
Public Services	Recreation	Transportation/Traffic
Utilities / Service Systems	Mandatory Findings of Significance	ž

# DETERMINATION

On t	he basis of this initial evaluation:		
$\boxtimes$	I find that the proposed project COULD NEGATIVE DECLARATION will be prep.	NOT have ared.	a significant effect on the environment, and a
	I find that although the proposed project coul a significant effect in this case because revisi- proponent. A MITIGATED NEGATIVE D	ons in the pro	ificant effect on the environment, there will not be ject have been made by or agreed to by the project ON will be prepared.
	I find that the proposed project MAY ENVIRONMENTAL IMPACT REPORT	have a si is required.	gnificant effect on the environment, and an
	mitigated" impact on the environment, but at document pursuant to applicable legal standar	least one eff rds; and 2) ha d sheets. A	ignificant impact" or "potentially significant unless ect: 1) has been adequately analyzed in an earlier is been addressed by mitigation measures based on ENVIRONMENTAL IMPACT REPORT is be addressed.
	potentially significant effects: a) have be DECLARATION, pursuant to applicable star	een analyzed idards; and b V, including r	ignificant effect on the environment, because all adequately in an earlier EIR or NEGATIVE ) have been avoided or mitigated pursuant to that evisions or mitigation measures that are imposed
Signa	iture:	Date:	March 26, 2007
Printe	ed Name: Rommel Pabalinas	For.	El Dorado County
Signat	ture:	Date:	March 26, 2007
Printe	d Name. Gina Hunter	For	El Durado County

# EVALUATION OF ENVIRONMENTAL IMPACTS

- A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3. Once the lead agency has determined that a particular physical impact may occur, the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is a fair argument that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level.
- Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately
  analyzed in an earlier EIR or negative declaration. Section 15063(c) (3) (D) In this case, a brief discussion should identify the
  following:
  - Earlier Analysis Used. Identify and state where they are available for review.
  - b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - c. Mitigation Measures. For effects that are "Less Than Significant With Mitigation Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- Supporting Information Sources: A source list should be attached, and other sources used, or individuals contacted should be cited in the discussion.
- This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally
  address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9. The explanation of each issue should identify:
  - a. the significance criteria or threshold, if any, used to evaluate each question; and
  - b. the mitigation measure identified, if any, to reduce the impact to less than significant.

# ENVIRONMENTAL IMPACTS

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

# Discussion:

A substantial adverse effect to Visual Resources would result in the introduction of physical features that are not characteristic of the surrounding development, substantially change the natural landscape, or obstruct an identified public scenic vista, U.S. Highway 50 from the eastern limits of the Forni Road/Placerville Drive interchange to South Lake Tahoe has been designated by Caltrans in April of 1985 as a State Scenic Highway. General Plan Policy 2.6.1.1 suggests the need for establishing standards and to preserve the scenic resources along U.S. 50.

- a- c. The project site is not within a State Scenic Highway or in an area identified as Scenic Resources. The proposed expansion and facade modifications would maintain the existing commercial use on the property and conform to the adjacent similar uses and designations. The project has been reviewed and approved by the Cameron Park Design Review Committee for architectural design. Therefore, the project would have no impact to scenic vista or visual character of the area.
- d. The proposed expansion to the rear of the building would include installation of wall lighting. Upgrades of the wall signs would also produce lighting. In both cases, the amount of light would predominantly be limited within the existing commercial center. Therefore, the impacts from light and glare from this proposed project are considered to be less than significant.

II.	AGRICULTURE RESOURCES. Would the project:		
a.	Convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance, or Locally Important Farmland (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?		x
b.	Conflict with existing zoning for agricultural use, or a Williamson Act Contract?		x
c.	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?		X

#### Discussion:

A substantial adverse effect to Agricultural Resources would occur if:

 There is a conversion of choice agricultural land to nonagricultural use, or impairment of the agricultural productivity of agricultural land;

- The amount of agricultural land in the County is substantially reduced; or
- Agricultural uses are subjected to impacts from adjacent incompatible land uses.
- a-c. The proposed project is commercial in nature and is located on and surrounded by properties designated commercial. Therefore, the project would have no impacts on Agricultural resources.

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

A substantial adverse effect on Air Quality would occur if:

- Emissions of ROG and No<sub>x</sub>, will result in construction or operation emissions greater than 82lbs/day (See Table 5.2, of the El Dorado County Air Pollution Control District – CEQA Guide);
- Emissions of toxic air contaminants cause cancer risk greater than 1 in 1 million (10 in 1 million if best available control technology for toxics is used) or a non-cancer Hazard Index greater than 1. In addition, the project must demonstrate compliance with all applicable District, State and U.S. EPA regulations governing toxic and hazardous emissions.

El Dorado County is within the area of Sacramento Region designated as Mountain Counties Air Basin. According to the Sacramento Regional Ozone Air Quality Attainment Plan (AQAP) this region is considered to be non-attainment with Reactive Organic Gases (ROG), 24-hour PM10, and Nitrous Oxide (NOx) in accordance to federal and state standards. The County is in attainment of Carbon Monoxide (CO) and Sulfur (S0x) and Nitrogen Dioxide (NO2) for ambient air quality standards, General Plan Goal 6.7 details specific air quality policies involving project design, implementation of best management practices and promoting public awareness of air quality.

a-c) Air quality in El Dorado County is regulated by various local, state and federal government agencies. The County Air Quality Management District (AQMD) at the local level is responsible for ensuring air quality conditions in the County through comprehensive program of planning, regulation, enforcement, technical innovation and promotion of understanding air quality issues. The strategy for clean air includes preparation of plans for attainment of ambient air quality standards, adoption and enforcement of rules and regulations concerning sources of air pollution, issuance of permits for stationary sources of air pollution, inspection of stationary sources of air pollution and response to complaints, monitoring of ambient air quality conditions. AQMD's Guide to Air Quality Assessment: Determining Significance of Air Quality Impacts under California Environmental Quality Act provides an outline for quantitative and qualitative analysis for the estimation of construction and operational emissions and mitigation measures to reduce impacts.

El Dorado County Environmental Management- Air Quality Management Division reviewed the project for conformance to AQMD's Guide to Air Quality Assessment (Attachment B). Based on the type and scope of the project, the division reviewed the project based on initial project screening for NOx, SO<sub>2</sub> ROG, and PM10 emissions during operational and construction stages of the project. The Division determined that the commercial expansion would be below the threshold of potentially significant effects for the type of development (Shopping Center @ 62,000 square feet). Additionally, the Division concluded that the project will have insignificant impacts to air quality subject to standardized District Rules 223 and 223-1 (Fugitive Dust Plan), 224 (Cutback and Emulsified Asphalt Paving Materials), 300 (Open Burnings), 215 (Architectural Coatings) and Heavy Equipment and Mobile Source Measures (Attachment B).

The applicant provided a supplemental air quality analysis further evaluating potential additional air quality impacts associated with expansion exceeding the of F.A.R threshold of .25 for commercial development. In the analysis, Sycamore Environmental Consultants concluded and confirmed the determination of the AQMD, stating the project would have less significant effect on air quality impacts to the AQMD standard measures incorporated into the project (Attachment A).

As discussed above, the project has been reviewed by the AQMD for potential air quality impacts and determined that the project poses less than significant impact subject to the District standards and measures. Therefore, the project anticipates less than significant impact.

d) Sensitive receptors are identified as facilities that house or attract children, elderly, people with illnesses and others sensitive to effects of air pollutants. Examples of these facilities include hospitals, schools and convalescent homes. The project is within the vicinity of a potentially sensitive receptor (Eskaton Lodge at Cameron Park) located west of the project, north on Palmer Drive and east of Cameron Park Drive. This assisted living facility provides independence living with on-site nursing and medical needs for residents 65 years or older. AQMD's Guide to Air Quality Assessment currently does not provide specific guideline regulating uses that may affect the sensitive receptor. However, California Environmental Protection Agency California Air Resources Board (CARB)'s Air Quality and Land Use Handbook: A Community Health Perspective (2005) has developed siting standards for sensitive receptors with respect to specific land uses that may pose significant air quality effects (see Table 3 below).

Table 3. Siting Standards for Sensitive Receptors

Source Category	Advisory Recommendations
Freeways and High-Traffic Roads	<ul> <li>Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day.</li> </ul>
Distribution Centers	<ul> <li>Avoid siting new sensitive land uses within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units (TRUs) per day, or where TRU unit operations exceed 300 hours per week)</li> <li>Take into account the configuration of existing distribution centers and avoid locating residences and other new sensitive land uses near entry and exit points.</li> </ul>
Rail Yards	Avoid stiring new sensitive land uses within 1,000 feet of a major service and maintenance rail yard.     Within one mile of a rail yard, consider possible siting limitations and mitigation approaches.
Ports	<ul> <li>Avoid siting of new sensitive land uses immediately downwind of ports in the most heavily impacted zones. Consult local air districts or the ARB on the status of pending analyses of health risks.</li> </ul>
Refinenses	<ul> <li>Avoid siting now sensitive land uses immediately downwind of petroleum refineries. Consult with local air districts and other local agencies to determine an appropriate separation.</li> </ul>
Chrome Platers	<ul> <li>Avoid siting new sensitive kind uses within 1,000 feet of a chrome plater.</li> </ul>
Dry Cleaners Using Perchioro- ethylene	<ul> <li>Avoid siting new sensitive land uses within 300 feet of any dry cleaning operation. For operations with two or more machines, provide 500 feet. For operations with 3 or more machines, consult with the local air district.</li> <li>Do not site new sensitive land uses in the same building with perc dry cleaning operations.</li> </ul>
Gasokne Dispensing Facilities	<ul> <li>Avoid siting new sensitive land uses within 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater). A 50 foot separation is recommended for typical gas dispensing facilities.</li> </ul>

Using the table above, the most related impact source to the receptor in proximity of the project is State Highway 50. As a result, this assisted living facility inherently has an existing elevated risk for exposure to emissions from the highway. In contrast, the proposed project is commercial in nature, within an existing shopping center, and is determined to have less than significant impact to air quality, as determined by and subject to AQMD standards. Therefore, impact to sensitive receptor would be considered less than significant.

e) Guide to Air Quality Assessment consider uses that cause detriment, nuisance, or annoyance to any considerable number of persons or to the public that may cause injury, health effects, and injury to business or property, to potentially have significant impacts resulting from odors. Table 3.1 of Guide to Air Quality Assessment below detail the common facilities that are known to produce odors that potentially could cause detriment, nuisance or annoyance to the public. These facilities are limited to industrial and waste disposal type of land uses. Commercial developments are not considered odor generating uses. Therefore, since the proposed project is commercial in nature, no odor impacts are anticipated.

Table 3.1 Common Types of Facilities Known to Produce Odors

Wastewater Treatment Plant	Chemical Manufacturing
Sanitary Landfill	Fiberglass Manufacturing
Transfer Station	Painting/Coating Operations (e.g., auto body shop)
Composting Facility	Food Processing Plant
Petroleum Refinery	Rendering Plant
Asphalt Batch Plant	Coffee Ronster

IV	. BIOLOGICAL RESOURCES. Would the project:	
a,	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	х
b.	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	x
c.	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	x
d.	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	х
e.	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	X
f.	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	х

# Discussion:

A substantial adverse effect on Biological Resources would occur if the implementation of the project would:

- Substantially reduce or diminish habitat for native fish, wildlife or plants;
- Cause a fish or wildlife population to drop below self-sustaining levels;
- Threaten to eliminate a native plant or animal community;
- Reduce the number or restrict the range of a rare or endangered plant or animal;
- Substantially affect a rare or endangered species of animal or plant or the habitat of the species; or
- Interfere substantially with the movement of any resident or migratory fish or wildlife species.
- a-f. The Bel Air Market is located within the Goldorado Shopping center. There are no important biological resources or habitat exists on the property that would be disturbed on site. In preparation for the project

construction, minor grading, re-paving, and replanting of ornamental trees within the affected perimeter landscaping. Therefore, there would be need does not anticipate any impact to Biological Resources.

V.	CULTURAL RESOURCES. Would the project:	
a.	Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	
b.	Cause a substantial adverse change in the significance of archaeological resource pursuant to Section 15064.5?	
c.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	
d.	Disturb any human remains, including those interred outside of formal cemeteries?	

#### Discussion:

a-d. Bel Air Market is within an existing Goldorado shopping center developed approximately 15 years ago. The proposal includes an expansion of the footprint area at the rear of the existing building amounting to 7,977 square feet (approximately 235' x 30'). Submittal of construction plans (i.e. grading, improvement plans, building) shall be required for review and approval by the El Dorado County Department of Transportation and Development Services. Given the existing developed nature of the site, the project does anticipate any impacts to cultural resources. However, standard construction condition, noted below, would be included on all of the construction plans to ensure protection of discovered human remains:

In the event of the discovery of human remains, all work is to stop and the County Coroner shall be immediately notified pursuant to Section 7050.5 of the Health and Safety Code and Section 5097.98 of the Public Resources Code. If the remains are determined to be Native American, the Coroner must contact the Native American Heritage Commission within 24 hours. The treatment and disposition of human remains shall be completed consistent with guidelines of the Native American Heritage Commission.

There would be no impact to Cultural Resources.

a.	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:		
	i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.		х
	ii) Strong seismic ground shaking?		х
	iii) Seismic-related ground failure, including liquefaction?	E E	x
	iv) Landslides?		X
٥.	Result in substantial soil erosion or the loss of topsoil?	Talanta a	X

VI.	GEOLOGY AND SOILS. Would the project:	
c.	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	x
d,	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994) creating substantial risks to life or property?	x
e.	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	x

A substantial adverse effect on Geologic Resources would occur if the implementation of the project would:

- Allow substantial development of structures or features in areas susceptible to seismically induced hazards such as groundshaking, liquefaction, seiche, and/or slope failure where the risk to people and property resulting from carthquakes could not be reduced through engineering and construction measures in accordance with regulations, codes, and professional standards;
- Allow substantial development in areas subject to landslides, slope failure, erosion, subsidence, settlement, and/or expansive soils where the risk to people and property resulting from such geologic hazards could not be reduced through engineering and construction measures in accordance with regulations, codes, and professional standards; or
- Allow substantial grading and construction activities in areas of known soil instability, steep slopes, or shallow depth to bedrock where such activities could result in accelerated erosion and sedimentation or exposure of people, property, and/or wildlife to hazardous conditions (e.g., blasting) that could not be mitigated through engineering and construction measures in accordance with regulations, codes, and professional standards.
- a-e. There are no Earthquake Fault Zones subject to the Alquist-Priolo Earthquake Fault Zoning Act (formerly Special Studies Zone Act) in El Dorado County. There are no known faults on the project site; however, the project site is located in a region of the Sierra Nevada foothills where numerous faults (e.g. Melones fault zone and east of the East Bear Mountains fault zone) have been mapped.

No portion of El Dorado County is located in a Seismic Hazard Zone (i.e., a regulatory zone classification established by the California Geological Survey that identifies areas subject to liquefaction and carthquake-induced landslides). Lateral spreading, which is typically associated with liquefaction hazard, subsidence, or other unstable soil/geologic conditions do not present a substantial risk in the western County where the project site is located. The project site is commercially developed with existing pavement and supporting infrastructure and foundation underneath the existing building.

All grading activities exceeding 250 cubic yards of graded material or grading completed for the purpose of supporting a structure must meet the provisions contained in the County of El Dorado - Grading, Erosion, and Sediment Control Ordinance (Ordinance No. 3983, adopted 11/3/88). This ordinance is designed to limit crossion, control the loss of topsoil and sediment, limit surface runoff, and ensure stable soil and site conditions for the intended use in compliance with the El Dorado County General Plan. Given the developed nature of the project site, the project may include minimal grading necessary for construction of the foundation and other improvements. Nevertheless, the project is required to submit construction plans

that may include a geotechnical report for review and consideration by the El Dorado County Department of Transportation and El Dorado Development Services-Building Division during the building permit process.

There would be no impact related to septic systems because the existing facility is served by El Dorado Irrigation District (EID). There would be no impacts to geologic resources.

Я,	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	x	
b.	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	x	
c.	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	x	
d.	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?		х
ė.	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?		х
f.	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?		x
g,	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?		х
h.	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?		x

#### Discussion:

A substantial adverse effect due to Hazards or Hazardous Materials would occur if implementation of the project would:

- Expose people and property to hazards associated with the use, storage, transport, and disposal of hazardous materials where the risk of such exposure could not be reduced through implementation of Federal, State, and local laws and regulations;
- Expose people and property to risks associated with wildland fires where such risks could not be reduced through implementation of proper fuel management techniques, buffers and landscape setbacks, structural design features, and emergency access; or
- Expose people to safety hazards as a result of former on-site mining operations.

a.- c Bel Air Market provides a variety of services and sale of consumer products and goods. Some of these products may include products containing chemicals that may be considered hazardous. The sale, distribution and consumption of these products are regulated by various Federal, State and local standards.

The proposed expansion includes areas for mechanical equipment, storage, condenser and boiler rooms. AQMD has imposed standard conditions of approval requiring securing of district permits prior to construction or installation of any new point source emissions. There are no schools within one (1) mile of the project site that would be impacted by any emissions. Therefore, the project anticipates less than significant impact.

d.-h. The project site is not identified as a hazardous materials site compiled pursuant to Government Code Section 65962.5, therefore, the project does not anticipate any impact.

Cameron Park Airport, a public airport, is located approximately 1 ½ miles northwest of the project site. The project is outside of the airport safety zone or airport land use plan area. Therefore, no impact is anticipated.

Bel Air is within the Goldorado Shopping Center which has five (5) access points, two (2) of which directly connects to the store off Palmer Drive. The developed site has adequate fire suppression system according to the Cameron Park Fire Protection District, which is located approximately one (1) mile away from the site. There would negligible or no disruption of emergency access to and from the proposed project. There would be no impact related to emergency response or evacuation plans.

The map of El Donado County Fire Hazard Zones identifies the project site as being located in an area of moderate risk. Though located in an urbanized community of Cameron Park, the site is immediately surrounded by commercial land designations and uses. Therefore, there would be no impact from wild land fires.

VI	TII. HYDROLOGY AND WATER QUALITY. Would the project:			
a.	Violate any water quality standards or waste discharge requirements?			х
b.	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			х
C.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or -off-site?			х
d.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?			x
e.	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			х
ſ.	Otherwise substantially degrade water quality?			X
g.	Place housing within a 100-year flood hazard area as mapped on a federal			X

VI	Contract of the state of the st		
	I'lood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?		
h.	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?		x
i. inv	Expose people or structures to a significant risk of loss, injury or death olving flooding, including flooding as a result of the failure of a levee or dam?		х
j.	Inundation by seiche, tsunami, or mudflow?		Х

A substantial adverse effect on Hydrology and Water Quality would occur if the implementation of the project would:

- Expose residents to flood hazards by being located within the 100-year floodplain as defined by the Federal Emergency Management Agency;
- Cause substantial change in the rate and amount of surface runoff leaving the project site ultimately causing
  a substantial change in the amount of water in a stream, river or other waterway;
- Substantially interfere with groundwater recharge;
- Cause degradation of water quality (temperature, dissolved oxygen, turbidity and/or other typical stormwater pollutants) in the project area; or
- · Cause degradation of groundwater quality in the vicinity of the project site.
- a & f. The project is within a developed shopping center served by an existing system of storm drainage, water and sewer, which will not be impacted by the proposal. Any interior structural, plumbing or electrical modifications and upgrades associated with the expansion shall be incorporated in subsequent building permit plans, subject to permitting review and determination by the County and other pertinent agencies.

The project is not within the vicinity of levee or dam or any body of water that would result to a seiche or tsumani.

Therefore, no project impacts are anticipated from or to these resources.

IX.	LAND USE PLANNING. Would the project:			
a.	Physically divide an established community?			X
b.	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?			x
c.	Conflict with any applicable habitat conservation plan or natural community conservation plan?			х

#### Discussion:

A substantial adverse effect on Land Use would occur if the implementation of the project would:

- Result in the conversion of Prime Farmland as defined by the State Department of Conservation;
- Result in conversion of land that either contains choice soils or which the County Agricultural Commission
  has identified as suitable for sustained grazing, provided that such lands were not assigned urban or other
  nonagricultural use in the Land Use Map;
- Result in conversion of undeveloped open space to more intensive land uses:
- · Result in a use substantially incompatible with the existing surrounding land uses; or
- Conflict with adopted environmental plans, policies, and goals of the community.
- a-c. The project is an expansion and minor modification of the existing Bel Air Market. It would not divide, but would seek to provide better service to the established community of Cameron Park. The proposal would conform to the commercial land use designation of the property. Moreover, it would not conflict with any habitat conservation plan. The project would not have any impacts on existing land use.

X.	MINERAL RESOURCES. Would the project:	-,	
a.	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?		х
b.	Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?		х

A substantial adverse effect on Mineral Resources would occur if the implementation of the project would:

- Result in obstruction of access to, and extraction of mineral resources classified MRZ-2x, or result in land
  use compatibility conflicts with mineral extraction operations.
- a & b. The project site is not in an area where mineral resources classified as MRZ-2a or MRZ-2b by the State Geologist is present. Therefore, no impact is anticipated.

XI	NOISE. Would the project result in:	
a.	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	x
b.	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	X
c.	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	x
d.	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	x

XI	NOISE. Would the project result in:	
E.	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise level?	x
f.	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	x

A substantial adverse effect due to Noise would occur if the implementation of the project would:

- Result in short-term construction noise that creates noise exposures to surrounding noise sensitive land uses in excess of 60dBA CNEL;
- Result in long-term operational noise that creates noise exposures in excess of 60 dBA CNEL at the
  adjoining property line of a noise sensitive land use and the background noise level is increased by 3dBA,
  or more; or
- Results in noise levels inconsistent with the performance standards contained in Table 6-1 and Table 6-2 in the El Dorado County General Plan.
- a-f. In addition to the ambient noise level borne from the shopping center, vehicular noise exists from the contiguous Palmer and Cameron Park Drives and Highway 50. The project anticipates a short term increase in noise levels during construction, regulated by Noise policies in the General Plan which limits construction hours to 7 AM to 7 PM. Given its location, the noise will be primarily limited within and offset by noise from the commercial center, surrounding properties with commercial uses, and Highway 50.

In evaluating the potential noise effects associated with the expansion, the applicant provided a supplemental acoustical analysis conducted by Kimley-Horn and Associates. Specifically, the analysis was based on the General Plan Policy 6.5.1.1 where noise sensitive land uses are proposed in areas exposed to existing or projected exterior noise levels (transportation sources) exceeding the levels in Table 6.1 of the policy (see below) an acoustical analysis shall be required as part of an environmental review process so that noise mitigation may be included in the project design (Attachment A).

Land Use	Outdoor Activity	Interior Spaces		
	Areas" L <sub>db</sub> /CNEL, dB	Ldo/CNEL, dB	Leq. dB2	
Residential	60 <sup>3</sup>	45	**	
Transient Lodging	60 <sup>3</sup>	45		
Hospitals, Nursing Homes	60 <sup>1</sup>	45	**	
Theaters, Auditoriums, Music Halls	N=		35	
Churches, Meeting Halls, Schools	60 <sup>3</sup>	**	40	
Office Buildings	**		45	
Libraries, Museums	**		45	
Playgrounds, Neighborhood Parks	70			

Notes:

Noise sensitive receptors (i.e. residential dwellings, nursing homes, hospitals) are land uses with indoor and/or outdoor activities that may be subject to stress or significant interference from noise. Industrial, commercial, and agricultural uses are not considered sensitive to ambient noise. Based on Table 6.1, exterior sound levels from transportation sources up to 60 dBA CNEL are compatible with noise sensitive land uses.

As further discussed in the Transportation/Traffic section below, the proposed expansion would result in increase of 378 daily vehicular trips. Acoustical calculations were conducted estimating the existing and the anticipated traffic noise level, at 75-feet from the centerlines of the roadway near the residences and assisted living facility along Palmer Drive. The analysis includes averaging of vehicular speed on Cameron Park and Palmer Drive and quantifying the mix and type of vehicles.

As determined, the increase by 378 vehicle trips would result in a vehicular traffic noise increase up to 0.1 dBA. It is considered that sound level variations of less than 3.0 dBA are not detectable by typical human car. Therefore, the proposed project would have a less than significant impact to the ambient noise environment.

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<sub>dn</sub> shall be applied at the building facade, in addition to a 60 dB L<sub>dn</sub> criterion at the outdoor activity area. In Rural Regions, an exterior noise level criterion of 60 dB L<sub>dn</sub> 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<sub>dn</sub> may apply. The 100-foot radius applies to properties which are five acres and larger, the balance will fall under the property line requirement.

As determined for a typical worst-case hour during periods of use.

Where it is not possible to reduce noise in outdoor activity areas to 60 dB L<sub>m</sub>/CNEL or less using a practical application of the best-available noise reduction measures, an exterior noise level of up to 65 dB L<sub>m</sub>/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.

The project site is not within the airport land use plan. There are no private airstrips in the vicinity of the project site. There would be no aircraft-related noise impacts. Construction noises are anticipated to be short term, operational noise would be contained within the building, and associated traffic related noise is considered insignificant. Therefore, the impacts would be considered less than significant.

XI	. POPULATION AND HOUSING. Would the project:		
a,	Induce substantial population growth in an area, either directly (i.e., by proposing new homes and businesses) or indirectly (i.e., through extension of roads or other infrastructure)?		х
ь.	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?		x
C,	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?		х

#### Discussion:

A substantial adverse effect on Population and Housing would occur if the implementation of the project would:

- Create substantial growth or concentration in population;
- · Create a more substantial imbalance in the County's current jobs to housing ratio; or
- Conflict with adopted goals and policies set forth in applicable planning documents.

a-c. The project is commercial in nature and seeks to enhance its customer service. The project would not impact the population count of Cameron Park.

XIII. PUBLIC SERVICES. Would the project result in substate provision of new or physically altered governmental facilities, the construction of which could cause significant acceptable service ratios, response times or other perform		, need for new or physically alter vironmental impacts, in order t	ered governn o maintain	the nental
a. I	Fire protection?		X	
b. F	Police protection?			x
c. S	Schools?	100000000000000000000000000000000000000	ALC: UNITED BY	X
d. T	Parks?			Х
e. (	Other government services?			X

# Discussion:

A substantial adverse effect on Public Services would occur if the implementation of the project would:

Substantially increase or expand the demand for fire protection and emergency medical services without
increasing staffing and equipment to meet the Department's/District's goal of 1.5 firefighters per 1,000
residents and 2 firefighters per 1,000 residents, respectively;

- Substantially increase or expand the demand for public law enforcement protection without increasing staffing and equipment to maintain the Sheriff's Department goal of one sworn officer per 1,000 residents;
- Substantially increase the public school student population exceeding current school capacity without also
  including provisions to adequately accommodate the increased demand in services;
- Place a demand for library services in excess of available resources;
- Substantially increase the local population without dedicating a minimum of 5 acres of developed parklands for every 1,000 residents; or
- · Be inconsistent with County adopted goals, objectives or policies.
- a. The project is within the Cameron Park Fire Protection District. The proposed expansion requires a building permit subject to review and approval by the District for any internal upgrades of fire suppression; the District indicated that the existing project site suppression (i.e. fire hydrant system) would be adequate for the entire shopping center. The project site has five existing accesses of the contiguous public streets, which can be accessed during emergency situations. Therefore, the project anticipates less than significant impact to fire protection services.
- b.-e. No new or expanded law enforcement, school or park services would be required. Therefore, no impacts are anticipated. .

ΧI	V. RECREATION.	w	
a.	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?		х
b,	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?		х

A substantial adverse effect on Recreational Resources would occur if the implementation of the project would:

- Substantially increase the local population without dedicating a minimum of 5 acres of developed parklands for every 1,000 residents; or
- Substantially increase the use of neighborhood or regional parks in the area such that substantial physical deterioration of the facility would occur.
- a-b. The proposed project does not include any increase in population that would substantially contribute to increased demand on recreation facilities or contribute to increased use of existing facilities. Therefore, no impact is anticipated.

XV. TRANSPORTATION/TRAFFIC. Would the project:	
a. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	x

	Exceed, either individually or cumulatively, a level of service standard ablished by the county congestion management agency for designated roads or hways?		x	
c.	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?			х
d.	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			Х
e.	Result in inadequate emergency access?	The state of		X
ť.	Result in inadequate parking capacity?	THE RE		Х
g.	Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	8		х

A substantial adverse effect on Traffic would occur if the implementation of the project would:

- Result in an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system;
- Generate traffic volumes which cause violations of adopted level of service standards (project and cumulative); or
- Result in, or worsen, Level of Service "I" traffic congestion during weekday, peak-hour periods on any highway, roud, interchange or intersection in the unincorporated areas of the county as a result of a residential development project of 5 or more units.

As required by El Dorado County Department of Transportation (DOT), a Traffic Impact Analysis was conducted by Kimley-Horn Associates evaluating the potential environmental effects by the project to existing transportation infrastructure in the vicinity of the project using DOT Traffic Impact Study Protocols and Procedures (Attachment A). Specifically, the analysis of significant environmental impacts focused at intersections and its effects to the existing Level of Service (LOS). Project impacts are determined by comparing conditions with the proposed project to those without the project. Impacts to intersections are created when traffic from a project forces the LOS to all below a specific threshold or conditions at intersection operating at LOS F or worsened. General Plan TC-Xd states that LOS for County maintained roads and State Highways within the unincorporated area of the County shall not be worse than LOS E in the Community Region. The project site is located within the Cameron Park Community Region.

The analysis evaluated intersections at Cameron Park and Palmer Drives, Cameron Park Drive @ US 50 west and east bound ramps, and three (3) driveway points (onto the project) along Palmer Drive. The number of vehicular trips borne by the projected was determined using the Institute of Transportation Engineers Trip Generation. As detailed in Table 4 below, the project anticipates 378 new daily trips with 25 trips occurring during the PM peak.

Table 4. Proposed Project Trip Generation

TTT 7		Total		PN	I Peak-H	our	
ITE Land Use (Code)	Units (ksf)	Daily			įΝ	0	ur
		Trips	Trips	0/0	Trips	%	Trips
Existing Shopping Center (820)	150.9	8,877	822	48%	395	52%	427
Proposed Shopping Center (820)	160.7	9,255	857	48%	411	52%	446
Subtotal Ne	w Trips	378	35		17		18
Pass-by Reduction	(30%) <sup>1</sup>		-10		-5		-5
Net New External	Trips:	378	25		12		13

Using the County's *Protocol*, the traffic analysis shall: a) review the project's consistency with the underlying land use designations and b) determine if the project magnitude is within the amount of development anticipated in the traffic study for the 2004 General Plan; if the project falls within the anticipated traffic under the 2004 General Plan, the Plan's analysis would serve as the basis for the project.

As determined, the commercial project is consistent with the land use designation (commercial) under the General Plan. Table 5 below details the applicable vehicular trip data for the project site (designated as Traffic Zone No. 164) under the 1998 General Plan data (similar site data is used as basis for the 2004 General Plan) and the projected trips by the year 2025. According to Table 4, the project anticipates a generation of 378 daily trips and 25 PM trips. The project is within the amount of development which was anticipated in the traffic study for the General Plan.

Table 5. Traffic Analysis Zone #164 Trips

Year	ADT	PM
1998	11,058	1,197
2025	14,546	1,498
Allowable Change	3,488	301
Project	378	25
Consistent with GP 2004?	Yes	Yes
Source: Dowling Associates, Inc.	•	

Based on the above criteria and the County's Protocols, the project would not trigger the requirement to be evaluated against the General Plan analysis for 2025. Therefore, the LOS analysis was conducted for the study of intersections for PM peak hour based on the following scenarios: Existing Conditions, Existing plus Proposed Conditions, Existing plus Approved Projects (2011) Conditions, and Existing plus Approved Projects (2011) plus Proposed Project Conditions. The following tables detail the results of the analysis.

Existing	LOS			Existing and Existing Plus Pr	oposed P	roject Lev	els
Isoborection	Traffic Control	PM Peak Delay (Seconds)	LOS	Intersection	Traffic Control	PM Peak Delay (Seconds)	-Hour LOS
Cameron Park Drive as Palmer Drive	Signal	32.4		Cameron Park Drive or Palmer Drive	Signal	32,4 / 33,1	C/C
Cameron Park Drive av US-50 WB	Signal	26.5	c	Cameron Fack Drive (# US-30 WB Estate Country Club Drive	Signal	16,5 / 27.5	c · c
Ramp Country Club Drive	-			Cameron Pock Drive @ US-50 EB Ramps	Signal	20.7 / 21.2	C/C
Cameron Park Drive of US-50 EB Ramps	Signal	20.7	C	Palmer Drave of Site Draveway (West)	TWSC*	3\$.1 (WB)	E/E
Palmer Drive in Site Driveway (West)	TWSC.	35.1 (VE)	E		14.17.00	40.3 (WB)	
Palmer Drive @ Site Driveway (North)	TW5C'	15.0 (NB)	C	Palmer Drive III Site Driveway (North)	TWSC*	15.0 (VB)	C/C
Palmer Drive (2. Site Driveway (East)	TWSC*	14.0 (2/B)	В	Palmer Drive % Site Driveway (East)	LAZC.	14.0 (NB)	ва
Control delay for worst minor approach (west	at minor mon	ement).		Results in this toble are presented in Existing / format." Control delay for worst minor approx	Existing plu	Proposed Proof account)	jec†

Existing Plus Approved Pro	I) Condition	Existing Plus Approved Project Conditions	ect (2011	) Plus Pro	posed		
	Traffc	PM Peak	-Hour		Traffie	PM Peak	Hour
Intersection	Control	Delay (Seconds)	LOS	Interrection	Control	Delay (Seconds)	LOS
A 2.12 (21 B			*	Cameron Park Drive of Palmer Drive	Signal	16.2 / 16.5	B/3
Cameron Park Drive @ Palmer Drive	Signal	16.2	В	Conserva Park Drive @ US-30 WB	Signal	59.3 / 60.7	E/E
Comercia Park Drive siz US-30 WB	Signal	59.3	F	Zoopp Country Club Drave Cameron Park Drive at US-50 EB Ramps			
Ramas Country Club Drive	240,000	1100	- #1		Somal	39.1 / 39.8	DID
Cameron Fark Drive @ US-50 EB Ramps	Signal	39.1	D	Palmer Drive @ Site Driveway (West)	TWSC*	38.1 (WB) / 40.7 (WB)	E/E
Palmer Drive @ Site Driveway (West)	TWSC*	38.1 (WB)	E	Palmer Drive of Size Driveway (North)	TWSC*	15.0 (NB)	C/C
Palmer Drive (# Site Driveway (North)	TWSC.	13.0 (NB)	~		1020000	15.1 (NB)	31.5
		13:0 (40)	C	Palmer Drive 32 Site Driveway (East)	TWSC'	14.0 (NB)	B 3
Palmer Drive (in Site Driveway (East)	TWSC'	14.0 (NB)	. B	Results sie is Existing plus Approved / Exist	ne obes here	pared also Pea	need
Control delay for worst minus approach (wo	st nunor men	ement).	-	Project format.  Control delay for worst minor approach (wor			poyes

The analysis concluded that the project would not cause intersections that are operating at acceptable levels of service without the project to fall below the previously existing operational threshold (LOS E) with the addition of the proposed project. Therefore, the associated project impacts would not result to substandard operations at the study intersections. DOT has imposed a standard condition requiring payment of applicable traffic impact fees at the time building permit is deemed complete.

Based on this similar analysis, given the relatively minimal vehicular trips triggered and in consistency with the threshold established by the General Plan, the excess in F.A.R does not create significant impacts at the transportation facilities analyzed for the project.

- a & b. Based on the above discussion, the implementation of the project would not result in substandard operation at the affected intersections in the vicinity of the project and is deemed consistent with the applicable General Plan policies and the County's Protocol. Therefore, the impacts would be considered less than significant.
- c.-e. The project is not within an airport safety zone and, therefore would not present an air traffic hazard. No changes in air traffic patterns would occur or be affected by the proposed project. There are no additional road infrastructures associated with the project. The project is located within an existing shopping center that has five (5) points of access that can be used for emergency purposes. The site is adequately provided with existing on-site parking. The site has existing pedestrian access and on-site pedestrian/bicycle circulation connecting with the proposed Class II Bike Lane along Palmer Drive. This connection with the Class II Bike Lane would facilitate continuity with adjacent project, schools, parks and other facilities. No Impact is anticipated

a.	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?		X
b.	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?		x
c.	Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?		x
d.	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	x	
e.	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	x	
f.	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	x	
g.	Comply with federal, state, and local statutes and regulations related to solid waste?	х	
h.	Result in demand for expansion of power or telecommunications service facilities without also including provisions to adequately accommodate the increased or expanded demand.	x	

A substantial adverse effect on Utilities and Service Systems would occur if the implementation of the project would:

- Breach published national, state, or local standards relating to solid waste or litter control;
- Substantially increase the demand for potable water in excess of available supplies or distribution capacity
  without also including provisions to adequately accommodate the increased demand, or is unable to provide
  an adequate on-site water supply, including treatment, storage and distribution;
- Substantially increase the demand for the public collection, treatment, and disposal of wastewater without
  also including provisions to adequately accommodate the increased demand, or is unable to provide for
  adequate on-site wastewater system; or
- Result in demand for expansion of power or telecommunications service facilities without also including provisions to adequately accommodate the increased or expanded demand.
- a-c. The proposed expansion and modification to an existing facility would not exceed waste water treatment system requirements and would not require construction of additional waste water or drainage system.
- d-h. Goldorado Shopping Center is within the El Dorado Irrigation District's services for sewer and water. The developed site is also served by a storm drain system provided by El Dorado County. Internal plumbing systems upgrades shall be reviewed during building permit process subject to County and ElD's approval. Power, telecommunication and waste disposal services currently exist and are anticipated to increase insignificantly. Impacts to these services and systems are considered less than significant.

a.	Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?		х
b.	Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	x	
c.	Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	x	

- Implementation of the project would result in an expansion and minor modification of the Bel Air Market within the existing developed areas of the Goldorado Shopping Center.
- b-c. Based on the analysis provided and discussed above, the project would anticipate less than significant individual and cumulative environmental effects subject to the standards project conditions imposed on the project.

#### ATTACHMENTS:

- A. Supplemental Studies (Air Quality, Noise and Truffic Analyses)
- B. Agency Comments

# EXHIBITS:

- A. Vicinity Map
- B. General Plan Land Use Map
- C. Zoning Map
- Project Plans (Overall and Detailed Site Plans, Preliminary Grading Plans, Overall and Detailed Floor Plans, Exterior Elevations)

# SUPPORTING INFORMATION SOURCE LIST

The following documents are available at the El Dorado County Planning Department in Placerville.

El Dorado County 2004 General Plan

El Dorado County General Plan Draft Environmental Impact Report

Volume I - Comments on Draft Environmental Impact Report

Volume II - Response to Comment on DEIR

Volume III - Comments on Supplement to DEIR

Volume IV - Responses to Comments on Supplement to DEIR

Volume V - Appendices

El Dorado County Zoning Ordinance (Title 17 - County Code)

County of El Dorado Drainage Manual (Resolution No. 67-97, Adopted March 14, 1995)

County of El Dorado Grading, Erosion and Sediment Control Ordinance (Ordinance No. 3883, amended Ordinance Nos. 4061, 4167, 4170)

El Dorado County Design and Improvement Standards

California Environmental Quality Act (CEQA) Statutes (Public Resources Code Section 21000, et seq.)

Title 14, California Code of Regulations, Chapter 3, Guidelines for Implementation of the California Environmental Quality Act (Section 15000, et seq.)

# Traffic Impact Analysis

# Bel Air Store #515 Expansion Cameron Park, California

February 8, 2007

# Prepared for:

El Dorado County, California

# Prepared by:



Phone: (916) 797-3811 Fax: (916) 797-3804



#### EXECUTIVE SUMMARY

This report documents the results of a traffic impact analysis completed for the proposed Bel Air Store #515 Expansion located at 3510 Palmer Drive in the Goldorado Shopping Center in Cameron Park (the "proposed project" or "project"). The purpose of this impact analysis is to identify potential environmental impacts to transportation facilities as required by the California Environmental Quality Act (CEQA). This study was performed in accordance with the El Dorado County Department of Transportation's Traffic Impact Study Protocols and Procedures and the scope of work provided by a representative of the County in a memorandum dated November 16, 2006.

The project consists of a 9,777 sf expansion to the existing Bel Air Store located within the Goldorado Shopping Center at 3510 Palmer Drive. Access to the site is provided from five driveways located along Cameron Park Drive (1) and Palmer Drive (4).

The following intersections, listed with existing traffic control, are included in this traffic impact analysis:

- Cameron Park Drive @ Palmer Drive (Signalized)
- Cameron Park Drive @ US-50 Westbound Ramp/Country Club Drive (Signalized)
- Cameron Park Drive @ US-50 Eastbound Ramps (Signalized)
- Palmer Drive @ Goldorado Shopping Center Driveway West (Two-Way Stop Controlled)
- Palmer Drive @ Goldorado Shopping Center Driveway North (Two-Way Stop Controlled)
- Palmer Drive @ Goldorado Shopping Center Driveway East (Two-Way Stop Controlled)

The level of service (LOS) analyses were conducted for the study intersections for PM peak-hours for the following scenarios:

- A. Existing Conditions
- B. Existing plus Proposed Project Conditions
- C. Existing plus Approved Projects (2011) Conditions
- D. Existing plus Approved Projects (2011) plus Proposed Project Conditions

## Significant findings of this study include:

- The proposed project is expected to generate 378 daily trips, including 25 PM peak-hour trips.
- The proposed project is consistent with the zoning density and the 2004 General Plan land use designation for the site and is smaller than the GPEIR forecasted growth for the traffic analysis zone.
- The project is not anticipated to create any significant environmental impacts.
- The Palmer Drive intersections with the Goldorado Shopping Center west and north driveways have adequate stopping sight distance but do not meet requirements for the more stringent intersection sight distance for their current traffic control (two-way stop control).
- Two study area sites were identified by the County's 2005 Accident Location Study for investigation
  and determination of corrective action(s). For both sites, either improvements have been identified or
  no corrective action was required.
- The proposed project site has adequate access from Cameron Park Drive and Palmer Drive. The
  existing interior roadways are anticipated to provide adequate on-site circulation within the
  development.
- The proposed project includes pedestrian paths and on-site pedestrian/bicycle circulation connecting
  the project with the proposed adjacent Class II Bike Lanes. Through this connection to the proposed
  bike lane network, the project provides continuity with adjacent projects, schools, parks, and other
  public facilities.

## TABLE OF CONTENTS

INTRODUCTION	1
PROJECT DESCRIPTION	1
PROJECT AREA ROADWAYS	1
CHARACTERISTICS OF PROPOSED PROJECT	5
Proposed Project Trip Generation	5
Proposed Project Trip Distribution	5
TRAFFIC IMPACT ANALYSIS	
Consistency with General Plan Land Use Designation	8
EXISTING CONDITIONS	9
EXISTING PLUS PROPOSED PROJECT CONDITIONS	9
EXISTING PLUS APPROVED PROJECTS (2011) CONDITIONS	12
EXISTING PLUS APPROVED PROJECTS (2011) PLUS PROPOSED PROJECT	
IMPACTS AND MITIGATION	
Standards of Significance	
Impacts	
Mitigation	17
OTHER CONSIDERATIONS	
Intersection Queuing Evaluation	17
Sight Distance Evaluation	17
Preliminary Traffic Safety Evaluation	18
Bicycle and Pedestrian Facilities Evaluation	18
Site Plan, Access, and On-site Circulation Evaluation	19
CONCLUSIONS	19
APPENDICES	
Traffic Count Data Sheets	
Worksheets for Existing Conditions	
Worksheets for Existing plus Proposed Project Conditions	
Approved Projects and Existing plus Approved Projects (2011) Traffic Volumes	
Worksheets for Existing plus Approved Projects (2011) Conditions	
Worksheets for Existing plus Approved Projects (2011) plus Proposed Project Con-	
Worksheets for Intersection Queuing Analysis	

## LIST OF TABLES

Table 1 - Proposed Project Trip Generation	
Table 2 - Intersection Level of Service Criteria	
Table 3 - Traffic Analysis Zone #164 Trips	
Table 4 – Existing Levels of Service	10
Table 5 – Existing and Existing plus Proposed Project Levels of Service	12
Table 6 - Existing plus Approved Projects (2011) Levels of Service	19
Table 7 – Existing plus Approved Projects (2011) and Existing plus	
Approved Projects plus Proposed Project (2011) Levels of Service	16
Table 8 - Intersection Queuing Evaluation Results	17
LIST OF FIGURES	_
Figure 1 - Project Vicinity Map	2
Figure 2 – Proposed Project Site Plan	
Figure 3 – Project Location and Study Intersections	4
Figure 4 – Proposed Project Trip Distribution	6
Figure 5 - Proposed Project Trip Assignment	
Figure 6 – Existing Peak-Hour Traffic Volumes	
Figure 7 - Existing plus Proposed Project Peak-Hour Traffic Volumes	
Figure 8 - Existing plus Approved Projects (2011) Peak-Hour Traffic Volumes	
Figure 9 - Existing plus Approved Projects (2011) plus Proposed Project Peak-Hour T	

### INTRODUCTION

This report documents the results of a traffic impact analysis completed for the proposed Bel Air Store #515 Expansion located at 3510 Palmer Drive in the Goldorado Shopping Center in Cameron Park (the "proposed project" or "project"). The purpose of this impact analysis is to identify potential environmental impacts to transportation facilities as required by the California Environmental Quality Act (CEQA). This study was performed in accordance with the El Dorado County Department of Transportation's Traffic Impact Study Protocols and Procedures and the scope of work provided by a representative of the County in a memorandum dated November 16, 2006<sup>1</sup>.

The remaining sections of this report document the proposed project, trip generation and distribution for the proposed project, analysis methodologies, impacts and mitigation, and general study conclusions.

#### PROJECT DESCRIPTION

The project consists of a 9,777 sf expansion to the existing Bel Air Store located within the Goldorado Shopping Center at 3510 Palmer Drive. Access to the site is provided from five driveways located along Cameron Park Drive (1) and Palmer Drive (4). The project location is shown in Figure 1 and the project site plan is shown in Figure 2.

The following intersections, listed with existing traffic control, are included in this traffic impact analysis:

- Cameron Park Drive @ Palmer Drive (Signalized)
- · Cameron Park Drive @ US-50 Westbound Ramp/Country Club Drive (Signalized)
- Cameron Park Drive @ US-50 Eastbound Ramps (Signalized)
- Palmer Drive @ Goldorado Shopping Center Driveway West (Two-Way Stop Controlled)
- Palmer Drive @ Goldorado Shopping Center Driveway North (Two-Way Stop Controlled)
- Palmer Drive @ Goldorado Shopping Center Driveway East (Two-Way Stop Controlled)

Figure 3 illustrates the study intersections, existing traffic control, and existing lane configurations. This analysis evaluates only those site driveways that are likely to be impacted by the project.

#### PROJECT AREA ROADWAYS

The following are descriptions of the primary roadways in the vicinity of the project:

US Route 50 (US-50) is an east-west freeway located south of the project site. Generally, US-50 serves all of El Dorado County's major population centers and provides connections to Sacramento County to the west and the State of Nevada to the east. Access to the project site from US-50 is provided at Cameron Park Drive. Within the general project area, US-50 currently serves approximately 63,000 vehicles per day<sup>2</sup> (vpd) with two travel lanes in each direction.

Cameron Park Drive is a two-lane arterial roadway that generally traverses north and south connecting Green Valley Road on the north with US-50 on the south. In the vicinity of the project site, Cameron Park Drive serves approximately 24,500 vpd<sup>3</sup>.

Memorandum from Jaskamal Singh Dowling Associates, Inc., November 16, 2006.

<sup>&</sup>lt;sup>2</sup> Caltrans Traffic and Vehicle Data Systems Unit, www.dot.ca.gov/bg/traffops/saferesr/trafdata/2005all.htm

El Dorado County Department of Transportation, <a href="http://www.co.el-dorado.ca.us/DOT/trafficcounts.asp">http://www.co.el-dorado.ca.us/DOT/trafficcounts.asp</a>

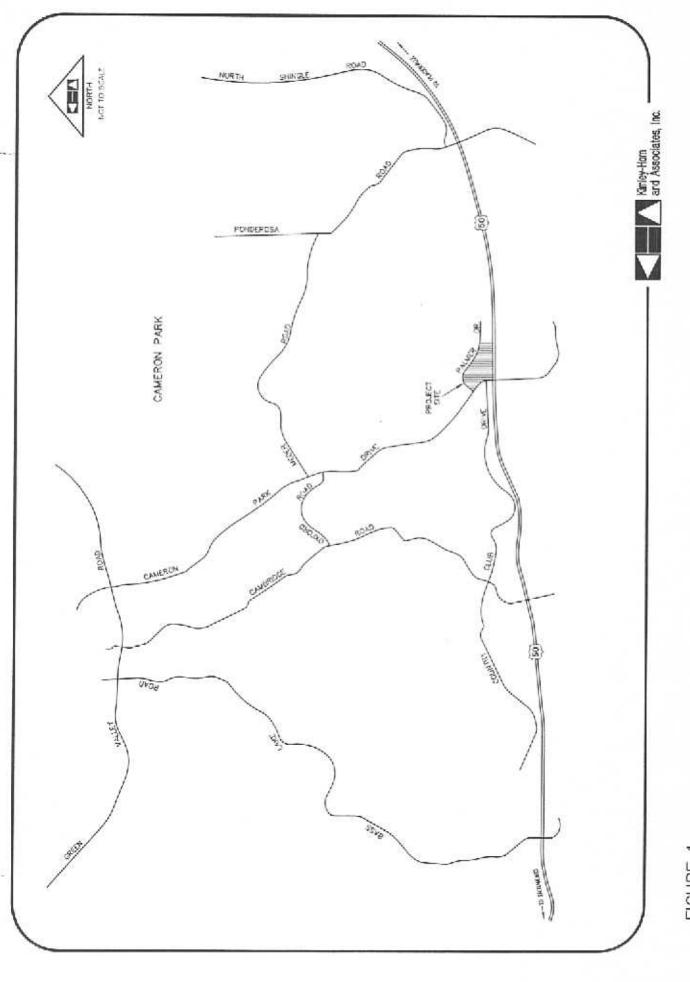


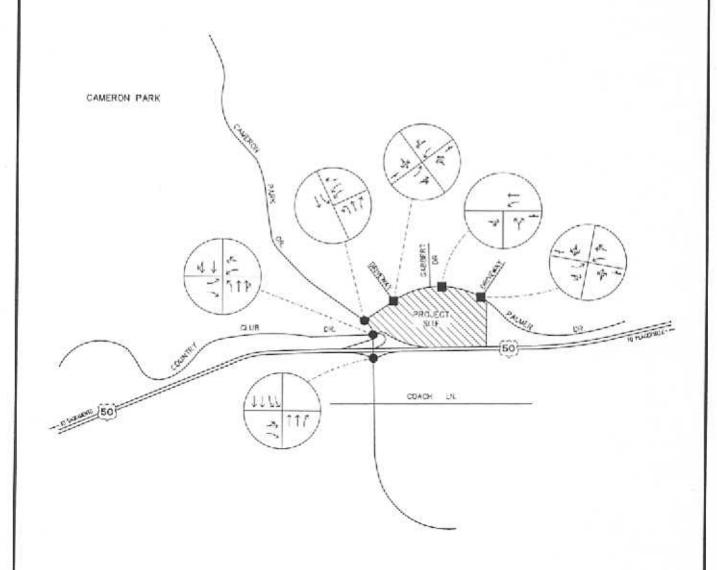
FIGURE 1
PROJECT VICINITY MAP

BEL AIR STORE #515 EXPANSION CAMERON PARK, CA

BEL AIR STORE #515 EXPANSION CAMERON PARK, CA

PROJECT SITE PLAN FIGURE 2





### LEGEND:

- SIGNALIZED INTERSECTION
- TWO WAY STOP CONTROLLED INTERSECTION
- STOP SIGN





BEL AIR STORE #515 EXPANSION CAMERON PARK, CA

PROJECT LOCATION AND STUDY INTERSECTIONS

Palmer Drive is an east-west roadway that provides access to numerous commercial and office developments located east of Cameron Park Drive. Palmer Drive currently serves approximately 9,400 vpd<sup>4</sup> just east of Cameron Park Drive.

#### CHARACTERISTICS OF PROPOSED PROJECT

#### Proposed Project Trip Generation

The number of trips generated by the proposed project was derived using data included in *Trip Generation*, 7<sup>th</sup> Edition, published by the Institute of Transportation Engineers (ITE). The trip generation for this project was approved by a representative of the County<sup>5</sup> and is shown in Table 1.

Table 1 - Proposed Project Trip Generation

ITE Land Use (Code)		Total		lour			
	Units	Daily	22000000	1	IN	0	UT
(Code)	isting Shopping Center (820)	Trips	Trips	%	Trips	%	Trips
Existing Shopping Center (820)	150.9	8,877	822	48%	395	52%	427
Proposed Shopping Center (820)	160.7	9,255	857	48%	411	52%	446
Subtotal Ne	w Trips	378	33		17		18
Pass-by Reduction	(30%) <sup>1</sup>		-10		-5		-5
Net New External	378	25		12		13	

As shown in Table 1, the proposed project is estimated to generate 378 new daily trips with 25 trips occurring during the PM peak.

#### Proposed Project Trip Distribution

The distribution of project traffic was based on project area roadway volumes and general knowledge of project area traffic patterns. The project trip distribution percentages were approved by a representative of the County<sup>5</sup> and are illustrated in Figure 4. The resulting PM peak-hour traffic volumes attributed to the proposed project at the study area intersections are illustrated in Figure 5.

El Dorado County Department of Transportation, http://www.co.cl-dorado.ca.us/DOT/trafficcounts.asp.

Memorandum from Jaskamal Singh, Dowling Associates, Inc., November 16, 2006.

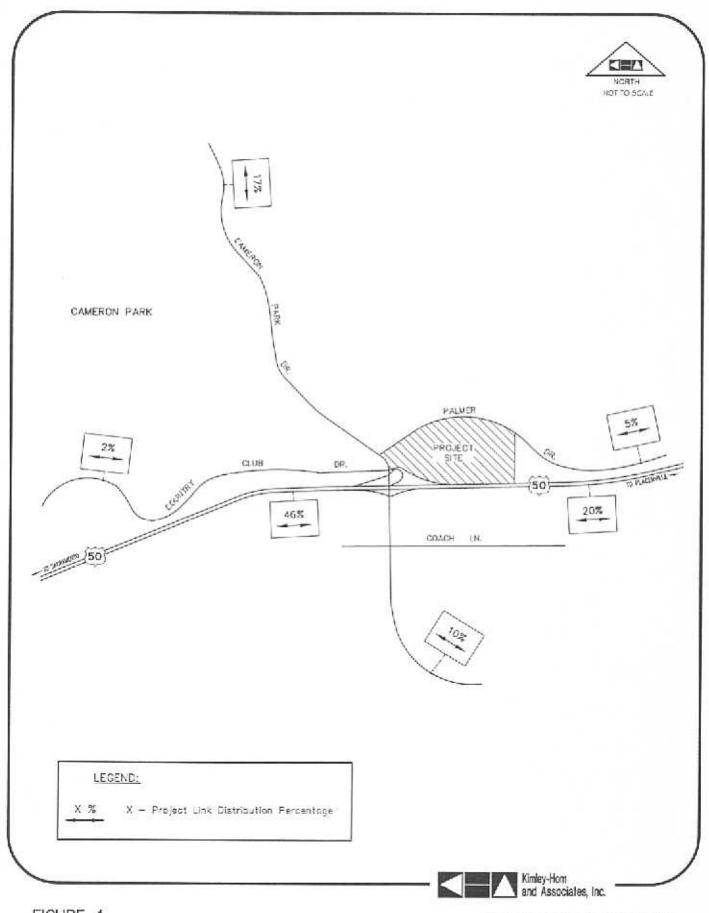
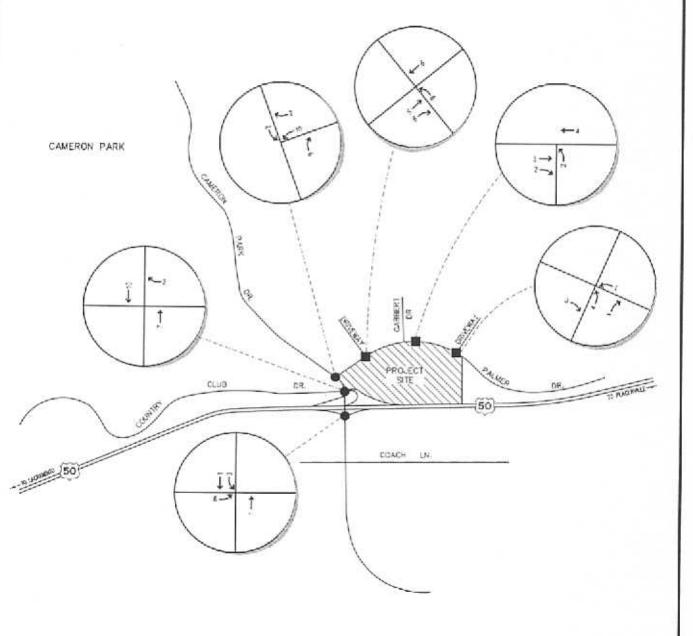


FIGURE 4

BEL AIR STORE #515 EXPANSION CAMERON PARK, CA





#### LECEND:

- PM PEAK HOUR TRAFFIC VOLUME
- SIGNALIZED INTERSECTION
- UNSIGNALIZED INTERSECTION



#### TRAFFIC IMPACT ANALYSIS

Analysis of significant environmental impacts at intersections is based on the concept of Level of Service (LOS). The LOS of an intersection is a qualitative measure used to describe operational conditions. LOS ranges from A (best), which represents minimal delay, to F (worst), which represents heavy delay and a facility that is operating at or near its functional capacity. Intersection LOS for this study was determined using methods defined in the *Highway Capacity Manual*, 2000 (HCM) and appropriate traffic analysis software.

The HCM includes procedures for analyzing two-way stop controlled (TWSC) and signalized intersections. The TWSC procedure defines LOS as a function of average control delay for each minor street approach movement. Signalized intersection LOS is a function of average control delay per vehicle for the intersection as a whole. Table 2 presents intersection LOS definitions as defined in the HCM.

Table 2 - Intersection Level of Service Criteria

Level of Service	Un-Signalized (TWSC)	Signalized		
(LOS)	Average Control Delay (sec/veh)	Control Delay pe Vehicle (sec/yeh		
A	≤ 10	≤ 10		
В	> 10 - 15	> 10 - 20		
C	> 15 - 25	> 20 - 35		
D	> 25 - 35	> 35 - 55		
E	> 35 - 50	> 55 - 80		
F	> 50	> 80		

Applied to the worst lane/lane group(s)

#### Consistency with General Plan Land Use Designation

According to the County's Protocols:

"[A] Each traffic impact study must provide a review of a proposed project's consistency with the land use designations and zoning densities of the 2004 County General Plan to determine if the project is consistent with such designation(s) as applicable within the proposed project area...[B] If a proposed project is of a magnitude that is clearly within the amount of development which was anticipated in the traffic study conducted for the General Plan, then the General Plan's traffic analysis will serve as the basis for the cumulative traffic analysis of the project."

The proposed project (Commercial) is consistent with the 2004 General Plan land use designation (Commercial) for the site<sup>6</sup>. Therefore, the proposed project satisfies the first criterion [A] for determining if a new cumulative 2025 analysis is required in addition to the analysis already completed for the County's General Plan. Regarding the second criterion [B], the proposed project is located within Traffic Analysis Zone (TAZ) 164. Table 3 shows the 1998 and forecasted 2025 trips for TAZ 164<sup>7</sup>.

The proposed project, which is anticipated to generate 378 daily and 25 PM trips, is smaller than the General Plan forecasted growth for this zone. Therefore, the size of the project is within the amount of development which was anticipated in the traffic study conducted for the 2004 General Plan.

<sup>&</sup>lt;sup>6</sup> 2004 General Plan Land Use Diagram, El Dorado County Planning Department.

Memorandum from Jaskamal Singh, Dowling Associates, Inc., November 16, 2006.

Table 3 - Traffic Analysis Zone #164 Trips

Year	ADT	PM
1998	11,058	1,197
2025	14,546	1,498
Allowable Change	3,488	301
Project	378	25
Consistent with GP 2004?	Yes	Yes
Consistent with GP 2004? Source: Dowling Associates, In	-	T(

Based on the above criteria, and based on the County's *Protocols*, cumulative year analyses are not required to update the General Plan analysis for 2025. Therefore, the LOS analysis was conducted for the study intersections for the PM peak-hour for the following scenarios:

- A. Existing Conditions
- B. Existing plus Proposed Project Conditions
- C. Existing plus Approved Projects (2011) Conditions
- D. Existing plus Approved Projects (2011) plus Proposed Project Conditions

The following is a discussion of the analyses for these four scenarios:

#### EXISTING CONDITIONS

Existing peak-hour traffic volumes for three of the six study intersections were obtained from a representative of the County. Where appropriate, these existing peak-hour volumes were increased to represent current year conditions using a straight line growth rate from existing conditions to year 2025 projected volumes? New weekday PM peak-hour intersection turning movement traffic counts were conducted for the three Palmer Drive intersections. The counts were conducted between the hours of 3:30 p.m. and 6:30 p.m. The existing peak-hour turn movement volumes are presented in Figure 6 and the traffic count data sheets for the Palmer Drive intersections are provided in Appendix A. Table 4 presents the existing peak-hour intersection operating conditions for the study intersections.

As indicated in Table 4, the study intersections operate from LOS B to LOS E during the PM peak-hour. Analysis worksheets for the existing conditions scenario are provided in Appendix B.

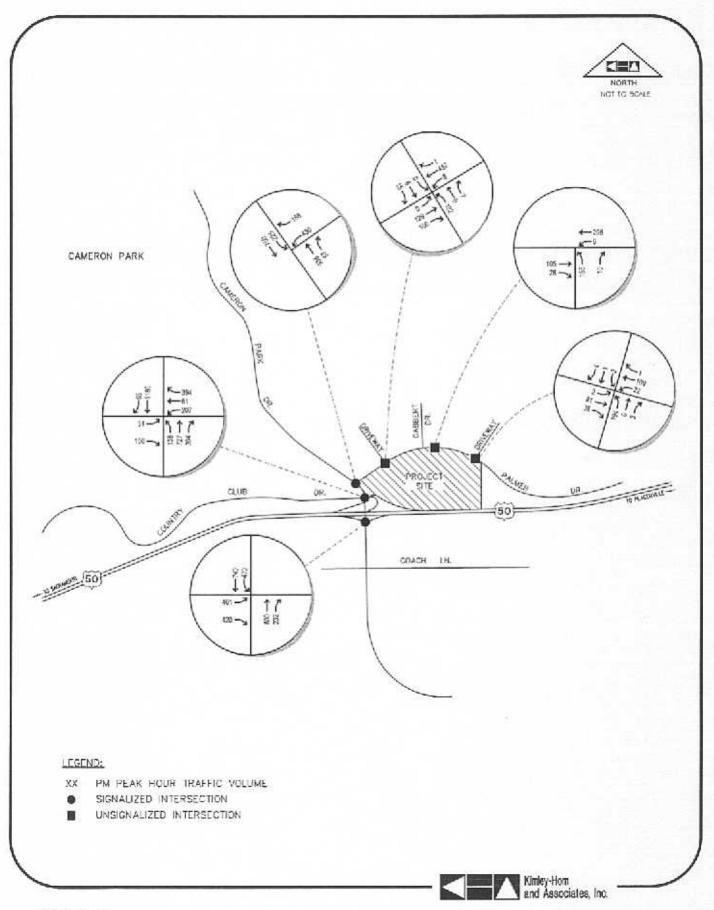
# EXISTING PLUS PROPOSED PROJECT CONDITIONS

Peak-hour traffic associated with the proposed project was added to the existing traffic volumes and levels of service were determined at the study intersections. Table 5 provides a summary of the intersection analysis and Figure 7 provides the PM peak-hour traffic volumes at the study intersections for this analysis scenario.

Beginning with this analysis scenario, the Cameron Park Drive roadway improvements included in the current El Dorado County Department of Transportation's 2005/2006 – 2009/20010 Capital Improvement Program (CIP) are included in the LOS analysis. This upcoming project is anticipated to begin construction in Spring 2007 and includes the addition of one northbound through lane (includes the elimination of the existing northbound exclusive right-turn lane) and one southbound through lane along Cameron Park Drive through the project area?

B Dowling Associates, Inc.

Cameron Park Drive/Palmer Drive/Country Club Drive Intersection Improvements, DMJM Hurris, July 2006.



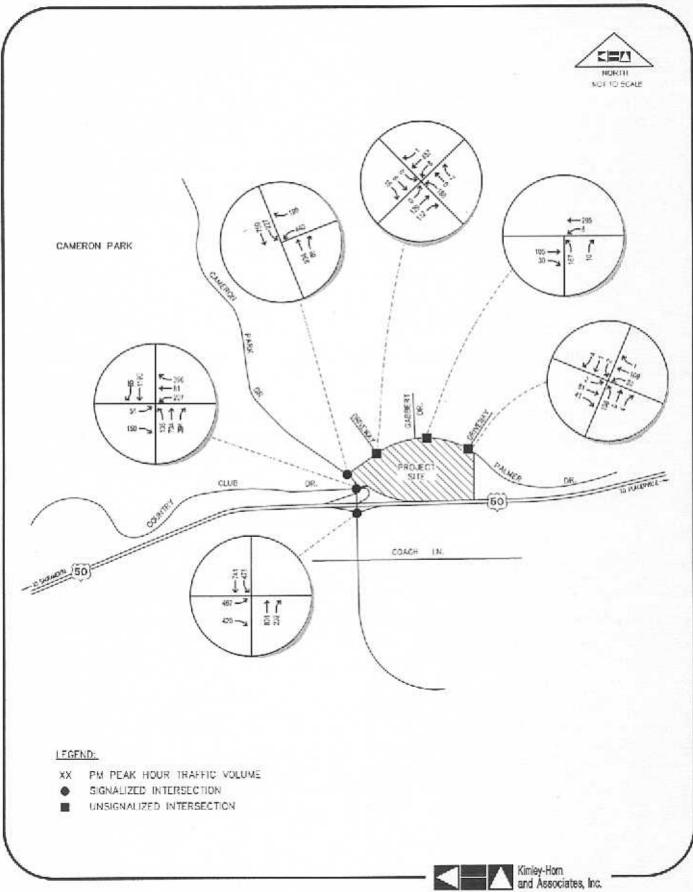


FIGURE 7

BEL AIR STORE #515 EXPANSION CAMERON PARK, CA

EXISTING PLUS PROPOSED PROJECT PEAK HOUR TRAFFIC VOLUMES

Table 4 - Existing Levels of Service

	Traffic	PM Peak-Hour			
Intersection	Control	Delay (Seconds)	LOS		
Cameron Park Drive @ Palmer Drive	Signal	32.4	C		
Cameron Park Drive @ US-50 WB Ramp/Country Club Drive	Signal	26.6	C		
Cameron Park Drive @ US-50 EB Ramps	Signal	20.7	C		
Palmer Drive @ Site Driveway (West)	TWSC*	38.1 (WB)	Е		
Palmer Drive @ Site Driveway (North)	TWSC*	15.0 (NB)	C		
Palmer Drive @ Site Driveway (East)	TWSC*	14.0 (NB)	В		

Table 5 - Existing and Existing plus Proposed Project Levels of Service

	Traffic	PM Peak-Hour			
Intersection	Control	Delay (Seconds)	LOS		
Cameron Park Drive @ Palmer Drive	Signal	32.4 / 33.1	C/C		
Cameron Park Drive @ US-50 WB Ramp/Country Club Drive	Signal	26.6 / 27.5	C/C		
Cameron Park Drive @ US-50 EB Ramps	Signal	20.7 / 21.2	C/C		
Palmer Drive @ Site Driveway (West)	TWSC'	38.1 (WB) / 40.7 (WB)	E/E		
Palmer Drive @ Site Driveway (North)	TWSC*	15.0 (NB) / 15.1 (NB)	C/C		
Palmer Drive @ Site Driveway (East)	TWSC'	14.0 (NB) / 14.2 (NB)	В/В		

Results in this table are presented in Existing / Existing plus Proposed Project format. Control delay for worst minor approach (worst minor movement).

As indicated in Table 5, the study intersections operate from LOS B to LOS E with the addition of project traffic during the PM peak-hour.

The analysis worksheets for this scenario are provided in Appendix C.

## EXISTING PLUS APPROVED PROJECTS (2011) CONDITIONS

As required by the County<sup>10</sup>, two scenarios were evaluated to determine the worst case approximation of nearterm study area roadway traffic volumes. First, traffic associated with ten approved projects in the vicinity of the proposed project was tabulated. The traffic from these projects was added to the existing traffic conditions. Second, five years of projected growth, as derived from the County's travel demand model output, was applied to the existing traffic conditions. For this second scenario, peak-hour traffic volumes for the study area roadway segments were obtained from a representative of the County<sup>11</sup> for the years 1998 and

El Dorado County Department of Transportation, Traffic Impact Study Protocols and Procedures, November 2005.

Dowling Associates, Inc.

2025. From this data, percent annual peak growth rates were determined for each roadway segment direction and were then extended to five year growth rates. The study intersections' existing peak-hour traffic volumes were then multiplied by these five year growth rates (by direction) to obtain forecasted (year 2011) traffic conditions for this analysis scenario. These two volume scenarios were compared and it was determined that the first scenario, the addition of the ten approved projects, yields the worst case traffic conditions. A list of approved projects and details regarding the comparison of year 2011 traffic conditions are presented in Appendix D.

The existing plus approved projects conditions were established by adding the traffic from the ten approved projects to the existing traffic conditions. The levels of service at the study intersections were then determined. Table 6 provides a summary of the intersection analysis and Figure 8 provides the PM traffic volumes for this analysis scenario.

Table 6 - Existing plus Approved Projects (2011) Levels of Service

	Traffic	PM Peak-Hour			
Intersection	Control	Delay (Seconds)	LOS		
Cameron Park Drive @ Palmer Drive	Signal	16.2	В		
Cameron Park Drive @ US-50 WB Ramp/Country Club Drive	Signal	59.3	Е		
Cameron Park Drive @ US-50 EB Ramps	Signal	39.1	D		
Palmer Drive @ Site Driveway (West)	TWSC*	38.1 (WB)	Е		
Palmer Drive @ Site Driveway (North)	TWSC*	15.0 (NB)	С		
Palmer Drive @ Site Driveway (East)	TWSC*	14.0 (NB)	В		

As indicated in Table 6, the study intersections operate from LOS B to LOS E during the PM peak-hour. The analysis worksheets for this scenario are provided in Appendix E.

# EXISTING PLUS APPROVED PROJECTS (2011) PLUS PROPOSED PROJECT CONDITIONS

Peak-hour traffic associated with the proposed project was added to the existing plus approved projects traffic volumes and levels of service were determined at the study intersections. Table 7 provides a summary of the intersection analysis and Figure 9 provides the PM traffic volumes for this analysis scenario.

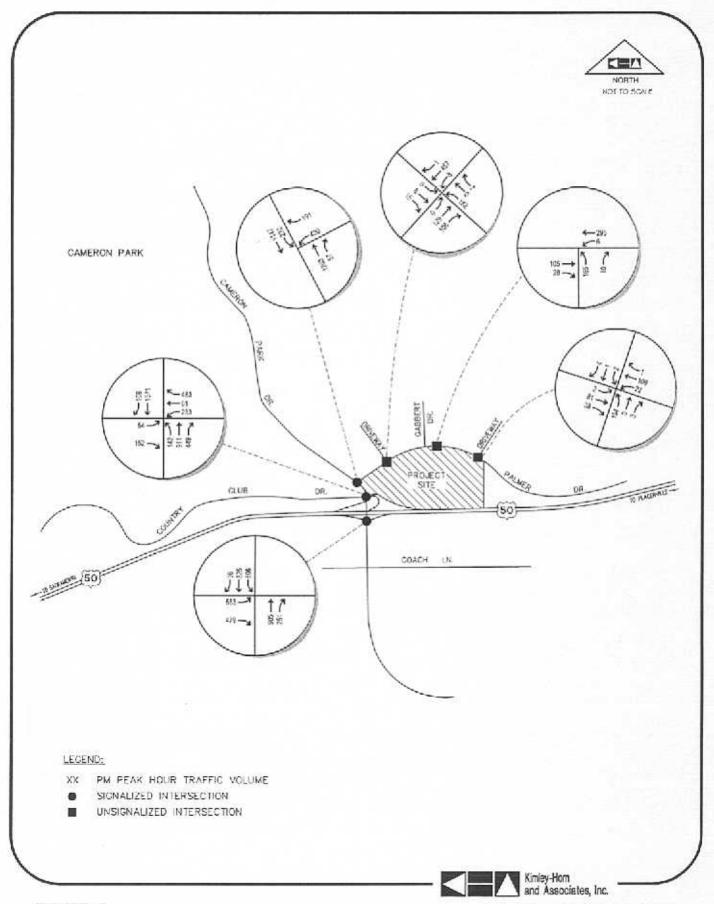


FIGURE 8

BEL AIR STORE #515 EXPANSION CAMERON PARK, CA

EXISTING PLUS APPROVED PROJECTS (2011) PEAK HOUR TRAFFIC VOLUMES

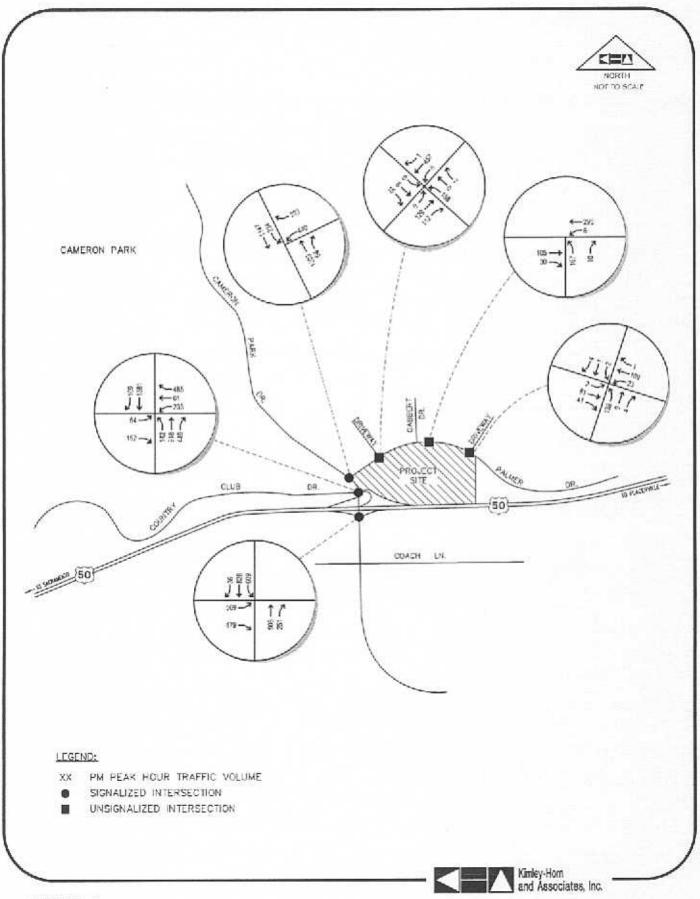


FIGURE 9

BEL AIR STORE #515 EXPANSION IFCT CAMERON PARK, CA

EXISTING PLUS APPROVED PROJECTS (2011) PLUS PROPOSED PROJECT PEAK HOUR TRAFFIC VOLUMES

Table 7 – Existing plus Approved Projects (2011) and Existing plus Approved Projects plus Proposed Project (2011) Levels of Service

	Traffic	PM Peak-Hour			
Intersection	Control	Delay (Seconds)  1 16.2 / 16.5  1 59.3 / 60.7  1 39.1 / 39.8  38.1 (WB) / 40.7 (WB)	LOS		
Cameron Park Drive @ Palmer Drive	Signal	16.2 / 16.5	B/B		
Cameron Park Drive @ US-50 WB Ramp/Country Club Drive	Signal	59.3 / 60.7	E/E		
Cameron Park Drive @ US-50 EB Ramps	Signal	39.1 / 39.8	D/D		
Palmer Drive @ Site Driveway (West)	TWSC*		E/E		
Palmer Drive @ Site Driveway (North)	TWSC*		C/C		
Palmer Drive @ Site Driveway (East)	TWSC*	14.0 (NB) / 14.2 (NB)	В/В		

Results are in Existing plus Approved / Existing plus Approved plus Proposed Project format.

Control delay for worst minor approach (worst minor movement).

As indicated in Table 7, the study intersections operate from LOS B to LOS E during the PM peak-hour. The analysis worksheets for this scenario are provided in Appendix F.

#### IMPACTS AND MITIGATION

Standards of Significance

Project impacts were determined by comparing conditions with the proposed project to those without the project. Impacts for intersections are created when traffic from the proposed project forces the LOS to fall below a specific threshold or conditions at an intersection operating at LOS F are worsened. The County's standards<sup>12</sup> specify the following:

"Level of Service (LOS) for County-maintained roads and State highways within the unincorporated areas of the County shall not be worse than LOS E in the Community Regions." (El Dorado County General Plan Policy TC-Xd) The proposed project is within the Cameron Park Community Region.

"If a project causes the peak-hour level of service...on a County road or State highway that would otherwise meet the County standards (without the project) to exceed the [given] values, then the impact shall be considered significant."

"If any county road or state highway fails to meet the [given] standards for peak hour level of service...under existing conditions, and the project will 'significantly worsen' conditions on the road or highway, then the impact shall be considered significant." According to General Plan Policy TC-Xe, 'significantly worsen' is defined as "a 2 percent increase in traffic during the a.m. peak hour, p.m. peak hour, or daily, or the addition of 100 or more daily trips, or the addition of 10 or more trips during the a.m. peak hour or the p.m. peak hour."

El Dorado County Department of Transportation, Traffic Impact Study Protocols and Procedures, November 2005.

#### Impacts

As indicated in Table 5 and Table 7, the proposed project does not cause intersections that are operating at acceptable levels of service without the project to fall below the previously defined operational threshold (LOS E) with the addition of the proposed project.

#### Mitigation

No mitigation is required.

#### OTHER CONSIDERATIONS

### Intersection Queuing Evaluation

Vehicle queuing for the following previously identified intersection movement<sup>13</sup> was evaluated: Westbound left-turn at the Cameron Park Drive intersection with Palmer Drive.

This intersection approach includes three lanes; two lefts and one right. The left-turn lane closest to the median was observed to provide approximately 160 feet of storage. The center approach lane, the second left-turn lane, was observed to provide approximately 320 feet of storage limited by the adjacent driveway at Plaza Goldorado. It was determined that the combination/total available storage for both left-turn lanes would be used as the measure for intersection approach queuing.

As presented in Table 8, the intersection approach has adequate storage capacity to accommodate the anticipated vehicle queuing. Further, the addition of the proposed project adds minimal additional queuing.

Table 8 - Intersection Queuing Evaluation Results

	19.8 FUE	PM Peak-Hour				
Intersection / Analysis Scenario	Movement	Available Storage (ft)	95 <sup>th</sup> % Queue** (ft)			
Cameron Park Drive @ Palmer Drive	WBLT					
		145				
Existin	Existing plus Project					
Existing plus Appr	oved Projects	320	122			
Existing plus Approved Project	Existing plus Approved Projects plus Project					
Source: Highway Capacity Manual (HCM) 20 WBLT Lunc #1 = 160 ft. Storage, WBLT I Total westbound left-turn queue, both lanes	000 methodolog .ene #2 = 320 ft s:	y per Synchro <sup>©</sup> v Storage.	6.			

Detailed results of this analysis for the intersection are presented in Appendix G.

#### Sight Distance Evaluation

A sight distance evaluation was completed for the three existing Goldorado Plaza driveway intersections with Palmer Drive included in this analysis. This evaluation was based on observed horizontal and vertical geometric conditions and was performed in accordance with the guidelines presented in the Geometric Design of Highways and Streets, 2004, published by the American Association of State Highway and Transportation Officials (AASHTO).

Field observations at these three project driveways along Palmer Drive yielded the following results:

<sup>13</sup> Memorandum from Jaskamal Singh, Dowling Associates, Inc., November 16, 2006.

Palmer Drive @ Goldorado Shopping Center Driveway (West)

Considering the urban characteristics of this intersection, stopping sight distance (SSD) was evaluated at this location. According to AASHTO, a 40 mph design speed requires a minimum of 305 feet of SSD. Adequate SSD was documented along the Palmer Drive approaches to this driveway.

Evaluation of intersection sight distance at this two-way stop controlled intersection was also performed according to AASHTO's "Case B – Intersections with Stop Control on the Minor Road". As such, regardless of the maneuver of the stopped vehicle, a minimum of 445 feet of intersection sight distance (ISD) is required (35 mph posted speed limit, 40 mph assumed design speed). Field observations documented 320 feet of ISD to the right (i.e., vehicles approaching the driveway from the east). It should be noted ISD is typically considered to be extremely conservative for urban driveways.

Palmer Drive (a) Goldorado Shopping Center Driveway (North)

Considering the urban characteristics of this intersection, stopping sight distance (SSD) was evaluated at this location. According to AASHTO, a 40 mph design speed requires a minimum of 305 feet of SSD. Adequate SSD was documented along the Palmer Drive approaches to this driveway.

Evaluation of intersection sight distance at this two-way stop controlled intersection was also performed according to AASHTO's "Case B – Intersections with Stop Control on the Minor Road". As such, regardless of the maneuver of the stopped vehicle, a minimum of 445 feet of intersection sight distance (ISD) is required (35 mph posted speed limit, 40 mph assumed design speed). Field observations documented 320 feet of sight distance to the left (i.e., vehicles approaching the driveway from the west). It should be noted ISD is typically considered to be extremely conservative for urban driveways.

Palmer Drive @ Goldorado Shopping Center Driveway (East)

Adequate ISD and SSD were noted along the Palmer Drive approaches to this driveway. The observed available ISD and SSD in both directions exceeds current AASHTO requirements for the observed operating conditions at the time of this evaluation.

In all cases, roadside vegetation should be maintained as to not obstruct the line of sight for vehicles exiting the project's access driveways. This effort will preserve the observed ISD and SSD.

Preliminary Traffic Safety Evaluation

According to the County's 2005 Accident Location Study<sup>14</sup>, the Cameron Park Drive intersection with the US-50 Easthound Ramps and Cameron Park Drive in the vicinity of Palmer Drive experienced seven (7) and twenty-five (25) accidents, respectively, during a three-year period between January 1, 2003, and December 31, 2005. According to the Study, the Cameron Park Drive intersection with the US-50 Eastbound Ramps was "reviewed and determined to be in satisfactory condition...(this site does) not require further review at this time." Furthermore, according to the Study, "an improvement has already been identified and is pending installation" for Cameron Park Drive in the vicinity of Palmer Drive. The Study further describes this pending improvement as "road widening and shoulder improvements."

Bicycle and Pedestrian Facilities Evaluation

According to Chapter 5 of the El Dorado County Bicycle Transportation Plan, Class II Bike Lanes are proposed for Cameron Park Drive and Palmer Drive in the vicinity of the project site. Furthermore, a Class I Bike Path is proposed for east of the project site to connect Palmer Drive with Wild Chaparral Drive.

While the project will not result in removal of a bikeway/bike lane or prohibition of implementation of the facilities identified in the *Plan*, it is required to include pedestrian/bicycle paths connecting to adjacent commercial, research and development, or industrial projects and any schools, parks, or other public facilities<sup>15</sup>.

Memorandum from Jaskamal Singh, Dowling Associates, Inc., November 16, 2006.



County of El Dorado Department of Transportation, Annual Accident Location Study 2005, March 1, 2006.

The proposed project site, the existing Goldorado Shopping Center, includes pedestrian paths and on-site pedestrian/bicycle circulation connecting the project with the proposed adjacent Class II Bike Lanes along Palmer Drive. Through this connection to the proposed bike lane network, the project provides continuity with adjacent projects, schools, parks, and other public facilities.

#### Site Plan, Access, and On-site Circulation Evaluation

The site plan for the proposed project was reviewed for general access and on-site circulation. According to the site plan, access to the site will be provided/maintained from Cameron Park Drive and Palmer Drive. As such, the proposed project site has adequate access from both Cameron Park Drive and Palmer Drive. The interior roadways are anticipated to provide adequate on-site circulation within the development.

#### CONCLUSIONS

Based upon the analysis documented in this report, the following conclusions are offered:

- The proposed project is expected to generate 378 daily trips, including 25 PM peak-hour trips.
- The proposed project is consistent with the zoning density and the 2004 General Plan land use designation for the site and is smaller than the GPEIR forecasted growth for the traffic analysis zone.
- The addition of the proposed project to the existing network does not result in substandard operations
  at the study intersections. As such, the impact at the study intersections is less than significant.
- The addition of the proposed project to the existing plus approved projects (2011) network does not
  result in substandard operations at the study intersections. As such, the impact at the study
  intersections is less than significant.
- The project is not anticipated to create any significant environmental impacts.
- The Palmer Drive intersections with the Goldorado Shopping Center west and north driveways have adequate stopping sight distance but do not meet requirements for the more stringent intersection sight distance for their current traffic control (two-way stop control).
- Two study area sites were identified by the County's 2005 Accident Location Study for investigation
  and determination of corrective action(s). For both sites, either improvements have been identified or
  no corrective action was required.
- The proposed project site has adequate access from Cameron Park Drive and Palmer Drive. The
  existing interior roadways are anticipated to provide adequate on-site circulation within the
  development.
- The proposed project includes pedestrian paths and on-site pedestrian/bicycle circulation connecting
  the project with the proposed adjacent Class II Bike Lanes. Through this connection to the proposed
  bike lane network, the project provides continuity with adjacent projects, schools, parks, and other
  public facilities.

Appendix A:

Traffic Count Data Sheets

# Intersection Turning Movement Prepared by: Southland Car Counters

N-S STREET: Driveway 1

DATE: 11/30/2006

LOCATION: City of Shingle Springs

E-W STREET: Palmer Dr

CONTROL: 2 Way Stop (N,S)

DAY: THURSDAY

PROJECT# 06-7268-001

	NC	RTHBOL	JND	SC	UTHBO	JND	E	EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 1	ET 1	ER 0	WL 1	WT 1	WR 0	TOTAL	
1:00 PM														
1:15 PM														
1:30 PM														
1:45 PM														
2:00 PM														
2:15 PM														
2:30 PM														
2:45 PM														
3:00 PM														
3:15 PM														
3:30 PM	54		0		1	4	1	29	15	1	112	0	217	
3:45 PM	41				2	5	0	34	2.7	3	115	0	228	
4:00 PM	43		2		3	2	0	40	29	2	116	1	238	
4:15 PM	42		1 2 3 1		1	2	0	28	18	3	104	0	201	
4:30 PM	56		1		0	5	0	27	32	0	122	0	244	
4:45 PM	47		1		1	2	0	23	15	1	108	0	198	
5:00 PM	50		0		0	3	0	28	27	D	131	0	239	
5:15 PM	49		1		0	1	0	14	21	2	111	1	200	
5:30 PM	48		2		0	0	0	23	27	3	86	0	189	
5:45 PM	44		3		0	2	0	35	22	1	100	0	207	
6:00 PM	53		3		0	3	0	22	25	2	90	0	198	
6:15 PM	31		0		0	1	0	16	19	1	76	O.	144	
6:30 PM														
6:45 PM														
OTAL	NL	NT	NR	SL	ST	5R	EL	ET	ER	WL	WT	WR	TOTAL	
OLUMES =	558	0	17	0	8	31	1	319	277	19	1271	2	2503	
PM Pe	ak Hr Be	gins at:	345	PM						·				
EAK										ę.				
OLUMES =	182	0	7	Ω	6	15	0	129	106	8	457	1	911	
EAK HR.		0.829			0.750			0.851			0.955		0.933	

# Intersection Turning Movement Prepared by: Southland Car Counters

N-S STREET: Driveway 2

DATE: 11/30/2006

LOCATION: City of Shingle Springs

E-W STREET: Palmer Dr

1 Way Stop (N)

CONTROL:

DAY: THURSDAY

PROJECT# 06-7268-002

	NO	RTHBO	UND	SC	UTHBO	UND	E	ASTBOU	ND	N			
LANES:	NL 1	NT O	NR 0	SL D	ST 0	SR 0	EL 0	ET 1	ER 1	WL .5	WT 1.5	WR 0	TOTAL
1:00 PM				_						-			
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM	37	0	3					25	7	1	70		143
3:45 PM	41	D	4 2 1					29	6	1	81		162
4:00 PM	43	D	2					34	4	2	76		161
4:15 PM	32	1						24	12	1	70		141
4:30 PM	49	D	3					18	6	2	68		146
4:45 PM	50	0	2					21	9	O	69		151
5:00 PM	47	0	1					20	8	2	85		163
5:15 PM	41	O	0					12	3	0	77		133
5:30 PM	23	0	0					16	10	()	56		115
5:45 PM	30	0	0					15	12	0	67		124
6:00 PM	37	0	0					18	6	1	56		118
6:15 PM	34	0	0					14	4	1.	45		98
6:30 PM													
6:45 PM													
OTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
OLUMES =	464	1	16	0	0	0	0	246	87	11	830	0	1655
DM Do	ak Hr Be	aine at:	345	DM						•			
	ak III be	giris ac.	373	1 (4)									
EAK OLUMES =	165	1	10	0	0	0	0	105	28	6	295	0	610
EAK HR.					0.000			0.875			0.918		0.941

# Intersection Turning Movement Prepared by: Southland Car Counters

N-S STREET: Driveway 3

DATE: 11/30/2006

LOCATION: City of Shingle Springs

E-W STREET: Palmer Dr

CONTROL: 1 Way Stop (N)

DAY: THURSDAY

PROJECT#

06-7268-003

0 1 0 0 0 0	0	ST 1	SR 1	EL C	ET 1.5	ER .5	WL .5	WT 1.5	WR 0	TOTAL
0 0		1	3							
0 0		1	3							
0 0		1	3							
0 0		1	3							
0 0		1	3							
0 0		1	3							
0 0		1	3							
0 0		1	3							
0 0		1	3							
0 0		1	3							
0 0		1	3							
0 0	1			0	22	3	7	31	1	105
		0	D	1	21	12	6	23	0	120
		0	1	1	25	13	5	27	0	126
0 0		0	0	O	13	10	4	28	C	106
1 1		2	2	0	15	12	2	2.7	C	99
0 1	0	0	0	0	12	10	0	29	0	95
0 0	0	0	1	O	9	8	2	36	0	102
		0	1	0	7	3			0	93
0 2	- 1	0	0	0		14	2		1	98
0 0	0	1	C	3			1			84
0 1	C	0	0	0	3		0			74
0 0	0	0	0	1	1	12	1	16	0	61
NT N		ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
1 9	3	4	8	4	133	124	34	308	3	1163
	D 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	D 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	D 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	D 0 0 0 1 0 1 0 0 1 0 2 1 0 0 0 0 0 1 0 0 0 0 1 0 0 0 0 0 0 0 0 0	D 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 1 0 9 0 0 1 0 7 0 0 2 1 0 0 0 0 3 0 0 0 1 0 1 2 0 0 0 0 3 0 0 0 0 0 0 1 1 0 0 1 1 1 0 0 0 0	0 0 0 0 1 0 9 8 0 1 0 0 1 0 7 3 0 2 1 0 0 0 3 14 0 0 0 1 0 1 2 13 0 1 0 0 0 0 3 14 0 0 0 0 1 1 1 1 12 NT NR SL ST SR EL ET ER	0 0 0 0 1 0 9 8 2 0 1 0 0 1 0 7 3 4 0 2 1 0 0 0 3 14 2 0 0 0 0 1 0 1 2 13 1 0 1 0 0 0 0 3 14 0 0 0 0 1 1 1 1 12 1	0 0 0 0 1 0 9 8 2 36 0 1 0 0 1 0 7 3 4 27 0 2 1 0 0 0 3 14 2 36 0 0 0 1 0 1 2 13 1 16 0 1 0 0 0 0 3 14 0 12 0 0 0 0 1 1 1 1 12 1 16	0 0 0 0 1 0 9 8 2 36 0 0 1 0 0 1 0 7 3 4 27 0 0 2 1 0 0 0 3 14 2 36 1 0 0 0 1 0 1 2 13 1 16 1 0 1 0 0 0 0 3 14 0 12 0 0 0 0 1 1 1 12 1 16 0

Appendix B:

Worksheets for Existing Conditions

	*	*	₹ì	Ť	1	1	¥	
Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT	
ane Configurations	ሻሻ	7	Ð	*	7	٦	*	
deal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	
ane Width	11	13	12	13	9	13	16	
Grade (%)	4%			0%			0%	
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	
ane Util. Factor	0.97	1.00		1.00	1.00	1.00	1.00	
₹rt	1.00	0.85		1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3252	1603		1925	1425	1829	2111	
It Permitted	0.95	1.00		1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3252	1603		1925	1425	1829	2111	
Volume (vph)	430	188	0	936	57	225	750	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	467	204	0	1017	62	245	815	
RTOR Reduction (vph)	0	165	0	0	13	0	0	
ane Group Flow (vph)	467	39	0	1017	49	245	815	
Turn Type		Perm	Prot		Perm	Prot		
Protected Phases	8		1	6		5	2	
Permitted Phases		8			6			
Actuated Green, G (s)	15.4	15.4		39.8	39.8	10.0	53.5	
Effective Green, g (s)	14.4	14.4		40.6	40.6	9.0	53.6	
Actuated g/C Ratio	0.19	0.19		0.53	0.53	0.12	0.71	
Clearance Time (s)	3.0	3.0		4.8	4.8	3.0	4.1	
Vehicle Extension (s)	2.5	2.5		1.5	1.5	3.0	1.5	
Lane Grp Cap (vph)	616	304		1028	761	217	1489	
v/s Ratio Prot	c0.14			c0.53		c0.13	0.39	
v/s Ratio Perm		0.02			0.03			
v/c Ratio	0.76	0.13		0.99	0.06	1.13	0.55	
Uniform Delay, d1	29.2	25.6		17.5	8.5	33.5	5.4	
Progression Factor	1.00	1.00		0.58	0.45	1.00	1.00	
ncremental Delay, d2	5.1	0.1		20.8	0.1	100.1	1.5	
Delay (s)	34.2	25.7		30.9	4.0	133.6	6.8	
Level of Service	C	C		С	A	F	Α	
Approach Delay (s)	31,6			29.3	- 328		36.1	
Approach LOS	C			C			D	
Intersection Summary								
HCM Average Control D			32.4	ŀ	HCM Le	vel of S	ervice	С
HCM Volume to Capaci			0.96	, Ca	400000000	0.014044.000		10.0
Actuated Cycle Length (			76.0			ost time		12.0
Intersection Capacity Ut	ilization	E	84.0%	1	CU Lev	el of Se	vice	E
Analysis Period (min) Critical Lane Group			15					

	1	-	*	*	4	*	4	1	1	1	+	1
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7		7	ሻ	<b>‡</b>		ሻ	44			44	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0		4.0	4.0			4.0	
Lane Util, Factor	1.00		1.00	1.00	1.00		1.00	0.95			0.95	
Frt	1.00		0.85	1.00	0.87		1.00	0.95			0.99	
Flt Protected	0.95		1.00	0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1770		1583	1770	1621		1770	3353			3511	
Flt Permitted	0.95		1.00	0.95	1.00		0.12	1.00			1.00	
Satd. Flow (perm)	1770		1583	1770	1621		226	3353			3511	
Volume (vph)	51	0	150	207	61	394	138	727	394	0	1180	65
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	55	D	163	225	66	428	150	790	428	0	1283	71
RTOR Reduction (vph)	0	0	38	0	148	0	0	96	0	0	5	0
Lane Group Flow (vph)	55	0	125	225	348	0	150	1122	0	0	1349	0
Turn Type	Prot		custom	Perm			Perm					
Protected Phases	7				8			2			6	
Permitted Phases			4	8			2					
Actuated Green, G (s)	3.2		24.4	17.2	17.2		43.6	43.6			43.6	
Effective Green, g (s)	3.2		24.4	17.2	17.2		43.6	43.6			43.6	
Actuated g/C Ratio	0.04		0.32	0.23	0.23		0.57	0.57			0.57	
Clearance Time (s)	4.0		4.0	4.0	4.0		4.0	4.0			4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	75		508	401	367		130	1924			2014	
v/s Ratio Prot	c0.03				c0.21			0.33			0.38	
v/s Ratio Perm			0.08	0.13			c0.66					
v/c Ratio	0.73		0.25	0.56	0.94		1.15	0.58			0.67	
Uniform Delay, d1	36.0		19.0	26.1	28.9		16.2	10.4			11.2	
Progression Factor	1.00		1.00	1.00	1.00		1.08	1.02			1.14	
Incremental Delay, d2	30.6		0.3	1.8	32.5		118.0	1.0			1.5	
Delay (s)	66.6		19.3	27.9	61.4		135.5	11.6			14.3	
Level of Service	E		В	C	Ε		F	В			В	
Approach Delay (s)		31.2			50.9			25.2			14.3	
Approach LOS		С			D			C			В	
Intersection Summary												
HCM Average Control D			26.6	1	ICM Le	vel of S	ervice		С			
HCM Volume to Capaci			1.08	(	2600000000000000				ogranie			
Actuated Cycle Length			76.0			ost time			12.0			
Intersection Capacity Ut	tilization		86.5%	- 1	CU Lev	el of Se	rvice		E			
Analysis Period (min)			15									
c Critical Lane Group												

	٠	-	*	*	<b>←</b>	4	4	†	1	1	+	4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4	7					44	7	14.64	十十	
ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0					4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00	1.00					0.95	1.00	0.97	0.95	
Frt		1.00	0.85					1.00	0.85	1.00	1.00	
Fit Protected		0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1770	1583					3539	1583	3433	3539	
FIt Permitted		0.95	1.00					1.00	1.00	0.28	1.00	
Satd. Flow (perm)		1770	1583					3539	1583	1002	3539	
Volume (vph)	461	0	420	0	0	0	0	800	232	470	740	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	501	0	457	0	0	0	0	870	252	511	804	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	104	0	0	0
Lane Group Flow (vph)	0	501	457	0	0	0	0	870	148	511	804	0
Turn Type	Perm		Perm						Perm	Perm		
Protected Phases		4						2			6	
Permitted Phases	4		4						2	6		
Actuated Green, G (s)		23.3	23.3					44.7	44.7	44.7	44.7	
Effective Green, g (s)		23.3	23.3					44.7	44.7	44.7	44.7	
Actuated g/C Ratio		0.31	0.31					0.59	0.59	0.59	0.59	
Clearance Time (s)		4.0	4.0					4.0	4.0	4.0	4.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		543	485					2081	931	589	2081	
v/s Ratio Prot								0.25			0.23	
v/s Ratio Perm		0.28	c0.29						0.09	c0.51		
v/c Ratio		0.92	0.94					0.42	0.16	0.87	0.39	
Uniform Delay, d1		25.5	25.7					8.5	7.1	13.2	8.3	
Progression Factor		1.00	1.00					1.00	1.00	0.41	0.47	
Incremental Delay, d2		21.4	26.9					0.6	0.4	13.0	0.4	
Delay (s)		46.8	52.6					9.2	7.5	18.5	4.4	
Level of Service		D	D					A	A	В	A	
Approach Delay (s)		49.6			0.0			8.8			9.8	
Approach LOS		D			Α			Α			Α	
Intersection Summary												
HCM Average Control D			20.7	1	HCM Le	vel of S	ervice		C			
HCM Volume to Capaci	ty ratio		0.89									
Actuated Cycle Length	(8)		76.0	5	Sum of I	lost time	(5)		8.0			
Intersection Capacity U	tilization		71.1%	- 1	CU Lev	el of Se	rvice		C			
Analysis Period (min)			15									
c Critical Lane Group												

	*	-	*	*	4-	*	4	1	1	1	+	1
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4		ሻ	1>		ሻ	7+	
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	0	6	15	182	0	7	0	129	106	8	457	- 1
Peak Hour Factor	0.75	0.75	0.75	0.83	0.83	0.83	0.85	0.85	0.85	0.96	0.96	0.96
Hourly flow rate (vph) Pedestrians Lane Width (ft)	0	8	20	219	0	8	0	152	125	8	476	1
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh) Median type Median storage veh)		None			None							
Upstream signal (ft) pX, platoon unblocked								656				
vC, conflicting volume vC1, stage 1 conf vol vC2, stage 2 conf vol	653	770	477	731	708	214	477			276		
vCu, unblocked vol	653	770	477	731	708	214	477			276		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	98	97	31	100	99	100			99		
cM capacity (veh/h)	374	329	588	318	357	826	1085			1286		
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2						
Volume Total	28	228	0	276	8	477						
Volume Left	0	219	0	0	8	0						
Volume Right	20	8	0	125	0	1						
cSH	480	326	1700	1700	1286	1700						
Volume to Capacity	0.06	0.70	0.00	0.16	0.01	0.28						
Queue Length 95th (ft)	5	124	0	0	0	0						
Control Delay (s)	13.0	38.1	0.0	0.0	7.8	0.0						
Lane LOS	В	E			A							
Approach Delay (s)	13.0	38.1	0.0		0.1							
Approach LOS	В	E										
Intersection Summary												
Average Delay Intersection Capacity U Analysis Period (min)	tilization	1	9.0 48.0% 15	-	CU Lev	el of Se	rvice		Α			

	-	*	*	<b>—</b>	4	1			
Movement	EBT	EBR	WBL	WBT	NBL	NBR			
Lane Configurations	Ť+		ሻ	<b>†</b>	*14				
Sign Control	Free		1.0	Free	Stop				
Grade	0%			0%	0%				
Volume (veh/h)	105	28	6	295	165	10			
Peak Hour Factor	0.88	0.88	0.92	0.92	0.85	0.85			
Hourly flow rate (vph)	119	32	7	321	194	12			
Pedestrians									
Lane Width (ft)									
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)									
Median type					None				
Median storage veh)									
Upstream signal (ft)	1190								
pX, platoon unblocked	131797925								
vC, conflicting volume			151		469	135			
vC1, stage 1 conf vol									
vC2, stage 2 conf vol									
vCu, unblocked vol			151		469	135			
tC, single (s)			4.1		6.4	6.2			
tC, 2 stage (s)									
tF(s)			2.2		3.5	3.3			
p0 queue free %			100		65	99			
cM capacity (veh/h)			1430		550	914			
Direction, Lane #	EB 1	WB 1	WB 2	NB 1					
Volume Total	151	7	321	206					
Volume Left	O	7	. 0	194					
Volume Right	32	0	0	12					
cSH	1700	1430	1700	563					
Volume to Capacity	0.09	0.00	0.19	0.37					
Queue Length 95th (ft)	0	0	0	42					
Control Delay (s)	0.0	7.5	0.0	15.0					
Lane LOS		Α		C					
Approach Delay (s)	0.0	0.2		15.0					
Approach LOS				C					
Intersection Summary									
Average Delay			4.6		504				
Intersection Capacity U	tilization	n	31.9%	- 1	CU Lev	el of Servi	e e	A	
Analysis Period (min)			15						

	1	-	*	1	<b>←</b>	4	4	†	-	1	<b>↓</b>	1
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations Sign Control	J,	ĵ+ Free		ሻ	Free			- ₽ Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	2	81	38	22	109	1	194	0	3	2	1	4
Peak Hour Factor	0.78	0.78	0.78	0.85	0.85	0.85	0.88	0.88	0.88	0.70	0.70	0.70
Hourly flow rate (vph) Pedestrians	3	104	49	26	128	1	220	0	3	3	1	6
Lane Width (ft) Walking Speed (ft/s) Percent Blockage												
Right turn flare (veh) Median type								None			None	
Median storage veh) Upstream signal (ft) pX, platoon unblocked												
vC, conflicting volume vC1, stage 1 conf vol	129			153			320	315	128	293	338	129
vC2, stage 2 conf vol vCu, unblocked vol	129			153			320	315	128	293	338	129
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s) tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			98			64	100	100	100	100	99
oM capacity (veh/h)	1456			1428			618	589	922	647	571	921
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total	3	153	26	129	224	10						
Volume Left	3	0	26	0	220	3						
Volume Right	0	49	0	1	3	6						
cSH	1456	1700	1428	1700	622	762						
Volume to Capacity	0.00	0.09	0.02	0.08	0.36	0.01						
Queue Length 95th (ft)	0	0	1	0	41	1						
Control Delay (s)	7.5	0.0	7.6	0.0	14.0	9.8						
Lane LOS	A		A		В	A						
Approach Delay (s) Approach LOS	0.1		1.3		14.0 B	9.8 A						
Intersection Summary												
Average Delay Intersection Capacity Ut Analysis Period (min)	tilization		6.3 32.1% 15	-	CU Lev	el of Se	rvice		Α			

Appendix C:

Worksheets for Existing plus Proposed Project Conditions

	1	*	¥٦	†	/	-	ţ	
Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT	
Lane Configurations	44	7	Д	<b>†</b>	7	ሻ	<b>^</b>	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1800	1900	
Lane Width	11	13	12	13	9	13	16	
Grade (%)	4%			0%			0%	
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	
Lane Util, Factor	0.97	1.00		1.00	1.00	1.00	1.00	
Frt	1.00	0.85		1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3252	1603		1925	1425	1829	2111	
Fit Permitted	0.95	1.00		1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3252	1603		1925	1425	1829	2111	
Valume (vph)	440	190	0	936	66	227	750	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	478	207	0	1017	72	247	815	
RTOR Reduction (vph)	0	167	ő	0	15	0	0	
Lane Group Flow (vph)	478	40	ő	1017	57	247	815	
Turn Type	4,70	Perm	Prot	10.11	Perm	Prot	0.0	
Protected Phases	8	r enn	1	6	I OIIII	5	2	
Permitted Phases	Q	8		U	6		- 40	
Actuated Green, G (s)	15.6	15.6		39.6	39.6	10.0	53.3	
Effective Green, g (s)	14.6	14.6		40.4	40.4	9.0	53.4	
Actuated g/C Ratio	0.19	0.19		0.53	0.53	0.12	0.70	
Clearance Time (s)	3.0	3.0		4.8	4.8	3.0	4.1	
Vehicle Extension (s)	2.5	2.5		1.5	1.5	3.0	1.5	
	625	308		1023	758	217	1483	
Lane Grp Cap (vph)	c0.15	300		c0.53	700	c0.14	0.39	
v/s Ratio Prot	60.15	0.02		60.00	0.04	CO. 14	0.33	
v/s Ratio Perm	0.76	0.02		0.99	0.04	1.14	0.55	
v/c Ratio				17.7	8.7	33.5	5.5	
Uniform Delay, d1	29.1	25.4		0.58	0.44	1.00	1.00	
Progression Factor	1.00 5.3	1.00		21.8	0.1	103.3	1.5	
Incremental Delay, d2	34.4	25.6		32.0	3.9	136.8	6.9	
Delay (s)	34.4 C	25.6 C		32.0	3.9 A	130.6 F	Α.	
Level of Service	31.7	C		30.1	A		37.2	
Approach Delay (s) Approach LOS	31.7 C			30. T			37.Z	
Intersection Summary								
HCM Average Control D			33.1	1	HCM Le	vel of S	ervice	С
HCM Volume to Capaci			0.95	26.5	400000000004	mm	4-9	
Actuated Cycle Length			76.0			ost time		12.0
Intersection Capacity U	tilization	1	84.4%	1	CU Lev	el of Se	rvice	E
Analysis Period (min)			15					
c Critical Lane Group								

	1	<b>→</b>	*	*	←	*	4	†	1	1	<b>‡</b>	1
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7		7	ሻ	7>		ሻ	44			44	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00		1.00	0.95			0.95	
Frt	1.00		0.85	1.00	0.87		1.00	0.95			0.99	
Flt Protected	0.95		1.00	0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1770		1583	1770	1621		1770	3354			3512	
Flt Permitted	0.95		1.00	0.95	1.00		0.12	1.00			1.00	
Sald. Flow (perm)	1770		1583	1770	1621		219	3354			3512	Ц.,
Volume (vph)	51	0	150	207	61	396	138	734	394	0	1190	65
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	55	0	163	225	66	430	150	798	428	0	1293	71
RTOR Reduction (vph)	0	0	37	0	144	0	0	96	0	0	5	0
Lane Group Flow (vph)	55	0	126	225	352	0	150	1130	0	0	1359	0
Turn Type	Prot	r	custom	Perm			Perm			111		
Protected Phases	7				8			2			6	
Permitted Phases			4	8			2					
Actuated Green, G (s)	3.2		24.7	17.5	17.5		43.3	43.3			43.3	
Effective Green, g (s)	3.2		24.7	17.5	17.5		43.3	43.3			43.3	
Actuated g/C Ratio	0.04		0.32	0.23	0.23		0.57	0.57			0.57	
Clearance Time (s)	4.0		4.0	4.0	4.0		4.0	4.0			4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	75		514	408	373		125	1911			2001	
v/s Ratio Prot	c0.03				c0.22			0.34			0.39	
v/s Ratio Perm			0.08	0.13			c0.68					
v/c Ratio	0.73		0.24	0.55	0.94		1.20	0.59			0.68	
Uniform Delay, d1	36.0		18.8	25.8	28.8		16.4	10.8			11.5	
Progression Factor	1.00		1.00	1.00	1.00		1.09	1.03			1.15	
Incremental Delay, d2	30.6		0.2	1,6	32.2		135.6	1.1			1.5	
Delay (s)	66.6		19.1	27.4	61.0		153.4	12.0			14.7	
Level of Service	E		В	C	Ε		F	В			В	
Approach Delay (s)		31.1			50.5			27.4			14.7	
Approach LOS		C			D			C			В	
Intersection Summary												
HCM Average Control D			27.5	1	ICM Le	vel of S	ervice		С			
HCM Volume to Capaci			1.11		panane majer	esa irea reco	-12020		12472002			
Actuated Cycle Length			76.0	100	Sum of I		7.767 Burn		12.0			
Intersection Capacity U	tilization		86.9%	-1	CU Lev	el of Se	rvice		E			
Analysis Period (min)			15									
c Critical Lane Group												

	*	<b>→</b>	V	*	←	*	4	†	1	1	+	1
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	930 - 312	4	7	V = N = N	VID-ALE			<b>^</b>	P	1/4	ተተ	- Walter
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0					4.0	4.0	4.0	4.0	
Lane Util, Factor		1.00	1.00					0.95	1.00	0.97	0.95	
Frt		1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected		0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1770	1583					3539	1583	3433	3539	
Flt Permitted		0.95	1.00					1.00	1.00	0.28	1.00	
Satd. Flow (perm)		1770	1583					3539	1583	1001	3539	
Volume (vph)	467	0	420	0	0	0	0	801	232	473	741	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	508	0	457	0	0	0	0	871	252	514	805	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	O	104	0	0	0
Lane Group Flow (vph)	0	508	457	0	0	0	0	871	148	514	805	- 0
Turn Type	Perm		Perm						Perm	Perm		
Protected Phases	1020000	4						2			6	
Permitted Phases	4		4						2	6		
Actuated Green, G (s)		23.3	23.3					44.7	44.7	44.7	44.7	
Effective Green, g (s)		23.3	23.3					44.7	44.7	44.7	44.7	
Actuated g/C Ratio		0.31	0.31					0.59	0.59	0.59	0.59	
Clearance Time (s)		4.0	4.0					4.0	4.0	4.0	4.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		543	485					2081	931	589	2081	
v/s Ratio Prot		0.000	. Uppore					0.25			0.23	
v/s Ratio Perm		0.29	c0.29						0.09	c0.51		
v/c Ratio		0.94	0.94					0.42	0.16	0.87	0.39	
Uniform Delay, d1		25.6	25.7					8.6	7.1	13.2	8.3	
Progression Factor		1.00	1.00					1.00	1.00	0.41	0.47	
Incremental Delay, d2		23.6	26.9					0.6	0.4	13.4	0.4	
Delay (s)		49.2	52.6					9.2	7.5	18.8	4.4	
Level of Service		D	D					Α	A	В	A	
Approach Delay (s)		50.8			0.0			8.8			10.0	
Approach LOS		D			Α			Α			В	
Intersection Summary												
HCM Average Control [			21.2	1	HCM Le	vel of S	ervice		C			
HCM Volume to Capaci			0.90						W <u>2</u> 302			
Actuated Cycle Length			76.0			lost time			8.0			
Intersection Capacity U	tilization		71.5%		CU Lev	el of Se	rvice		C			
Analysis Period (min) c Critical Lane Group			15									

	A	<b>→</b>	*	1	4	*	1	†	1	1	<b>↓</b>	1
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBF
Lane Configurations		4			4		ሻ	<b>†</b>		ሻ	1	
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%	Vilence C	100	0%	
Volume (veh/h)	0	6	15	188	0	7	Ω	129	112	8	457	and the
Peak Hour Factor	0.75	0.75	0.75	0.83	0.83	0.83	0.85	0.85	0.85	0.96	0.96	0.90
Hourly flow rate (vph) Pedestrians Lane Width (ft) Walking Speed (ft/s)	0	8	20	227	0	8	0	152	132	8	476	
Percent Blockage												
Right turn flare (veh) Median type		None			None							
Median storage veh) Upstream signal (ft) pX, platoon unblocked								744				
vC, conflicting volume vC1, stage 1 conf vol vC2, stage 2 conf vol	653	777	477	734	711	218	477			284		
vCu, unblocked vol	653	777	477	734	711	218	477			284		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)		0.0	0.2	17.4.9	0.0	300	-15.70					
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	98	97	28	100	99	100			99		
cM capacity (veh/h)	374	326	588	317	356	822	1085			1279		
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2						
Volume Total	28	235	0	284	8	477						
Volume Left	0	227	0	0	8	0						
Volume Right	20	8	ő	132	ō	1						
cSH	478	324	1700	1700	1279	1700						
Volume to Capacity	0.06	0.73	0.00	0.17	0.01	0.28						
Queue Length 95th (ft)	5	134	0	0	0	0						
Control Delay (s)	13.0	40.7	0.0	0.0	7.8	0.0						
Lane LOS	В	E			Α							
Approach Delay (s)	13.0	40.7	0.0		0.1							
Approach LOS	В	E										
Intersection Summary												
Average Delay Intersection Capacity Ut Analysis Period (min)	tilizatio	n	9.7 48.3% 15		CU Lev	el of Se	rvice		Α			

	$\rightarrow$	*	1	<b>←</b>	4	1		
Movement	EBT	EBR	WBL	WBT	NBL.	NBR		
Lane Configurations	1,		ሻ	4	34			
Sign Control	Free		7/5	Free	Stop			
Grade	0%			0%	0%			
Valume (veh/h)	105	30	6	295	167	10		
Peak Hour Factor	0.88	88.0	0.92	0.92	0.85	0.85		
Hourly flow rate (vph)	119	34	7	321	196	12		
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type					None			
Median storage veh)								
Upstream signal (ft)	1228							
oX, platoon unblocked								
vC, conflicting volume			153		470	136		
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol			153		470	136		
tC, single (s)			4.1		6.4	6.2		
tC, 2 stage (s)								
IF (8)			2.2		3.5	3.3		
p0 queue free %			100		64	99		
cM capacity (veh/h)			1427		549	912		
Direction, Lane #	EB 1	WB 1	WB 2	NB 1				
/olume Total	153	7	321	208				
Volume Left	0	7	0	196				
Volume Right	34	0	٥	12				
cSH	1700	1427	1700	562				
Volume to Capacity	0.09	0.00	0.19	0.37				
Queue Length 95th (ft)	0	0	0	43				
Control Delay (s)	0.0	7.5	0.0	15.1				
Lane LOS	,	Α		С				
Approach Delay (s)	0.0	0.2		15.1				
Approach LOS				С				
Intersection Summary								
Average Delay			4.6					
Intersection Capacity Ut	ilization	1	32.1%	1	CU Lev	el of Servi	ce A	
Analysis Period (min)			15					

	*	<b>→</b>	*	*	←	*	4	†	-	1/2	<b>↓</b>	1
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	1		7	T.			44			4	
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	2	81	41	23	109	1	198	0	4	2	1	4
Peak Hour Factor	0.78	0.78	0.78	0.85	0.85	0.85	0.88	0.88	0.88	0.70	0.70	0.70
Hourly flow rate (vph)	3	104	53	27	128	1	225	0	5	3	1	6
Pedestrians												
Lane Width (ft)												
Walking Speed (fl/s)												
Percent Blockage												
Right turn flare (veh) Median type								None			None	
Median storage veh)								HOLLE			None	
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	129			156			324	319	130	296	344	129
vC1, stage 1 conf vol	1.00			100			2776	37.13	111111111	10000	- 37.00.0	13.5
vC2, stage 2 conf vol												
vCu, unblocked vol	129			156			324	319	130	296	344	129
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			98			63	100	100	100	100	99
cM capacity (veh/h)	1456			1424			614	585	920	642	566	921
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total	3	156	27	129	230	10						
Volume Left	3	0	27	0	225	3						
Volume Right	0	53	0	1	5	6						
cSH	1456	1700	1424	1700	618	759						
Volume to Capacity	0.00	0.09	0.02	0.08	0.37	0.01						
Queue Length 95th (ft)	0	0	1	0	43	1						
Control Delay (s)	7.5	0.0	7.8	0.0	14.2	9.8						
Lane LOS	А		Α		В	A						
Approach Delay (s)	0.1		1.3		14.2	9.8						
Approach LOS					В	Α						
Intersection Summary												
Average Delay			6.5									
Intersection Capacity U	tilization	(	38.0%	1	CU Lev	el of Ser	vice		Α			
Analysis Period (min)			15									

Appendix D:

Approved Projects and Existing plus Approved Projects (2011) Traffic Volumes

pproved Project Volumes - PM Peek	T	NB			58			EB			WB	
Intersection	L	T	я	L	T	R	L	T	R	L	T	R
la Offices - Sports Ear (WO\$7)				1							9	2
Cameron Park Drive at Palmer Drive		2			5				-	-		-
Cameron Park Drive at US-59 WB Ramos/County Club Drive	1	14	10	_	12			-	14	- 5		
Cameron Park Drive at US-50 EB Ramps Goldgrado Shopping Center Driveway at Falmer Drive (Fast)	-	14	•		1.6	_		_	115			-
Golderado Shepping Center Driveway at Palmer Drive (North)	+		_									
Goldorado Shopping Center Driveway at Palmer Drive (1994)	_											
and the street of the street o												
rpoint Global (WO#12)												-
Comeron Park Drive at Palmer Drive Cameron Park Drive at US-50 WS Remos/County Club Drive	-	12	27		3	_	_	-	_			
Cameron Fark Drive at US-50 EB Ramps	1	41	6	_	4			_	- 8	_		
Goldorado Shopping Center Driveway at Parmer Drive (Last)	1	41	-						-			
Goldonado Shooping Center Drivelway at Palmer Drive (North)									-			
Goldorado Shopping Center Driveway at Painter Drive (West)												-
meron Hills - Douglas M Hanarlick Pro (NO#20)	_	_	_			_			_		_	-
Carrieron Park Drive at Palmer Drive	1	10			6							
Cameron Park Drive at US-50 WB Rampa County Class Drive												1.1
Camping Park Drive at US-50 EB Ramps				6								
Spidorado Shopping Center Driveway at Pattner Drive (Cest)									_			
Goldbrade Shopping Center Driveway at Palmer Erive (North)	-		_	_		_		_	-			H
Goldoredo Shopping Center Driveway at Palmer Drive (West)	+		_									Н
ercer Durnck Condos (WOR30)												
Common Park Drive of Pakiner Orine		4	111		2				100	120	-	-
Cameron Park Drive at UII-50 Will frampost curry Claib Felico	1	4.	11		27			_	37	19		-
Camaran Park Drive at US 50 EB Ramps	-	23	- 4	-	71	_		-	-41			$\vdash$
Goldbriedo Shopping Center Driveway at Palmer Drive (EAR) Goldbriedo Shopping Center Driveway at Palmer Drive (No-th)	+			_				_	_			т
Guldurado Shupping Center Driveney at Patrier Drive (West).												
								_	_			1
emeron Woods Village (WO#15) Cameron Park Drive at Palmer Drive	-	44			141							
Camaran Park Drive of US-50 Wft Ramps/County Club Drive	+	43	-		141	2	- 1					1 2
Cameron Park Drive at US-50 ER Ramps	-	7		45	14	36						
Gottoreno Chopping Center Criveway at Pelmer Crive (Faxi)												
Coldorado Shapping Conter Driveway at Patreer Drive (Horth)								_	-	_		-
Goldorado Shopping Center Driveway at Palmer Drive (West)	-		_	-	-	-	-	_	-	-	-	-
Ambroeio Cameron Park Bowling (WO#37)	-				-	-			-	-		
Clarrieron Park Linux at Paimer Tinux	T	74			72							
Corneron Park Drive at US-50 WE Ramp-County Club Urive		AR			71	1	1				_	1.3
Cameron Park Drive at US-50 CB Stamps		7		14	7	_	41	-	-	-	-	-
Coldorado Shopping Center Driveway at Palmin Drive (East)	-		_		-	-	-	-	-			+
Guldoraco Shopping Center Shveway at Patmer Drive (North) Goldorado Shopping Center Driveway at Palmer Drive (West)	_					-						$^{\perp}$
A TOTAL CONTRACTOR OF THE PROPERTY OF THE PROP												_
sbans Protessional Village (WO#44)	-	48		7	1.105	_		_	_		1	1
Cameron Park Drive at Pairner Drive  Cameron Park Drive at US-50 WB Ramps/County Club Drive	_	35		-	102	3	1		-	-	-	
Compress Park Drive at US 55 EB Rainus		6		27	13		29					
Goldorado Shopping Center Driveway at Falmer Drive (East)												
Goldonsdo Shopping Center Driveway at Falmer Drive (North)												
Goldunado Shopping Center Driveway at Palmer Drive (West)										-		-
	-					_	-	_	-	-	1	1_
ightand Denter (WO#45)  Cameron Park Onive at Palmer Drive	1	1.0			28				Т			T
Cameron Park Orive at US-50 WB Hamps/County Club Drive		18			28	38						
Cameron Park Drive et US-50 EB Ramos		3		22	- 5		15					
Golderada Shopoing Center Driveway at Palmer Drive (East)				1000						-		-
Goldonado Shopoino Center Driveway at Paimer Drive (Menn)		-					-		-			+
Golderada Shapaing Center Driveway at Palmer Drive (Vest)	-	-	-	-	-	-	-	-	-	-		+
amerado Drive (WO#48)	-											
Cameron Park Onive at Palmer Drive		6			74							
Cameron Park Drive at US-50 WB Ramps County Club Drive		-4			24					-		
Camaran Park Drive at US 50 EB Ramps		1		- 8	2		1	-	-			1
Golderado Shopping Center Driveway at Painter Drive (Exst)	-		-	-	-		-	-	-		-	+
Geleorada Ehopping Center Driveway at Paimer Drive (North)	-		-		-	_						+
Goldonado Shopping Center Drueway at Paimer Drive (West)												
norne Office Complex (WO#50)		1										
Dameron Park Drive at Palmer Drivis		26			3				-			-
Cameron Familianve at US 50 WS Ramps/County Club Drive	-	17		-	1	-			-			1
Cameron Park Drive at US-50 EU Ramos	-	1	-	1	-	-	14	-	-	1		+
Gordowde Shapping Center Driveway of Palmer Drive (East)	-	-										1
Solidorado Shouping Center Driveway at Palmer Drive (North) Goldorado Shooping Center Driveway at Palmer Drive (Vibal)												
							1			1		1
OTAL PM APPROVED PROJECT TRIPS	No.	1.11	- 374	1	DAYS.	100	1050	T. T.	1000	1 0	1 0	1
Cameron Park Drive at Palmer Drive	0	267	0	7		Q 44	0	0	2	26	C	13
Camaron Fact Drive at UF-60 WS Ramps County Club Drive	4	154		138	201	34	103	G.	29	- 20	0	100
Comeron Park Brive at US-50 EB Range Goldbrado Shopping Center Driveway at Palmor Brive (Ecol)	10	0	0	126	0		102				C	48
Goldonado Shopping Center Driveway at Patrier Drive (North)	0	0.5	i o	0	C	C		0		0	0	1
									C.		d	

Existing Volumes - PM Peak	515 SE		CP.		the s	32.	-		KOES,	-		19190
and the same of th		NB	-3.1		SB		100	EB			WB	
Intersection	L	T	R	L	T	R	L	T	R	L	T	R
Cameron Park Drive at Palmer Drive 2005	07	936	57	225	750	0	0	0	0	430	0	188
Cameron Park Drive at US-50 WB Ramps/County Club Drive 2005	138	727	394	0	1180	55	51	0	150	207	61	394
Cemeron Park Drive at US-50 EB Ramps 2005	0	800	232	470	740	0	461	0	420	0	0	0
Goldprado Shopping Center Driveway at Palmer Drive (East) 2008	164	0	3	2	1	4	2	81	38	22	109	1
Goldonado Shopping Center Driveway at Palmer Drive (North) 2006	165	1	10	0	0	0	0	105	25	6	298	0
Goldonado Shopping Center Driveway at Palmer Drive (West) 2006	C	120	108	8	457	1	C	6	15	182	0	7
Existing plus Proposed Project Volumes - PM Pe	ak	8	ESPE	888			glis:			2015217		100
		NB	No.		5B			EB			WB	
Intersection	L	T	R	L	T	R	L	T	R	L	T	R
Cameron Park Drive at Palmer Drive	67	936	65	227	750	0	0	.0	0	440	0	190
Cameron Park Drive at US-50 WB Ramps/County Club Drive	138	734	394	C	1190	65	51	0	150	207	61	39
Cameron Park Drive at US-50 EB Ramps	0	801	232	473	741	0	467	0	420	0	D	-0
Goldorado Shopping Center Driveway at Palmer Drive (East)	198	0	4	2	1	4	2	81	41	23	109	1
Goldonado Shapping Center Driveway at Palmer Drive (North)	167	-3	10	· C	0	0	0	105	30	6	295	0
Goldorado Shopping Center Driveway at Palmar Drive (West)	0	129	112	8	457	1	0	ű	1.5	188	a	7
Existing plus Approved Project (5 YR. GROWTH)	Volun	nes -	PM I	Peak	dams.			12000		White	1000	
	Se Stephen	NB	2120	ALC: U	SB	1000	PER HA	EB	70 S.W.	11377	WB	Silver
Intersection	L	DESTRE	A	C	T	R	L	Total	R	nic List	STATE OF	H
Cameron Park Drive at Palmer Drive	772	1076	65	225	760	0	Det	0	- Q	430	.0	20
Cameroe Park Drive at US-60 W6 Ramps/County Club Drive	155	817	448	0.0	1180	65	59.	0	150	217	84	41
Comeron Park Drive at US-50 E8 Ramps	- Bank	52H	3240	470	740	- 0	518	.0	472	. 0	0	0
Goldorado Shopping Center Driveway at Palmer Drive (East)	194	117011	3	2.5	03100	4	2	8.5	38	22	109	
Goldorado Shopping Center Driveway at Palmer Drive (North)	165	100	10	0	0	1	0	105	20	5.5	295	0
Soldorado Shopping Center Driveway at Palmer Crive (West)	0	125	108	8	467		0.	6	15	182	0	- 7
Existing plus Approved Project (Approved Project	ts) Vo	olume	s - F	M P	eak	SAI		HOLE !	(Kysiii	geria.		SIV
		NB			SB	- 11-		EB			WB	
Intersection	L	T	帛	L	T	R	L	T	R	L	Т	R
Cameron Park Drive at Palmer Drive	57	1203	57	232	1147	0	П	0	0	430	0	19
Cameron Park Drive at US-50 WB Ramps/County Club Drive	142	911	449	0	1571	109	54	0	152	233	61	48
Cameron Park Drive at US-50 EB Ramps	C	905	251	606	825	36	563	0	479	C	0	0
Goldbrado Shopping Center Driveway at Palmer Drive (East)	194	0	3	2	1.	4	2	81	38	22	109	1
Goldomido Shopping Center Driveway at Palmer Drive (North)	165	1	10	0	0	0	0	105	28	6	295	0
Goldorado Shopping Center Driveway at Palmor Drivo (West)	0	129	106	8	457	1	0	6	15	182	0	7
Existing plus Approved Project plus Proposed P	roject	Volu	mea	- PM	Peak		073	à in				
		NB		1	SB			EB	a von	- Common	WB	
	L	T	R	L	T	R	L	T	R	L	T	P
Intersection		1203	66	234		0	0	C	U	440	0	19
	E7			0	1581	109	54	0	152	233	61	48
Comeron Park Drive at Palmer Drive	142	913	449		Total 1							
Cameron Park Drive at Palmer Drive Cameron Park Drive at US-50 WB Ramps/County Club Drive		918 906	449 251	609	826	36	569	0	479	0	П	_
Cameron Park Drive at Palmer Drive	142	7.4	251 4	509 2	826 1	36 4	2	81	41	23	109	1
Cameron Park Drive at Palmer Drive Cameron Park Drive at US-50 WB Ramps/County Club Drive Cameron Park Drive at US-50 EB Ramps	142	906	251	609	826	36		_			-	_

Appendix E:

Worksheets for Existing plus Approved Projects (2011) Conditions

	*	*	√n	<b>†</b>	-	1	ļ	
Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT	
Lane Configurations	ሻሻ	7	Ð	41		퓍	**	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	
Lane Width	11	13	12	13	9	13	16	
Grade (%)	4%			0%			0%	
Total Lost time (s)	4.0	4.0		4.0		4.0	4.0	
Lane Util. Factor	0.97	1.00		0.95		1.00	0.95	
Frt	1.00	0.85		0.99		1.00	1.00	
Flt Protected	0.95	1.00		1.00		0.95	1.00	
Satd. Flow (prot)	3252	1603		3632		1829	4011	
Flt Permitted	0.95	1.00		1.00		0.95	1.00	
Satd. Flow (perm)	3252	1603		3632		1829	4011	
Volume (vph)	430	191	0	1203	57	232	1147	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	467	208	0	1308	62	252	1247	
RTOR Reduction (vph)	0	163	0	5	Ō	0	0	
Lane Group Flow (vph)	467	45	0	1365	0	252	1247	
Turn Type	407	Perm	Prot	1000	- 0	Prot	16.71	
Protected Phases	6	rem	3	8		7	4	
Permitted Phases	0.	6	3			***	100	
	13.5	13.5		29.3		11.9	42.9	
Actuated Green, G (s)				28.3		11.4	43.7	
Effective Green, g (s)	14.3	14.3				0.17	0.66	
Actuated g/C Ratio	0.22	0.22		0.43		3.5	4.8	
Clearance Time (s)	4.8	4.8		3.0		3.0	3.0	
Vehicle Extension (s)	1.5	1.5		2.5				
Lane Grp Cap (vph)	705	347		1557		316	2656	
v/s Ratio Prot	c0.14			c0.38		c0.14	0.31	
v/s Ratio Perm	727232	0.03		0.00		0.00	0.47	
v/c Ratio	0.66	0.13		0.88		0.80	0.47	
Uniform Delay, d1	23.6	20.8		17.3		26.2	5.5	
Progression Factor	1.00	1,00		0.81		1.00	1.00	
Incremental Delay, d2	4.9	0.8		2.5		13.1	0.1	
Delay (8)	28.5	21.8		16.5		39.3	5.6	
Level of Service	С	С		В		D	Α	
Approach Delay (s)	26.4			16.5			11.3	
Approach LOS	C			В			В	
Intersection Summary								
HCM Average Control I			16.2	ŀ	ICM Le	vel of S	ervice	В
HCM Volume to Capac	ity ratio		0.80					
Actuated Cycle Length	(s)		66.0		Sum of I			12.0
Intersection Capacity U		i	70.2%	- 1	CU Lev	el of Se	rvice	C
Analysis Period (min)			15					
c Critical Lane Group								

	*	-	*	*	←	*	4	†	-	1	+	1
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	*		74	ሻ	1		*1	<b>^</b>			ተተ	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00		1.00	0.95			0.95	
Frt	1.00		0.85	1.00	0.87		1.00	0.95			0.99	
Fit Protected	0.95		1.00	0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1770		1583	1770	1615		1770	3364			3505	
Flt Permitted	0.95		1.00	0.95	1.00		0.14	1.00			1.00	
Satd. Flow (perm)	1770		1583	1770	1615		253	3364			3505	
Volume (vph)	54	0	152	233	61	483	142	911	449	0	1571	109
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	59	0	165	253	66	525	154	990	488	0	1708	118
RTOR Reduction (vph)	0	0	12	0	62	0	0	96	0	0	8	0
Lane Group Flow (vph)	59	0	153	253	529	0	154	1382	0	0	1818	0
Turn Type	Prot		custom	Prot			Perm					
Protected Phases	7			3	8		0.0000000000000000000000000000000000000	2			6	
Permitted Phases	•		4	.0351			2					
Actuated Green, G (s)	2.4		10.0	14.6	22.2		29.4	29.4			29.4	
Effective Green, g (s)	2.4		10.0	14.6	22.2		29.4	29.4			29.4	
Actuated g/C Ratio	0.04		0.15	0.22	0.34		0.45	0.45			0.45	
Clearance Time (s)	4.0		4.0	4.0	4.0		4.0	4.0			4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	64		240	392	543		113	1499			1561	
v/s Ratio Prot	0.03			0.14	c0.33			0.41			0.52	
v/s Ratio Perm			c0.10				c0.61					
v/c Ratio	0.92		0.64	0.65	0.97		1.36	0.92			1.16	
Uniform Delay, d1	31.7		26.3	23.3	21.6		18.3	17.2			18.3	
Progression Factor	1.00		1.00	1.00	1.00		0.30	0.29			0.83	
Incremental Delay, d2	84.8		5.5	3.6	32.0		181.8	4.4			80.8	
Delay (s)	116.5		31.8	27.0	53.6		187.2	9.3			95.9	
Level of Service	F		C	C	D		F	Α			F	
Approach Delay (s)		54.1			45.6			26.1			95.9	
Approach LOS		D			D			С			F	
Intersection Summary			2012				0000047000					
HCM Average Control D			59.3	1	ICM Le	vel of S	ervice		Е			
HCM Volume to Capaci			1.19				-2000-9					
Actuated Cycle Length		324	66.0			ost time			12.0			
Intersection Capacity Ut Analysis Period (min)	tilization	1	04.5% 15	- 1	CU Lev	el of Se	rvice		G			

	1	-	*	1	4-	*	4	<b>†</b>	1	1	1	1
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4	7			250000	.110.00-134	<b>^</b>	7	44	44	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0					4.0	4.0	4.0	4.0	
Lane Util, Factor		1.00	1.00					0.95	1.00	0.97	0.95	
Frt		1.00	0.85					1.00	0.85	1.00	0.99	
Flt Protected		0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1770	1583					3539	1583	3433	3517	
FIt Permitted		0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1770	1583					3539	1583	3433	3517	
Volume (vph)	563	0	479	0	0	0	0	905	251	606	825	36
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	612	0	521	0	0	0	0	984	273	659	897	39
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	194	0	5	0
Lane Group Flow (vph)	0	612	521	0	0	0	0	984	79	659	931	0
Turn Type	Split		Perm						Perm	Prot		
Protected Phases	4	4	X SHICE					2		1	6	
Permitted Phases	0.000	0.00.11	4						2			
Actuated Green, G (s)		24.0	24.0					19.0	19.0	11.0	34.0	
Effective Green, g (s)		24.0	24.0					19.0	19.0	11.0	34.0	
Actuated g/C Ratio		0.36	0.36					0.29	0.29	0.17	0.52	
Clearance Time (s)		4.0	4.0					4.0	4.0	4.0	4.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		644	576					1019	456	572	1812	
v/s Ratio Prot		c0.35						c0.28		c0.19	0.26	
v/s Ratio Perm		100 000 00000	0.33						0.05			
v/c Ratio		0.95	0.90					0.97	0.17	1.15	0.51	
Uniform Delay, d1		20.4	19.9					23.2	17.6	27.5	10.6	
Progression Factor		1.00	1.00					1.00	1.00	0.61	0.31	
Incremental Delay, d2		23.8	17.6					21.0	0.8	70.5	0.1	
Delay (s)		44.2	37.5					44.2	18.4	87.4	3.4	
Level of Service		D	D					D	В	F	Α	
Approach Delay (s)		41.2			0.0			38.6			38,1	
Approach LOS		()			Α			D			D	
Intersection Summary												
HCM Volume to Consol			39,1 1.00		HCM Le	vel of S	ervice		D			
HCM Volume to Capaci			66.0		Sum of	lost time	/e\		12.0			
Actuated Cycle Length			83.5%			el of Se			12.0 E			
Intersection Capacity U Analysis Period (min) c Critical Lane Group	unzauor	1	15		IOU LEV	E U 3E	IVICE		-			

	*	<b>→</b>	7	1	←	4	4	<b>†</b>	1	1	1	1
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4		ሻ	1		*	To.	
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	0	В	15	182	0	7	0	129	106	8	457	1
Peak Hour Factor	0.75	0.75	0.75	0.83	0.83	0.83	0.85	0.85	0.85	0.96	0.96	0.96
Hourly flow rate (vph) Pedestrians Lane Width (ft)	0	8	20	219	0	8	0	152	125	8	476	1
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh) Median type		None			None							
Median storage veh)					1.05005-0							
Upstream signal (ft) pX, platoon unblocked								785				
vC, conflicting volume	653	770	477	731	708	214	477			276		
vC1, stage 1 conf vol vC2, stage 2 conf vol	000				, 00	****	1836.30					
vCu, unblocked vol	653	770	477	731	708	214	477			276		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)		100	u.2	***	0.0		344.0			07575		
tF(s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	98	97	31	100	99	100			99		
cM capacity (veh/h)	374	329	588	318	357	826	1085			1286		
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2						
Volume Total	28	228	0	276	8	477						
Volume Left	0	219	0	0	8	0						
Volume Right	20	8	0	125	0	1						
cSH	480	326	1700	1700	1286	1700						
Volume to Capacity	0.06	0.70	0.00	0.16	0.01	0.28						
Queue Length 95th (ft)	5	124	0	0	0	0						
Control Delay (s)	13.0	38.1	0.0	0.0	7.8	0.0						
Lane LOS	В	E			A							
Approach Delay (s)	13.0	38.1	0.0		0.1							
Approach LOS	В	E										
Intersection Summary												
Average Delay Intersection Capacity Ut Analysis Period (min)	tilization	n	9.0 48.0% 15	ı	CU Lev	el of Se	rvice		Α			

	-	*	*	4	1	1	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	The second secon
Lane Configurations	₽		ኝ	<b>†</b>	A.A.		
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Volume (veh/h)	105	28	6	295	165	10	
Peak Hour Factor	0.88	0.88	0.92	0.92	0.85	0.85	
Hourly flow rate (vph) Pedestrians Lane Width (ft) Walking Speed (ft/s) Percent Blockage	119	32	7	321	194	12	
Right turn flare (veh)							
Median type Median storage veh)	4000				None		
Upstream signal (ft)	1296						
pX, platoon unblocked			454		400	475	
vC, conflicting volume vC1, stage 1 conf vol vC2, stage 2 conf vol			151		469	135	
vCu, unblacked val			151		469	135	
IC, single (s) IC, 2 stege (s)			4.1		6.4	6.2	
IF (s)			2.2		3.5	3.3	
p0 queue free %			100		85	99	
cM capacity (veh/h)			1430		550	914	
Direction, Lane #	EB 1	WB 1	WB 2	NB 1			
Volume Total	151	7	321	206			
Volume Left	0	7	0	194			
Volume Right	32	0	0	12			
cSH	1700	1430	1700	563			
Volume to Capacity	0.09	0.00	0.19	0.37			
Queue Length 95th (ft)	0	0	0	42			
Control Delay (s)	0.0	7.5	0.0	15.0			
Lane LOS		A		C			
Approach Delay (s) Approach LOS	0.0	0.2		15.0 C			
Intersection Summary							
Average Delay Intersection Capacity Ut Analysis Period (min)	tilization	1	4.6 31.9% 15	1	CU Lev	el of Serv	rice A

	1	-	*	*	←	*	4	<b>†</b>	-	1	1	1
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations Sign Control	Ŋ	‡ Free		)	Free			-∰ Stop			Stop 0%	
Grade		0%	00	00	0%		404	0%	3	2	1	4
Volume (veh/h)	2	81	38	22	109	1	194	0.88	0.88	0.70	0.70	0.70
Peak Hour Factor	0.78	0.78	0.78	0.85	0.85	0.85	0.88	0.00	3	3	0.70	0.70
Hourly flow rate (vph) Pedestrians Lane Width (ft)	3	104	49	26	128	1	220	.0	3	3		
Walking Speed (ft/s)												
Percent Blockage												
Right lurn flare (veh) Median type								None			None	
Median storage veh) Upstream signal (ft) pX, platoon unblocked												
vC, conflicting volume vC1, stage 1 conf vol vC2, stage 2 conf vol	129			153			320	315	128	293	338	129
vCu, unblocked vol	129			153			320	315	128	293	338	129
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)	3000			1.551				(07577)				
tF(s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			98			64	100	100	100	100	99
cM capacity (veh/h)	1456			1428			618	589	922	647	571	921
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total	3	153	26	129	224	10						
Volume Left	3	0	26	0	220	3						
Volume Right	0	49	0	1	3	6						
cSH	1456	1700	1428	1700	622	762						
Volume to Capacity	0.00	0.09	0.02	0.08	0.36	0.01						
Queue Length 95th (ft)	0	0	1	0	41	1						
Control Delay (s)	7.5	0.0	7.6	0.0	14.0	9.8						
Lane LOS	A		Α		В	A						
Approach Delay (s)	0.1		1.3		14.0	9.8						
Approach LOS					В	Α						
Intersection Summary												
Average Delay			6.3									
Intersection Capacity Ul Analysis Period (min)	tilization		32.1% 15	1	CU Lev	el of Ser	vice		А			

# Appendix F:

Worksheets for Existing plus Approved Projects (2011) plus Proposed Project Conditions

	*	*	₹I	†	1	1	ţ	
Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT	
Lane Configurations	44	7	Ð	<b>↑</b> ↑		3	<b>^</b>	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	
Lane Width	11	13	12	13	9	13	16	
Grade (%)	4%			0%			0%	
Total Lost time (s)	4.0	4.0		4.0		4.0	4.0	
Lane Util. Factor	0.97	1.00		0.95		1.00	0.95	
Frt	1.00	0.85		0.99		1.00	1.00	
FIt Protected	0.95	1.00		1.00		0.95	1.00	
Satd. Flow (prot)	3252	1603		3629		1829	4011	
Flt Permitted	0.95	1.00		1.00		0.95	1.00	
Satd. Flow (perm)	3252	1603		3629		1829	4011	
Volume (vph)	440	193	0	1203	66	234	1147	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	478	210	0.02	1308	72	254	1247	
RTOR Reduction (vph)	0	164	o	5	0	0	0	
Lane Group Flow (vph)	478	46	o	1375	0	254	1247	
	470	Perm	Prot	1010		Prot	145-77	
Turn Type	6	rem	3	8		7	4	
Protected Phases	0	0	3	o		- 6		
Permitted Phases	10.7	6 13.7		29.1		11.9	42.7	
Actuated Green, G (s)	13.7					11.4	43.5	
Effective Green, g (s)	14.5	14.5		28,1		0.17	0.66	
Actuated g/C Ratio	0.22	0.22		0.43			4.8	
Clearance Time (s)	4.8	4.8		3.0		3.5	3.0	
Vehicle Extension (s)	1.5	1.5		2.5		3.0		
Lane Grp Cap (vph)	714	352		1545		316	2644	
v/s Ratio Prot	c0.15			c0.38		c0.14	0.31	
v/s Ratio Perm		0.03					0.47	
v/c Ratio	0.67	0.13		0.89		08.0	0.47	
Uniform Delay, d1	23.6	20.7		17.5		26.2	5.6	
Progression Factor	1.00	1.00		0.81		1.00	1.00	
Incremental Delay, d2	4.9	8.0		2.9		13.7	0.1	
Delay (s)	28.5	21.5		17.1		40.0	5.7	
Level of Service	C	C		В		D	A	
Approach Delay (s)	26.4			17.1			11.5	
Approach LOS	C			В			В	
Intersection Summary					198707.00-15	S111123140 ± 15-1	vec-rumber	
HCM Average Control D			16.5	1	ICM Le	vel of S	ervice	В
HCM Volume to Capaci			0.81		- 0. 10. In the total			
Actuated Cycle Length	Control of the second		66.0			ost time		12.0
Intersection Capacity Ut	tilization	1	70.9%	1	CU Lev	el of Se	rvice	С
Analysis Period (min)			15					
c Critical Lane Group								

	*	-	*	*	←	4	4	†	-	1	1	1
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ		7	ሻ	‡		ሻ	44			44	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0		4.0	4.0			4.0	
Lane Util, Factor	1.00		1.00	1.00	1.00		1.00	0.95			0.95	
Frt	1.00		0.85	1.00	0.87		1.00	0.95			0.99	
Flt Protected	0.95		1.00	0.95	1.00		0.95	1.00			1.00	
Satd, Flow (prot)	1770		1583	1770	1614		1770	3365			3505	
Flt Permitted	0.95		1.00	0.95	1.00		0.14	1.00			1.00	
Satd. Flow (perm)	1770		1583	1770	1614		253	3365			3505	
Volume (vph)	54	0	152	233	61	485	142	918	449	0	1581	109
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	59	0	165	253	66	527	154	998	488	0	1718	118
RTOR Reduction (vph)	0	0	12	0	51	0	0	95	0	0	8	0
Lane Group Flow (vph)	59	0	153	253	532	0	154	1391	0	0	1828	0
Turn Type	Prot	C	ustom	Prot			Perm					
Protected Phases	7			3	8			2			6	
Permitted Phases			4				2					
Actuated Green, G (s)	2.4		10.0	14.6	22.2		29.4	29.4			29.4	
Effective Green, g (s)	2.4		10.0	14.6	22.2		29.4	29.4			29.4	
Actuated g/C Ratio	0.04		0.15	0.22	0.34		0.45	0.45			0.45	
Clearance Time (s)	4.0		4.0	4.0	4.0		4.0	4.0			4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	64		240	392	543		113	1499			1561	
v/s Ratio Prot	0.03			0.14	c0.33			0.41			0.52	
v/s Ratio Perm			c0.10				c0.61					
v/c Ratio	0.92		0.64	0.65	0.98		1.36	0.93			1.17	
Uniform Delay, d1	31.7		26.3	23.3	21.7		18.3	17.3			18.3	
Progression Factor	1.00		1.00	1.00	1.00		0.30	0.29			0.84	
Incremental Delay, d2	84.8		5.5	3.6	33.0		181.5	4.6			83.5	
Delay (s)	116.5		31.8	27.0	54.7		187.0	9.6			98.7	
Level of Service	F		C	C	D		F	A			F	
Approach Delay (s)		54.1			46.4			26.3			98.7	
Approach LOS		D			D			C			F	
Intersection Summary												
HCM Average Control D			60.7	ŀ	HCM Le	vel of S	ervice		Ε			
HCM Volume to Capacit			1.19	774			0424		40.0			
Actuated Cycle Length (		10.0	66.0			ost time			12.0			
Intersection Capacity Ut	ilization	1	04.9%	1	CU Lev	el of Se	rvice		G			
Analysis Period (min) c Critical Lane Group			15									

	*	<b>→</b>	*	*	4	*	4	†	1	1	+	1
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		#	ř					ተተ	7	44	44	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0					4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00	1.00					0.95	1.00	0.97	0.95	
Frt		1.00	0.85					1.00	0.85	1.00	0.99	
Fit Protected		0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1770	1583					3539	1583	3433	3517	
Flt Permitted		0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1770	1583					3539	1583	3433	3517	
Volume (vph)	569	0	479	0	0	۵	0	906	251	609	826	36
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	618	0	521	0	0	0	0	985	273	662	898	39
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	194	0	5	0
Lane Group Flow (vph)	0	618	521	0	0	0	0	985	79	662	932	0
Turn Type	Split		Perm						Perm	Prot		
Protected Phases	4	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)		24.0	24.0					19.0	19.0	11.0	34.0	
Effective Green, g (s)		24.0	24.0					19.0	19.0	11.0	34.0	
Actuated g/C Ratio		0.36	0.36					0.29	0.29	0.17	0.52	
Clearance Time (s)		4.0	4.0					4.0	4.0	4.0	4.0	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		644	576					1019	456	572	1812	
v/s Ratio Prot		c0.35						c0.28		c0.19	0.27	
v/s Ratio Perm			0.33						0.05			
v/c Ratio		0.96	0.90					0.97	0.17	1.16	0.51	
Uniform Delay, d1		20.5	19.9					23.2	17.6	27.5	10.6	
Progression Factor		1.00	1.00					1.00	1.00	0.61	0.31	
Incremental Delay, d2		25.5	17.6					21.2	0.8	72.8	0.1	
Delay (s)		46.0	37.5					44.4	18.4	89.6	3.4	
Level of Service		D	D					D	В	F	A	
Approach Delay (s)		42.1			0.0			38.8			39.1	
Approach LOS		D			Α			D			D	
Intersection Summary									1 24			
HCM Average Control D			39.8	1	HCM Le	vel of S	ervice		D			
HCM Volume to Capaci			1.00				0.000		O-GELLWEE			
Actuated Cycle Length			66.0			ost time			12.0			
Intersection Capacity U	tilization	1	83.9%	1	CU Lev	el of Se	rvice		E			
Analysis Period (min)			15									
c Critical Lane Group												

	*	$\rightarrow$	7	*	←	*	4	<b>†</b>	-	1	1	1
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBF
Lane Configurations Sign Control Grade		Stop 0%			Stop 0%		ሻ	Free 0%		ሻ	Free 0%	
Volume (veh/h)	0	6	15	188	0	7	0	129	112	8	457	
Peak Hour Factor	0.75	0.75	0.75	0.83	0.83	0.83	0.85	0.85	0.85	0.96	0.96	0.96
Hourly flow rate (vph) Pedestrians Lane Width (ft)	0	8	20	227	0	8	۵	152	132	. 8	476	1
Walking Speed (ft/s) Percent Blockage												
Right turn flare (veh) Median type		None			None							
Median storage veh) Upstream signal (ft) pX, platcon unblocked								770				
vC, conflicting volume vC1, stage 1 conf vol vC2, stage 2 conf vol	653	777	477	734	711	218	477			284		
vCu, unblocked vol	653	777	477	734	711	218	477			284		
tC, single (s) tC, 2 stage (s)	7.1	6,5	6.2	7.1	6.5	6.2	4.1			4.1		
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	98	97	28	100	99	100			99		
cM capacity (veh/h)	374	326	588	317	356	822	1085			1279		
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2						
Volume Total	28	235	0	284	8	477						
Volume Left	0	227	0	0	8	0						
Volume Right	20	8	0	132	0	1						
cSH	478	324	1700	1700	1279	1700						
Volume to Capacity	0.06	0.73	0.00	0.17	0.01	0.28						
Queue Length 95th (ft)	5	134	0	0	0	0						
Control Delay (s)	13.0	40.7	0.0	0.0	7.8	0.0						
Lane LOS	В	E			A							
Approach Delay (s) Approach LOS	13.0 B	40.7 E	0.0		0.1							
Intersection Summary												
Average Delay Intersection Capacity Ut Analysis Period (min)	ilization	n .	9.7 48.3% 15	1	CU Leve	el of Ser	vice		Α			

	$\rightarrow$	*	1	+	1	1		
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	T <sub>a</sub>		ሻ	4	44			
Sign Control	Free		35	Free	Stop			
Grøde	0%			0%	0%			
Volume (veh/h)	105	30	6	295	167	10		
Peak Hour Factor	0.88	0.88	0.92	0.92	0.85	0.85		
Hourly flow rate (vph)	119	34	7	321	196	12		
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type					None			
Median storage veh)								
Upstream signal (ft)	1317							
pX, platoon unblocked	1.50.1.00							
vC, conflicting volume			153		470	136		
vC1, stage 1 conf vol			1100000					
vC2, stage 2 conf vol								
vCu, unblocked vol			153		470	136		
IC, single (s)			4.1		6.4	6.2		
IC, 2 stage (s)								
IF (s)			2.2		3.5	3.3		
p0 queue free %			100		64	99		
cM capacity (veh/h)			1427		549	912		
Direction, Lane #	EB 1	WB 1	WB 2	NB 1				
Volume Total	153	7	321	208				
Volume Left	0	7	0	196				
Volume Right	34	0	0	12				
cSH	1700	1427	1700	562				
Volume to Capacity	0.09	0.00	0.19	0.37				
Queue Length 95th (ft)	0	0	0	43				
Control Delay (s)	0.0	7.5	0.0	15.1				
Lane LOS		A		C				
Approach Delay (s)	0.0	0.2		15.1				
Approach LOS				C				
Intersection Summary								
Average Delay			4.6					
Intersection Capacity Ut	tilization	1	32.1%	1	CU Lev	el of Service	A	
Analysis Period (min)			15					

	1	<b>→</b>	*	*	4-	4	4	1	1	1	+	1
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBF
Lane Configurations Sign Control Grade	Ŋ	Free 0%		ሻ	Free 0%			Stop 0%			Stop 0%	
Volume (veh/h)	2	81	41	23	109	1	198	0	4	2	1	4
Peak Hour Factor	0.78	0.78	0.78	0.85	0.85	0.85	0.88	0.88	0.88	0.70	0.70	0.70
Hourly flow rate (vph) Pedestrians Lane Width (ft)	3	104	53	27	128	1	225	0	5	3	1	6
Walking Speed (ft/s) Percent Blockage												
Right turn flare (veh) Median type Median storage veh) Upstream signal (ft)								None			None	
pX, platoon unblocked vC, conflicting volume vC1, stage 1 conf vol	129			156			324	319	130	296	344	129
vC2, stage 2 conf vol				450			224	240	420	200	244	120
vCu, unblocked vol tC, single (s) tC, 2 stage (s)	129 4.1			156 4.1			324 7.1	319 6.5	130 6.2	7.1	344 6.5	129 6.2
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			98			63	100	100	100	100	99
cM capacity (veh/h)	1458			1424			614	585	920	642	586	921
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total	3	156	27	129	230	10						
Volume Left	3	0	27	0	225	3						
Volume Right	0	53	0	1	5	6						
cSH	1456	1700	1424	1700	618	759						
Volume to Capacity	0.00	0.09	0.02	0.08	0.37	0.01						
Queue Length 95th (ft)	0	0	1	0	43	1						
Control Delay (s)	7.5	0.0	7.6	0.0	14.2	9.8						
Lane LOS	A		A		В	A						
Approach Delay (s) Approach LOS	0.1		1.3		14.2 B	9.8 A						
Intersection Summary												
Average Delay Intersection Capacity Ut Analysis Period (min)	tilization	Ĺ	6.5 38.0% 15	ŀ	CU Lev	el of Ser	vice		Α			

Appendix G:

Worksheets for Intersection Queuing Analysis

	*	*	٧ſ	†	1	1	ţ	
Lane Group	WBL	WBR	NBU	NBT	NBR	SBL	SBT	
Valume (vph)	430	188	0	936	57	225	750	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	487	204	0	1017	62	245	815	
Lane Group Flow (vph)	467	204	0	1017	62	245	815	
v/c Ratio	0.76	0.43		0.99	0.08	1.13	0.55	
Control Delay	37.0	7.0		35.8	3.2	134.9	7.8	
Queue Delay	0.0	0.0		1.0	0.0	0.0	0.0	
Total Delay	37.0	7.0		36.9	3.2	134.9	7.8	
Queue Length 50th (ft)	108	0		254	1	~137	150	
Queue Length 95th (ft)	145	48	1	m#718	m4	#272	292	
Internal Link Dist (ft)	240			433			7051	
Turn Bay Length (ft)	160				100	150		
Base Capacity (vph)	817	556		1027	773	217	1488	
Starvation Cap Reductn		0		5	0	0	0	
Spillback Cap Reductn	0	0		0	0	0	0	
Storage Cap Reductn	0	0		0	0	0	0	
Reduced v/c Ratio	0.57	0.37		1.00	0.08	1.13	0.55	
Intersection Summary								

Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

	*	4	ฑ	<b>†</b>	1	1	ļ	
Lane Group	WBL	WBR	NBU	NBT	NBR	SBL	SBT	
Valume (vph)	440	190	0	936	66	227	750	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	478	207	0	1017	72	247	815	
Lane Group Flow (vph)	478	207	0	1017	72	247	815	
v/c Ratio	0.76	0.43		1.00	0.09	1.14	0.55	
Control Delay	37.1	6.9		37.0	3.1	137.9	7.9	
Queue Delay	0.0	0.0		1.1	0.0	0.0	0.0	
Total Delay	37.1	6.9		38.1	3.1	137.9	7.9	
Queue Length 50th (ft)	111	0		254	1	~139	153	
Queue Length 95th (ft)	148	48		m#717	m5	#275	292	
Internal Link Dist (ft)	240			433			7051	
Turn Bay Length (ft)	160				100	150		
Base Capacity (vph)	817	558		1022	772	217	1482	
Starvation Cap Reductn	0	0		5	0	C	0	
Spillback Cap Reductn	0	0		0	0	0	0	
Storage Cap Reductn	0	0		0	0	0	0	
Reduced v/c Ratio	0.59	0.37		1.00	0.09	1.14	0.55	
Intersection Summary								

Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.

<sup># 95</sup>th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

	6	*	₹Ĩ	1	1	1	1	
Lane Group	WBL	WBR	NBU	NBT	NBR	SBL	SBT	
Volume (vph)	430	191	0	1203	57	232	1147	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	467	208	0	1308	62	252	1247	
Lane Group Flow (vph)	467	208	0	1370	0	252	1247	
v/c Ratio	0.66	0.41		0.88		0.80	0.47	
Control Delay	28.2	6.0		20.1		46.7	6.5	
Queue Delay	0.0	0.0		0.0		0.0	0.0	
Total Delay	28.2	6.0		20.1		46.7	6.5	
Queue Length 50th (ft)	90	0		230		97	102	
Queue Length 95th (ft)	122	43	- 3	m#393		#202	179	
Internal Link Dist (ft)	240			433			612	
Turn Bay Length (ft)	160					150		
Base Capacity (vph)	1035	652		1562		333	2655	
Starvation Cap Reductn	0	0		0		0	0	
Spillback Cap Reductn	0	0		0		0	0	
Storage Cap Reductn	0	0		0		0	0	
Reduced v/c Ratio	0.45	0.32		0.88		0.76	0.47	
Intersection Summary								

<sup># 95</sup>th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

	*	4	٧n	†	-	1	ţ	
Lane Group	WBL	WBR	NBU	NBT	NBR	SBL	SBT	
Volume (vph)	440	193	0	1203	66	234	1147	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	478	210	0	1308	72	254	1247	
Lane Group Flow (vph)	478	210	0	1380	0	254	1247	
v/c Ratio	0.67	0.41		0.89		0.80	0.47	
Control Delay	28.2	5.9		20.9		47.2	6.7	
Queue Delay	0.0	0.0		0.0		0.0	0.0	
Total Delay	28.2	5.9		20.9		47.2	6.7	
Queue Length 50th (ft)	92	0		239		98	104	
Queue Length 95th (ft)	125	43		m#399		#204	182	
Internal Link Dist (ft)	240			433			612	
Turn Bay Length (ft)	160					150		
Base Capacity (vph)	1035	653		1549		333	2642	
Starvation Cap Reductn	0	0		0		0	0	
Spillback Cap Reductn	0	0		0		0	0	
Storage Cap Reductn	0	0		0		0	0	
Reduced v/c Ratio	0.46	0.32		0.89		0.76	0.47	
Intersection Summary								

<sup># 95</sup>th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



March 8, 2007

Mr. Mel Pabalinas, Senior Planner El Dorado County Planning Department 4950 Hillsdale Circle, Suite 100 El Dorado Hills, California 95762

Re:

Response to Comments

Bel Air Store #515 Expansion - Cameron Park

Dear Mr. Pabalinas:

As you are aware, the Bel Air Store #515 Expansion Project is located within the existing Goldorado Shopping Center along Palmer Drive in Cameron Park. It has been brought to my attention that both the individual Bel Air Store expansion project and the shopping center, as a whole, have Floor Area Ratios (FAR) of 0.26. Furthermore, I understand that the current General Plan documentation establishes a FAR of 0.25 as the threshold.

Suite 120

1430 Blue Oaks Boulevard

Roseville, California

According to the El Dorado County Environmental Assessment of General Plan Policy Modifications (July 2004), "FAR policies have the potential to generate sufficient traffic to cause inconsistencies with traffic level of service (LOS) policies and to increase daily and peak hour traffic..."

As documented in our February 8, 2007 Traffic Impact Analysis for this project, while the proposed project increases traffic on the surrounding roadway network, it is not anticipated to result in traffic levels of service that are inconsistent with the County's policies. The proposed project's FAR of 0.26 does not create significant impacts at the transportation facilities included in our analysis.

Please contact me at (916) 797-3811 if you have any questions or require additional information.

Very truly yours,

KIMLEY-HORN AND ASSOCIATES, INC.

Matthew D. Weir, P.E., T.E.

Mouter White

Project Manager

cc:

Mr. Mike Gates, Raley's

517 Fourth Avenue Suite 301 San Diego, California 92101

January 11, 2007

Mr. Mike Gates Raley's 500 West Capitol Avenue West Sacramento, California 95605-2696

Re: Bel Air Store #515 Expansion Cameron Park, California – Vehicular Traffic Noise Assessment

Dear Mr. Gates:

At your request, Kimley-Horn and Associates, Inc. (KHA) conducted an assessment of potential noise impacts resulting from the proposed Bel Air Store #515 Expansion located at 3510 Palmer Drive in the Goldorado Shopping Center in Cameron Park (the "proposed project" or "project") (Figure 1). The assessment focuses on vehicular traffic noise based on a telephone conversation on December 7, 2006 with Rommel Pabalinas at the El Dorado County Planning Department. The project consists of a 9,777 sf expansion to the existing Bel Air Store. Access to the site is provided from five driveways located along Cameron Park Drive and Palmer Drive (Figure 2). The following presents our findings.

# Environmental Noise Background

Sound is a physical phenomenon consisting of minute vibrations that travel through a medium, such as air, and are sensed by the human ear. Sound is generally characterized by several variables, including frequency and intensity. Frequency describes the sound's pitch and is measured in cycles per second, or hertz (Hz), whereas intensity describes the sound's loudness and is measured in decibels (dB). Decibels are measured using a logarithmic scale. A sound level of 0 dB is approximately the threshold of human hearing and is barely audible under extremely quiet listening conditions. Normal speech has a sound level of approximately 60 dB. Sound levels above about 120 dB begin to be felt inside the human car as discomfort and eventually as pain at still higher levels. The minimum change in the sound level of individual events that an average human ear can detect is about 3 dB. The average person perceives a change in sound level of about 10 dB as a doubling of the sound's loudness; this relation holds true

TEL 519 234 9411 FAX 519 234 9433



for sounds of any loudness. Sound levels of typical noise sources and environments are provided in Table 1.

Because of the logarithmic nature of the decibel unit, sound levels cannot be added or subtracted directly and are somewhat cumbersome to handle mathematically. A simple rule is useful, however, in dealing with sound levels. If a sound's intensity is doubled, the sound level increases by 3 dB, regardless of the initial sound level. Thus, for example, 60 dB + 60 dB = 63 dB, and 80 dB + 80 dB = 83 dB.

The normal human car can detect sounds that range in frequency from about 20 Hz to 20,000 Hz. However, all sounds in this wide range of frequencies are not heard equally well by the human ear, which is most sensitive to frequencies in the range of 1,000 Hz to 4,000 Hz. This frequency dependence can be taken into account by applying a correction to each frequency range to approximate the human ear's sensitivity within each range. This is called A-weighting and is commonly used in measurements of community environmental noise. The A-weighted sound pressure level (abbreviated as dBA) is the sound level with the "A-weighting" frequency correction. In practice, the level of a noise source is conveniently measured using a sound level meter that includes a filter corresponding to the dBA curve.

Because community noise fluctuates over time, a single measure called the Equivalent Sound Level (Leq) is often used to describe the time-varying character of community noise. The Leq is the energy-averaged A-weighted sound level during a measured time interval, and is equal to the level of a continuous steady sound containing the same total acoustical energy over the averaging time period as the actual time-varying sound.

Community Noise Equivalent Level (CNEL) is an adjusted average A-weighted sound level for a 24-hour day. It is calculated by adding a 5-dB adjustment to sound levels during evening hours (7:00 p.m. to 10:00 p.m.) and a 10-dB adjustment to sound levels during nighttime hours (10:00 p.m. to 7:00 a.m.). These adjustments compensate for the increased sensitivity to noise during the typically quieter evening and nighttime hours. The CNEL is used by the State of California and El Dorado County to evaluate land-use compatibility with regard to noise.

#### Applicable Standards

The following is summarized from the El Dorado County General Plan Public Health, Safety and Noise Element:



Policy 6.5.1.1 Where noise-sensitive land uses are proposed in areas exposed to existing or projected exterior noise levels (transportation noise sources) exceeding the levels specified in Table 2 an acoustical analysis shall be required as part of the environmental review process so that noise mitigation may be included in the project design.

Noise sensitive receptors are land uses associated with indoor and/or outdoor activities that may be subject to stress and/or significant interference from noise. In El Dorado County they include residential dwellings, transient lodging, hospitals, nursing homes, churches, educational facilities and libraries. Industrial, commercial, agricultural and urban reserve land uses are generally not considered sensitive to ambient noise. As shown in Table 2, exterior sound levels from transportation sources up to 60 dBA CNEL are compatible with noise-sensitive land uses.

#### Assessment

Major roadways in the project vicinity include US Route 50 (US-50), Cameron Park Drive and Palmer Drive. The following are descriptions of theses roadways:

US-50 is an east-west freeway located south of the project site. Generally, US-50 serves all of El Dorado County's major population centers and provides connections to Sacramento County to the west and the State of Nevada to the east. Access to the project site from US-50 is provided at Cameron Park Drive. Within the general project area, US-50 currently serves approximately 63,000 Average Daily Trips (ADT) with two travel lanes in each direction (Kimley-Horn and Associates, 2006).

Cameron Park Drive is a two-lane arterial roadway that generally traverses north and south connecting Green Valley Road on the north with US-50 on the south. In the vicinity of the project site, Cameron Park Drive serves approximately 24,500 ADT.

Palmer Drive is an east-west roadway that provides access to numerous commercial and office developments located east of Cameron Park Drive. Palmer Drive currently serves approximately 9,400 ADT just east of Cameron Park Drive.

The existing ADT from the shopping center is 8,877 vehicles. The proposed project would increase the number of daily trips by 378 vehicles to a total of 9,255 (Kimley-Horn and Associates, 2006).



Single-family and multi-family residences and an assisted living land use are located in the project vicinity at various distances from US-50, Cameron Drive and Palmer Drive. Acoustical calculations were performed to estimate the existing traffic noise level and the traffic noise level after implementation of the project, at 75-feet from the centerlines of the roadway, near these residences. Calculations were also performed estimate the line-of-sight distance to noise contours in 5-dBA increments, beginning at 60 dBA CNEL. The calculations were performed using the Federal Highway Administration's Traffic Noise Model version 2.5 (FHWA 2004). The average vehicle speed was modeled at 65 miles per hour (mph) on US-50, 45 mph on Cameron Park Drive and 35 mph on Palmer Drive. The vehicle mix was assumed to be 94% car sand 6% trucks on US-50. and 98% cars and 2% trucks on Cameron Park Drive and Palmer Drive. The results of vehicular traffic noise modeling are presented in Table 3. The actual sound level at any location is dependent upon such factors as the source-toreceptor distance and the presence of intervening structures, barriers, and topography and may be less than the calculated value.

# Findings

A review of Table 3 shows that the existing vehicular traffic noise level at 75 feet from the centerline of the roadway is approximately 63 dBA CNEL along Palmer Drive, 68 CNEL dBA along Cameron Park Drive and 75 dBA CNEL along US-50. Existing sound levels at residential building façades may exceed 60 dBA CNEL if located within the noise contour identified in the table and in direct line-of-sight to the roadway. The proposed project would increase the daily traffic volume from the shopping center by approximately 378 vehicle trips. The increase traffic would increase vehicular traffic noise by up to 0.1 dBA at any given location. Sound level variations of less than 3.0 dBA are not detectable by the typical human ear. Therefore, the proposed project would not significantly increase the ambient noise environment.

This concludes the assessment, Please contact us if you have any further questions.

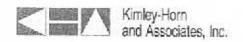
Sincerely,

KIMLEY-HORN AND ASSOCIATES, INC.

By: Jeffrey D. Fuller INCE REHS

John D. Felh

Senior Project Manager/Senior Acoustician



# Attachments:

### References

Table 1 Sound Levels of Typical Noise Sources and Noise Environments

Table 2 Maximum Allowable Noise Exposure For Transportation Noise Sources

Table 3 Calculated Vehicular Traffic Sound Level

Figure 1 Project Vicinity Map

Figure 2 Project Site Plan



### References

County of El Dorado. 2004. General Plan, Public Health, Safety and Noise Element. July

Kimley-Horn and Associates, Inc. 2006. Traffic Impact Analysis. Bel Air Store #515 Expansion. December 8.

Federal Highway Administration (FHWA). 2004. Traffic Noise Model, Version 2.5. February.



Table 1 Sound Levels of Typical Noise Sources and Noise Environments

Noise Source (at Given Distance)	Noise Environment	A-Weighted Sound Level	Human Judgment of Noise Loudness (Relative to Reference Loudness of 70 Decibels*
Military Jet Takeoff with Afterburner (50 ft)	Carrier Flight Deck	140 Decibels	128 times as foud
Civil Defense Siren (100 ft)		130	64 times as loud
Commercial Jet Take-off (200 ft)		120	32 times as loud Threshold of Pain
Pile Driver (50 ft)	Rock Music Concert Inside Sutway Station (New York)	110	16 times as loud
Ambulance Siren (100 ft) Newspaper Press (5 ft) Gas Lawn Mower (3 ft)		100	8 times as loud Very Loud
Food Blender (3 ff) Propeller Plane Flyover (1,000 ff) Diesel Truck (150 ft)	Saller Room Printing Press Plant	90	4 times as loud
Garbage Disposal (3 ft)	Noisy Urban Daytime	80	2 times as loud
Passenger Car, 65 mph (25 ft) Living Room Stereo (15 ft) Vacuum Cleaner (10 ft)	Commercial Areas	70	Reference Loudness Moderately Loud
Normal Speech (5 ft) Air Conditioning Unit (100 ft)	Data Processing Center Department Store	60	1/2 as loud
Light Traffic (100 ft)	Large Business Offica Quiet Urban Daytime	50	1/4 as loud
Bird Calls (distant)	Quiet Urban Nighttime	40	1/8 as loud Quiet
Soft Whisper (5 ft)	Library and Bedroom at Night Quiet Rural Nightlime	30	1/16 as loud
	Broadcast and Recording Studio	20	1/32 as loud Just Audible
		0	1/84 as foud Threshold of Hearing

Source: Compiled by Kimley-Horn and Associates, Inc.



Land Use	Outdoor Activity Areas <sup>1</sup> Ldn/CNEL, dBA	Interior Spaces	
		Ldn /CNEL, d	Leq, dBA
Residential	60	45	722
Transient Lodging	60	45	
Hospitals, Nursing Homes	60	45	-
Theaters, Auditoriums, Music Halls	**		35
Churches, Meeting Halls, Schools	60		40
Office Buildings	##.F		45
Libraries, Museums			45
Playgrounds, Neighborhood Parks	70		



Table 3 Calculated Existing Vehicular Traffic Sound Level

Roadway Segment	CNEL at 75 ft from	Approximate Distance in Feet to CNEL Noise Contour			
centerline (dBA)		60 dBA	65 dBA	70 dBA	75 dBA
US-50	75 dBA	1680	530	170	75
Cameron Park Drive	68 dBA	360	115		
Palmer Drive	63 dBA	95			

<sup>\*</sup> The roadway does not generate this contour.

PROJECT VICINITY MAP

BEL AIR STORE #515 EXPANSION CAMERON PARK, CA

BEL AIR STORE #515 EXPANSION CAMERON PARK, CA

FIGURE 2 PROJECT SITE PLAN



# SYCAMORE ENVIRONMENTAL CONSULTANTS, INC.

6355 Riverside Blvd., Suite C, Speramento, CA 95831 916/427-0703 Fax: 916/427-2175

5 January 2007

Mr. Michael Gates Raley's 500 West Capitol Avenue West Sacramento, CA 95605

Phone: 916/373-6267 Fax: 530/373-2612

Subject: CEQA Evaluation of Potential Air Quality Impacts Resulting from a Supermarket Expansion on APN 083-456-14 with General Plan Policy 2.2.1.5.

Dear Mr. Gates:

El Dorado County Environmental Management Department requested that the El Dorado County Air Quality Management District (AQMD) review the expansion of the Bel Air supermarket located at 3510 Palmer Drive in Cameron Park, CA. The expansion consists of adding 9,777 gross square feet to the existing 50,345 gross square-foot building. In an interoffice memorandum dated 29 September 2006 (see attached), the El Dorado County AQMD determined that the project would have no significant impact on air quality with the incorporation of specific conditions.

The floor to area ratio (FAR) of the proposed project would exceed the maximum FAR of 0.25 as stated in General Plan Policy 2.2.1.5. The FAR of the proposed project is 0.26. The El Dorado County General Plan Pinal Environmental Impact Report identified a potential for additional significant impacts to air quality resulting from Commercial District zoned projects that exceed the 0.25 FAR. Sycamore Environmental reevaluated potential air quality impacts to determine if the increased FAR proposed by the project would cause additional significant impacts.

The El Dorado County AQMD evaluates air quality impacts for commercial development based on gross square footage of the commercial building. The gross square footage is used to estimate trip counts, which are then used to estimate the daily emissions expressed in pounds. Mitigation measures are also factored into the estimate of daily emissions. Mitigation measures may include building design; orientation of the project to alternative transportation uses; and reduced parking capacity. In fact, El Dorado County AQMD awards emission reduction credits to commercial projects that achieve a FAR of 0.75 or greater.

The gross square footage of the proposed supermarket expansion is the same amount that the El Dorado County AQMD evaluated. Therefore, there is no change in the basis of its evaluation. There is no reason to change the finding documented in the 29 September 2006 memorandum, that the project will not have a significant impact on air quality with the conditions incorporated.

Based on this evaluation, the project's inconsistency with the General Plan Policy 2.2.1.5 does not result in any additional impacts or any new significant impacts.

Thank you for the opportunity of evaluating your project. If you have any questions, please call Andrew Bayne or me.

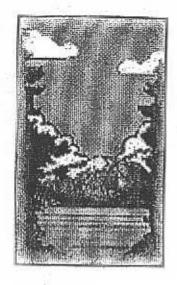
Jeff Little

Vice President

Affry Little

JJL:wab

Attachment: Interoffice Memorandum Dated 29 September 2006.



EL DORADO COUNTY
ENVIRONMENTAL MANAGEMENT
PLACERVILLE OFFICE
2850 FAIRLANE CT, BLDG C
PLACERVILLE, CA 95667
PHONE: (530) 621-5300
FAX: (530) 642-1531

Interoffice Memorandum

9/29/06

To:

John Heiser, Project Planner

EDC Development Services Department

From:

Environmental Management Dept.

Subject

DR 90-0031 R

GOLDORADO CENTER

Environmental Management Department staff have reviewed the subject application. Should this project be conditionally approved, it is the recommendation of this Department that the following conditions be a part of that action:

#### Air Quality Management:

The District has reviewed the proposed project DR 90-0031 - Goldorado Center (Best/SVC-Cameron Park, c/o Best Properties/Mark Marvelli, Rauschenbach Marvelli Becker, Architects)/APN 083-456-14. The District has determined this project will have an insignificant air quality impact. Though there is no significant impact on air quality, the following summary of issues SHALL be addressed:

1. The project construction will involve grading and excavation operations, which will result in a temporary negative impact on air quality with regard to the release of particulate matter (PM<sub>10</sub>) in the form of dust. Current county records indicate this property is not located within the Asbestos Review Area (See Enclosed). Therefore, District Rule 223 and 223-1, which addresses the regulations and mitigation measures for fugitive dust emissions shall be adhered to during the construction process. Mitigation measures for the control of fugitive dust shall comply with the requirements of Rule 223 and 223-1. In addition, a Fugitive Dust Plan (FDP) Application shall be submitted along with the appropriate fees to and approved by the District prior to start of project construction.

Project construction may involve road development and should adhere to District Rule
 Cutback and Emulsified Asphalt Paving Materials.

THICI ILIS.

home being an at et

- Burning of wastes that result from "Land Development Clearing" must be permitted through the DISTRICT. Only vegetative waste materials may be disposed of using an open outdoor fire (Rule 300 Open Burning).
- The project construction will involve the application of architectural coating, which shall adhere to District Rule 215 Architectural Coatings.
- 5. The District's goal is to strive to achieve and maintain ambient air quality standards established by the U.S. Environmental Protection Agency and the California Air Resources Board and to minimize public exposure to toxic or hazardous air pollutants and air pollutants that create unpleasant odors. The following are measures used to reduce impacts on air quality from equipment exhaust emissions:

#### Heavy Equipment and Mobile Source Mitigation Measures.

- Use low-emission on-site mobile construction equipment.
- Maintain equipment in tune per manufacturer specifications.
- Retard diesel engine injection timing by two to four degrees.
- Use electricity from power poles rather than temporary gasoline or diesel generators.
- Use reformulated low-emission diesel fuel.
- Use catalytic converters on gasoline-powered equipment.
- Substitute electric and gasoline-powered equipment for diesel-powered equipment where feasible.
- Do not leave inactive construction equipment idling for prolonged periods (i.e., more than two minutes).
- Schedule construction activities and material hauls that affect traffic flow to off-peak hours.
- Configure construction parking to minimize traffic interference.
- 6. Prior to construction/installation of any new point source emission units or non-permitted emission units (i.e. gasoline dispensing facility, boilers internal combustion engines, emergency generators, etc.), authority to construct applications shall be submitted to the District. Submittal of applications shall include facility diagram(s) equipment specifications and emission factors.

The above District rules are found in the El Dorado County Air Pollution Control District Rules and Regulations. A copy of the District Rules and Regulations is available at our Department or from the Department's web page located at the following internet address: <a href="www.co.el-dorado.ca.us/emd">www.co.el-dorado.ca.us/emd</a>.

If you have any questions regarding these comments, please do not hositate to telephone our office at (530) 621-6662.

#### Environmental Health:

Plans for the modification of the Bel Air building shall be reviewed by Environmental Health Division, Consumer Protection Program prior to any construction or modification of the food facility.

#### Hazardous Materials:

No comments.

CC: Rauschenbach Marvelli Becker, Architects ATTN: Mark Marvelli 2277 Watt Ave. 2<sup>nd</sup> Floor Sacramento CA 95825



#### COUNTY OF EL DORADO DEPARTMENT OF TRANSPORTATION



#### INTEROFFICE MEMORANDUM

Date:

October 3, 2006March 6, 2007

To:

Mel Pabalinas, Project Planner

From:

Jon Vegna, DOT Transportation Planning

Subject:

(Z06-0042. DR90-0031R--

PD06-0027)

PRELIMINARY

CONDITIONS

Project name:

Golderado Center

Location:

Palmer Drive, 0.2 miles east of Cameron Park Drive

APN:

083-456-14

Project Description: The Department of Transportation has reviewed the subject Design Review to expand the Bel Air Supermarket by 16,062 square feet:

9,777

Grading & Drainage: It appears as though the grading and drainage improvements for this project will be confined to the on-site improvements.

The roads fronting the property are County or State maintained. The DOT believes that this project will "worsen" traffic as defined by Policy TC-Xf of the General Traffic: Plan and is required to prepare a traffic study per the Traffic Impact Study Protocol and Procedures. Of particular concern is the existing traffic condition at the Cameron Park Drive/ US 50 interchange as well as the surrounding County roadways and intersections. Therefore, a traffic study shall be submitted to this Department for review. DOT RECOMMENDS THAT THIS DISCRETIONARY APPLICATION IS CONSIDERED INCOMPLETE UNTIL THAT TRAFFIC STUDY HAS BEEN REVIEWED AND APPROVED BY THE DEPARTMENT OF TRANSPORTATION.

#### **DOT Conditions**

1. The applicant shall submit a site improvement/grading plan prepared by a professional civil engineer to the Department for review and approval, prior to the issuance of any building permit for this project. The plan shall be in conformance with the County of El Dorado "Design and Improvement Standards Manual", the "Grading, Erosion and Sediment Control Ordinance", the "Drainage Manual", the "Off-Street Parking and Loading Ordinance", and the State of California Handicapped Accessibility Standards.

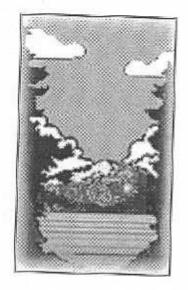
Page 1 of 2

T:\Dovelopment Services\Discretionary Project Processing\OR - Design Review\DR90-0031R Golderado Center - CP Bel Air expansion\DR90-0031R Final Conditions.doc1\Development Services\Discretionary Project Processing\DR -Design Review/DR90-0031R Golderado Conter - CP Bel Air expansion/DR90-0031R Conditions doe

The applicant shall pay the traffic impact fees in effect at the time a building permit is deemed complete.

DOT STANDARD CONDITONS

- 1. The applicant shall provide a soils report at time of grading permit application addressing, at a minimum, grading practices, compaction, slope stability of existing and proposed cuts and fills, erosion potential, ground water and pavement section based on TI and R values. The report shall include recommended design criteria for any retaining walls. Any export to be deposited within El Dorado County shall require an additional grading permit.
- 2. The applicant shall provide a drainage report at time of grading permit application, consistent with the Drainage Manual and the Storm Water Management Plan, which addresses storm water runoff increase, impacts to downstream facilities and properties, and identification of appropriate storm water quality management practices to the satisfaction of the Department of Transportation.
- Any import or export to be borrowed or deposited within El Dorado County shall require an additional grading permit for that offsite grading.
- 4. Upon completion of the improvements required, and prior to acceptance of the improvements by the County, the developer will provide a CD to DOT with the approved drainage and geotechnical reports in PDF format and the approved record drawings in TIF format.



EL DORADO COUNTY
ENVIRONMENTAL MANAGEMENT
PLACERVILLE OFFICE
2850 FAIRLANE CT, BLDG C
PLACERVILLE, CA 95667
PHONE: (530) 621-5300

FAX: (530) 642-1531

#### Interoffice Memorandum

9/29/06

To:

John Heiser, Project Planner

EDC Development Services Department

From:

Environmental Management Dept.

Subject:

DR 90-0031 R

GOLDORADO CENTER

Environmental Management Department staff have reviewed the subject application. Should this project be conditionally approved, it is the recommendation of this Department that the following conditions be a part of that action:

#### Air Quality Management:

The District has reviewed the proposed project DR 90-0031 – Goldorado Center (Best/SVC-Cameron Park, c/o Best Properties/Mark Marvelli, Rauschenbach Marvelli Becker, Architects)/APN 083-456-14. The District has determined this project will have an insignificant air quality impact. Though there is no significant impact on air quality, the following summary of issues SHALL be addressed:

- 1. The project construction will involve grading and excavation operations, which will result in a temporary negative impact on air quality with regard to the release of particulate matter (PM<sub>10</sub>) in the form of dust. Current county records indicate this property is not located within the Asbestos Review Area (See Enclosed). Therefore, District Rule 223 and 223-1, which addresses the regulations and mitigation measures for fugitive dust emissions shall be adhered to during the construction process. Mitigation measures for the control of fugitive dust shall comply with the requirements of Rule 223 and 223-1. In addition, a Fugitive Dust Plan (FDP) Application shall be submitted along with the appropriate fees to and approved by the District prior to start of project construction.
- Project construction may involve road development and should adhere to District Rule 224 Cutback and Emulsified Asphalt Paving Materials.

- Burning of wastes that result from "Land Development Clearing" must be permitted through the DISTRICT. Only vegetative waste materials may be disposed of using an open outdoor fire (Rule 300 Open Burning).
- The project construction will involve the application of architectural coating, which shall adhere to District Rule 215 Architectural Coatings.
- 5. The District's goal is to strive to achieve and maintain ambient air quality standards established by the U.S. Environmental Protection Agency and the California Air Resources Board and to minimize public exposure to toxic or hazardous air pollutants and air pollutants that create unpleasant odors. The following are measures used to reduce impacts on air quality from equipment exhaust emissions:

#### Heavy Equipment and Mobile Source Mitigation Measures.

- Use low-emission on-site mobile construction equipment.
- Maintain equipment in tune per manufacturer specifications.
- · Retard diesel engine injection timing by two to four degrees.
- Use electricity from power poles rather than temporary gasoline or diesel generators.
- · Use reformulated low-emission diesel fuel.
- Use catalytic converters on gasoline-powered equipment.
- Substitute electric and gasoline-powered equipment for diesel-powered equipment where feasible.
- Do not leave inactive construction equipment idling for prolonged periods (i.e., more than two minutes).
- Schedule construction activities and material hauls that affect traffic flow to off-peak hours.
- Configure construction parking to minimize traffic interference.
- 6. Prior to construction/installation of any new point source emission units or non-permitted emission units (i.e. gasoline dispensing facility, boilers internal combustion engines, emergency generators, etc.), authority to construct applications shall be submitted to the District. Submittal of applications shall include facility diagram(s) equipment specifications and emission factors.

The above District rules are found in the El Dorado County Air Pollution Control District Rules and Regulations. A copy of the District Rules and Regulations is available at our Department or from the Department's web page located at the following internet address: <a href="www.co.el-dorado.ca.us/emd">www.co.el-dorado.ca.us/emd</a>.

If you have any questions regarding these comments, please do not hesitate to telephone our office at (530) 621-6662.

#### Environmental Health:

Plans for the modification of the Bel Air building shall be reviewed by Environmental Health Division, Consumer Protection Program prior to any construction or modification of the food facility.

#### Hazardous Materials:

No comments.

CC: Rauschenbach Marvelli Becker, Architects ATTN: Mark Marvelli 2277 Watt Ave 2<sup>nd</sup> Floor Sacramento CA 95825 sep 10 2008 STABNIL HE PUSEKSEL LUV

OFFICE OF COUNTY SURVEYOR SEP 11 AM 7: 45

**MEMO** 

RECEIVED

DATE: September 8, 2006

TO: John Heiser, Project Planner

RS

FROM: Rich Briner phone (530) 621-5440 fax (530) 626-8731

SUBJECT: DR 90-0031 R - Goldorado Center: Best/SVC-Cameron Park, c/o Best Properties/ Mark Marvelli, Rauschenbach Marelli Becker, Architects

We have looked over the application and no comments at this time.

#### Cameron Park Community Services District

September 21, 2006

John Heiser, Project Planner El Dorado County Planning Department 2850 Fairlane Court Placerville, Ca. 95667

Re: DR 90-0031 R - Goldorado Center

Dear Mr. Heiser:

Cameron Park Community Services District has reviewed the plans regarding the above referenced project with no objections.

Should you have any questions regarding the above, please feel free to contact me.

Sincerely,

Tanny Method Tammy Mefford, General Manager

MEETING DATE:

SEPT: BER 11, 2006

FILE NO.:

DR 90-0031 R

PROJECT: APPLICANT: GOLDORADO CENTER Best/SVC-Cameron Park

DESIGN REVIEW COMMITTEE COMMENTS SEP 14 PM 1:27 STATER CYTEN E. 1 Pollock Pines X Cameron Park Sethacks: Landscaping And Existing Growth: Fencing: Mail Boxes: Signs: Lighting: Trash Areas: Vehicular Access: Colors: No di Roof-Mounted Items:

DESIGN REVIEW COMME PROJECT: DR 90-0031R

PAGE 2

	Possed in acceptable to the committee as propos	ed.
# -1 200	here is conson of the neighboring store long's to the consequent apparate to that the rate pare to the facade in upgrated. Will measures be addressed assay long's to follow set?	Diges
,,,,,		
comme	ndation:	
comme	Indation:  All All All All All All All All All Al	
comme	Indation:    Indation:   Indat	
comme	Mall A Mall  Arch Jahr  Association:	
comme	Mall A Mall  Arch Jahr  HSMCOOL	

# FILE COPY CAMERON PARK DESIGN REVIEW COMMITTEE MONDAY - SEPTEMBER 11, 20006 - 6:00 P.M.

Cameron Park Fire Station 3200 Country Club Drive Cameron Park CA 95682

#### AGENDA

- 1. CALL TO ORDER
- 2. ADOPTION OF AGENDA
- 3. COMMITTEE DISCUSSION ITEM
  - DR 90-0031 R GOLDORADO CENTER (Best/SVC-Cameron Park, c/o Best Properties/Mark Marvelli, Rauschenbach Marvelli Becker, Architects): A request for a revision to existing design review to add 16,062 square feet to an existing 49,737 square foot building. The expansion will be located at the rear of the building and will include modification to the exterior elevation. The property, identified by Assessor's Parcel Number 083-456-14, consists of 4.139 acres, and is located on the south side of Palmer Drive approximately .02 miles east of the intersection with Cameron Park Drive, in the Cameron Park area.

STAFF:

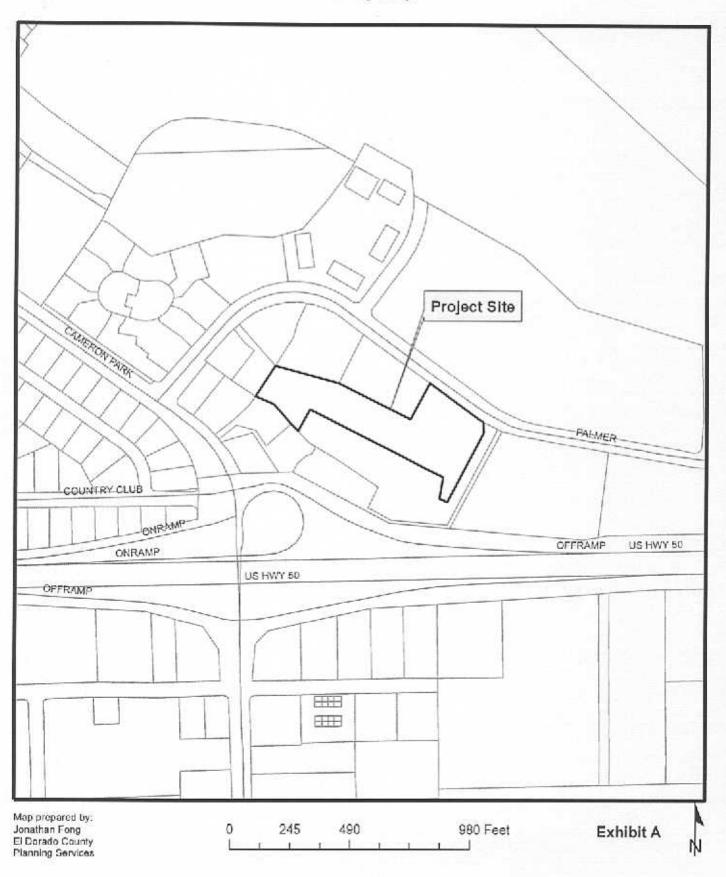
John Heiser

4. ADJOURNMENT

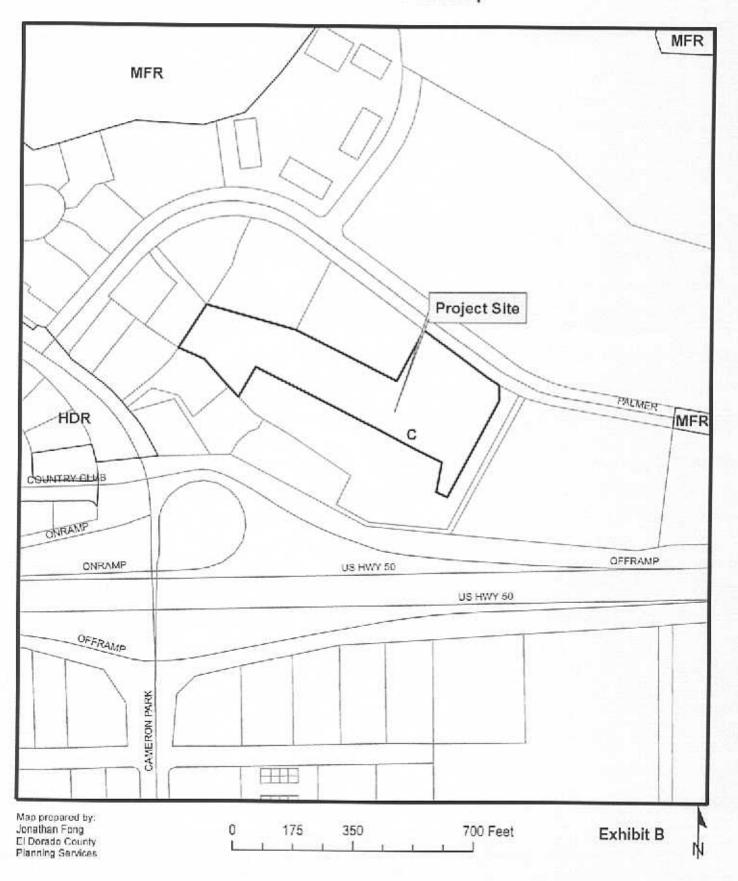
NOTE: Agendas must be posted seven days prior to meeting

CPDR/clj

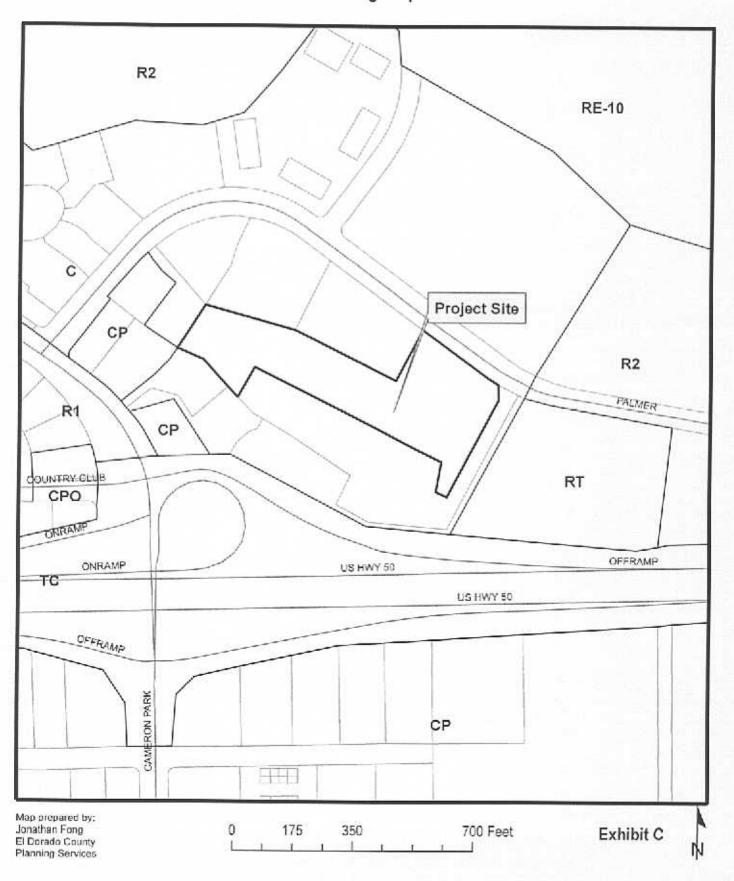
#### Bel Air Expansion DR90-0031R PD06-0027 Z06-0042 Vicinity Map

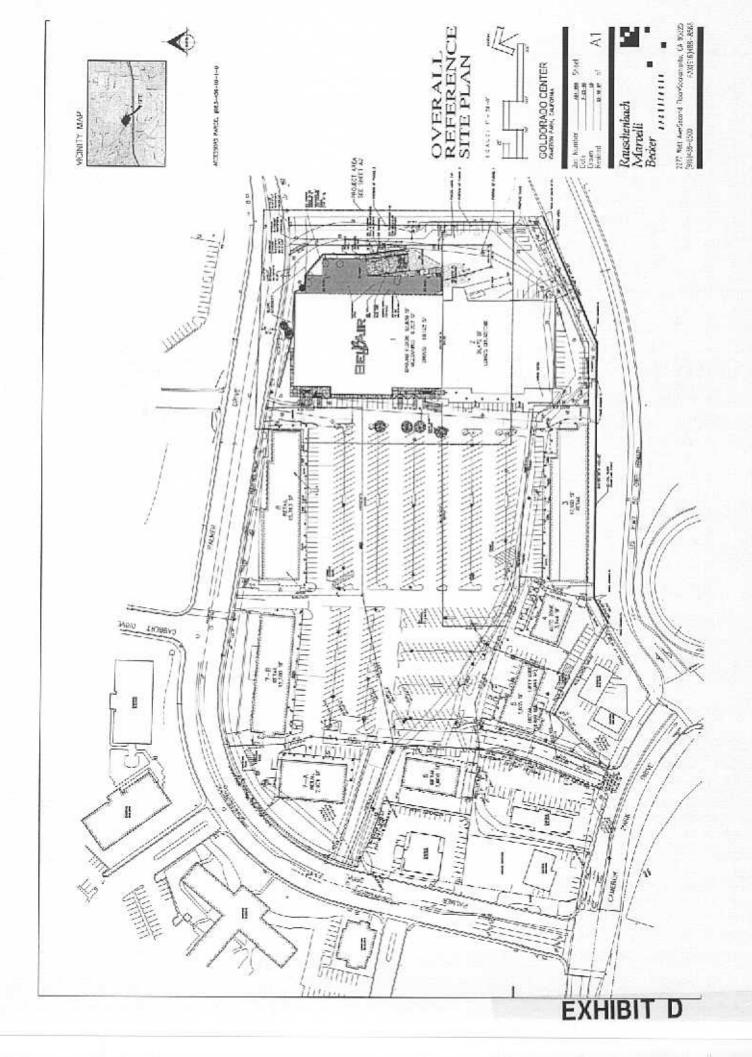


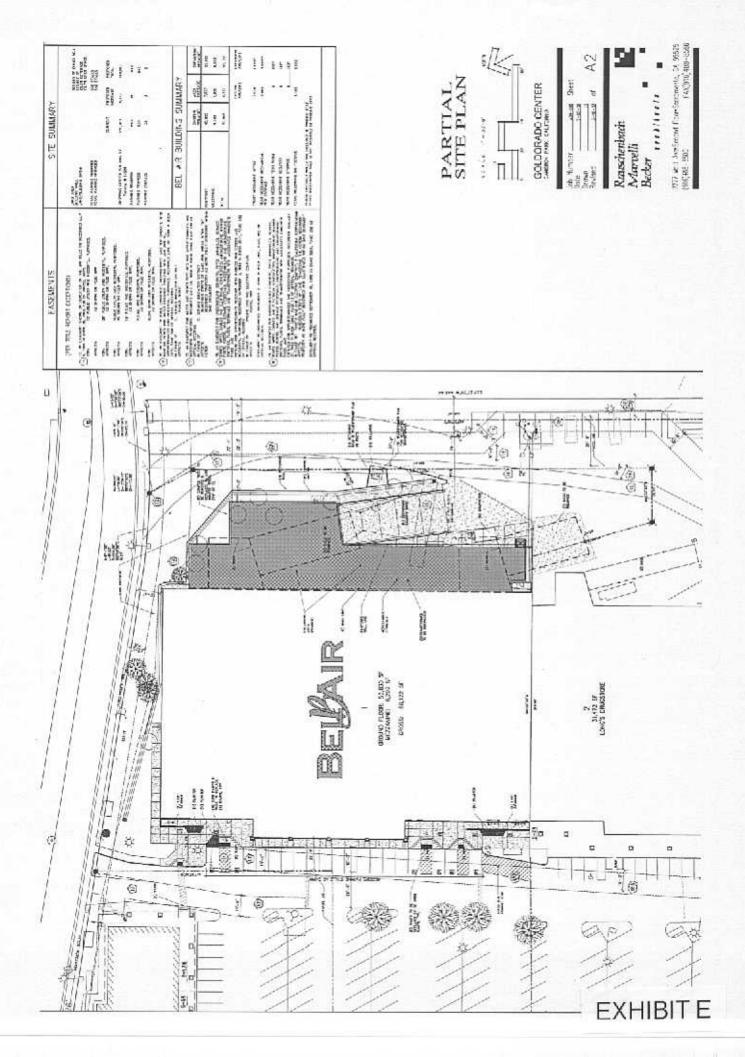
#### Bel Air Expansion DR90-0031R PD06-0027 Z06-0042 General Plan Land Use Map

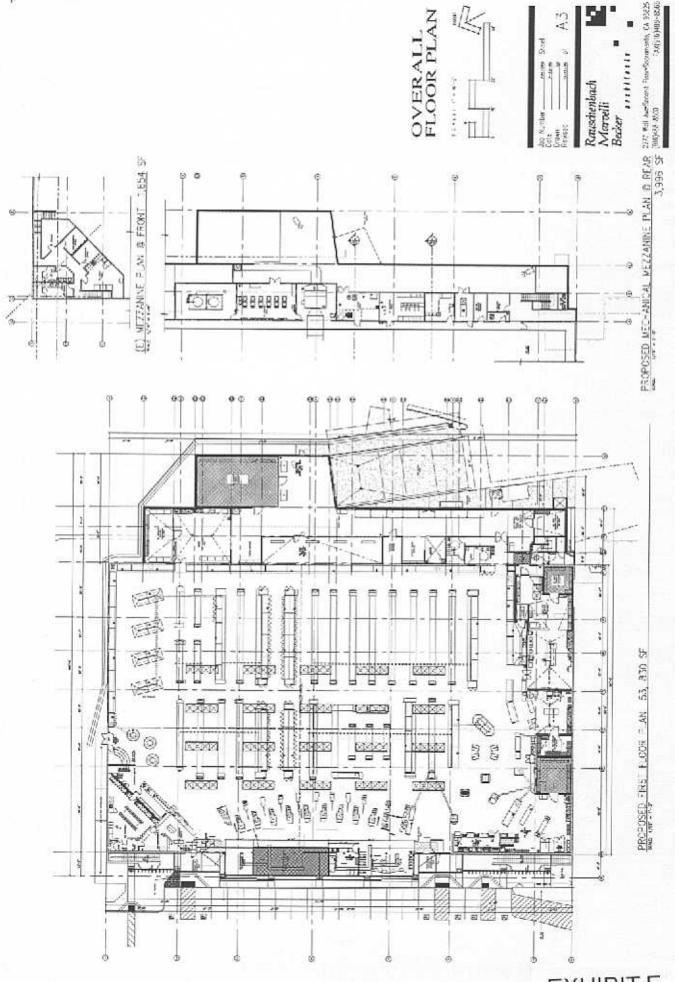


#### Bel Air Expansion DR90-0031R PD06-0027 Z06-0042 Zoning Map

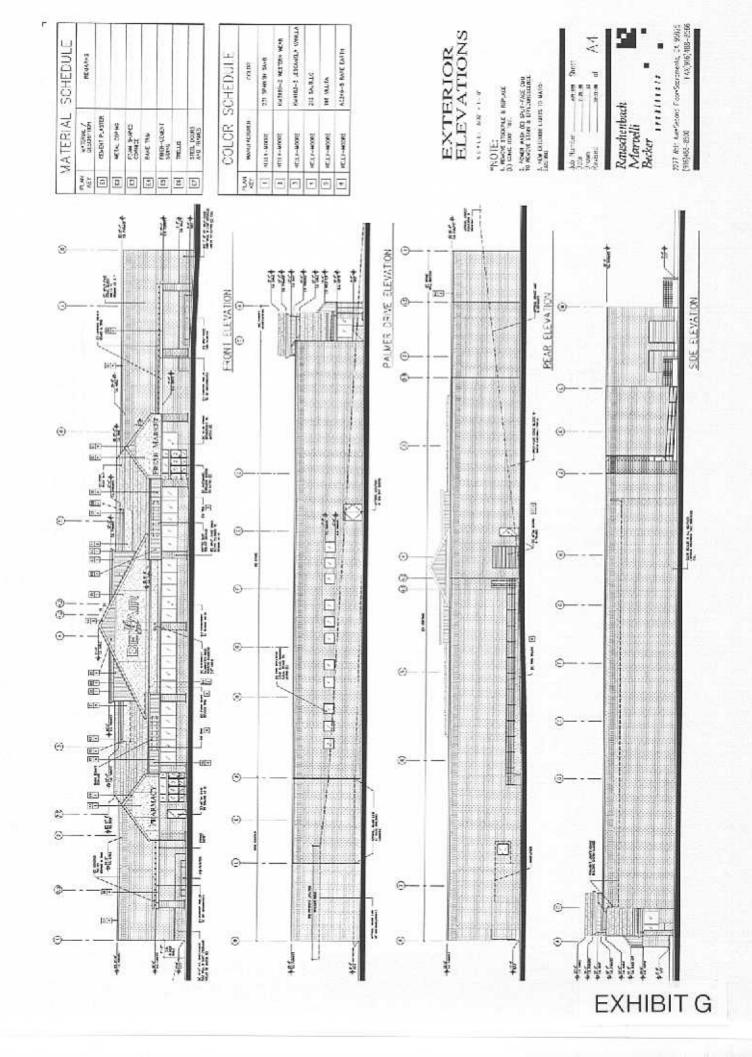


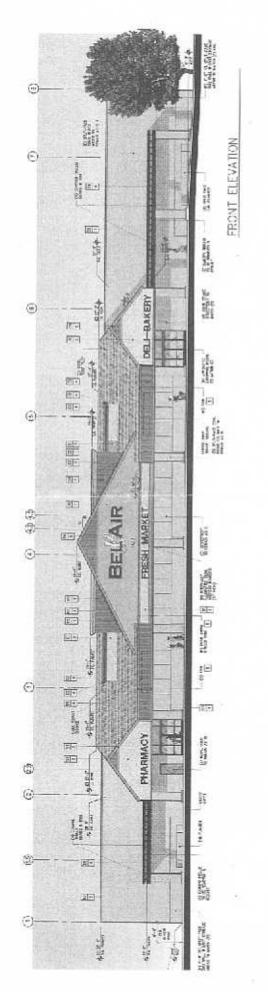






**EXHIBIT F** 





# EXTERIOR

16.94.8 MSP+F-3F

\*NOTE | none to struct

SCHEDULE

MATERIAL

COLOR SCHEDULF

NOTHER PROPERTY. PLTS NOCECTED

T CLLV-HOOG

C CLLV-HOOG

2017/2 140/20 Services.

\$4 (F) (B) (B) (B) (B)

DIVERSION SHE ice)

DHE-T-DOM: NOTE: NAME OF RECEIPE AND

(1) chis-about

573764 511

PR YEAR

9008-1101 S 9008-1101 S

TO PERSON WHEN IN THE PARTY CANDING THE

A NEW CYTHEN CORTS TO UAKE FAIRTHING

ACTUAL COPING CONTROL OF CONTROL	Raush
---	-------

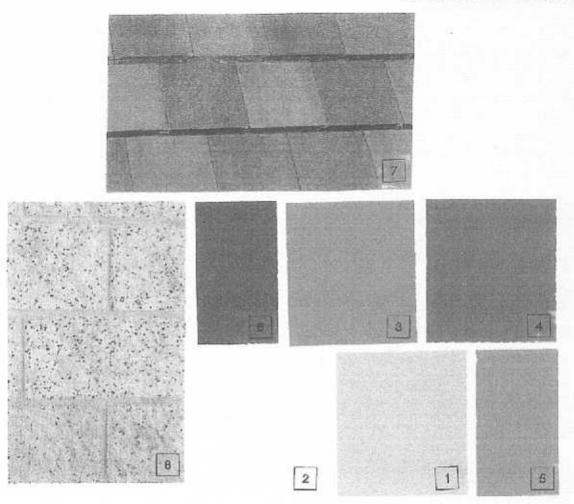
8

4CH2-4 NAC CHD+

NUM-CITE

	V	3.	2.0 050 050 050 050 050 050 050 050 050 0
Shear	10	٠.	23.00 E
1.8.4	Name of the last	elli elli	4-Sected Phor-Ba
Dade Bumber	Hewise d	Rauschen Maruelli Becker	277 Watt AvaSa

# DR 90-0031 R



Material	Manufacturer	Style/Color
Foamed Shaped Cornice/Cement Plaster	"Kelly Moore Paints"	231 Spanish Sand
Cement Plaster	"Kelly Moore Paints"	KM3980-2 Western Wear
Metal Coping	'Kelly Moore Paints'	KM4182-3 Lescamela. Vanilla
Foamed Shaped Cornice/Cement Slding	"Kelly Moare Paints"	212 Saltillo
Rake Trim	"Kelly Moore Paints"	196 Vilita
Trellis	"Kelly Moore Paints"	AC249-5 Rare Earth
Existing Concrete Tile Roof (to Remain)	"Lifetile"	California Mission Blend
Exiating Split Face Block (to Remain)	Existing	Existing
	Foamed Shaped Cornice/Cement Plaster Cement Plaster Metal Coping Foamed Shaped Cornice/Cement Siding Rake Trim Trellis Existing Concrete Tile Roof (to Remain) Existing Split Face	Foamed Shaped Cornice/Cement Plaster  Cement Plaster  Kelly Moore Paints'  Metal Coping  Kelly Moore Paints'  Kelly Moore Paints'

### Bel Air Remodel

Cameron Park Dr. & Palmer Dr. Cameron Park, CA

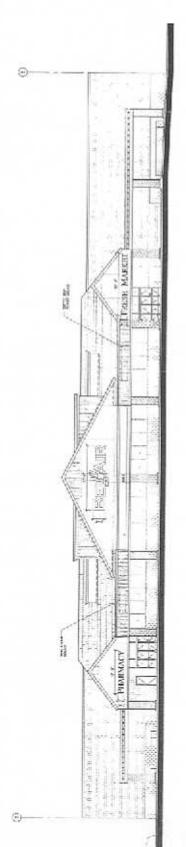
Rauschenbach
Marvelli
Becker

2277 Watt Ave.-Second Floor-Secramento, CA 95825 (916)488-8500 FAX(916)488-8568

PROPOSE: SIGNAGE

SIGNAGE

STATE STATE OF STATE



FROM T ELEVATION

**EXHIBIT** H

Control sector of Methy, (1997-5) (1907-1907) user and a sector of the control of 3 SERVICES. Caracterian Caracterian Constitution of China galifica 4.13.00 FRESH MARKETS PRIMEMACY, FRESH MARKEY

6 AUSTROL FORD RED ACRVIC FACES

6 Y GOLD THACAP IS: AIMERS

6 G GOLD RETURNS

6 ILLMARATED W/ FEGILE LED Perts Coffee so Tex PHARMACY: FRESH MARKET 42.14 (F) Section 1 STYLIZED 'B' BEL AIR 3 Prace South SCALE 3/16" = 1' - 0" "BEL AIR" AUTHOR COLLANDONNA Managed by the state of the sta SECURIOR MESSAGE 24 Car 200 11 - Internation PHARMACY 23 . 0-AAAR COUNTY DO DO The state of the s FUNCTOR TO A ALABOTE, AND STREET THE CHARGOS LETTER
OF WINDOWS COLD TO THE TO A STREET THE CHARGOS COLD TO THE CHARGOS CO Į! Tett san i Authorities and the desire in the last service in the last service in the PERSON NAMED IN COLUMN TO SERVICE AND ADDRESS OF THE PERSON NAMED IN COLUMN TO SE 一般を .0 · .V

BEL AIR #515 CAMERON PARK, CA



Deg. PECSON DIOUSE)

3

1221 Entherprise Drive - Diamend Springs, CA 95519 Proce 916 905 9165 - 500 625 - 400 - Fax 500 expense net workstaanskie pominister in vertry zin vij zit van de kaar in seur verkeer. In zoon op zaam in versionen v Versionen on de versionen kinds in de transferende verbich on zon de versionen versionen vertrom de versionen 20 Mei 162 Sept. No. RARESTER FR

Nutsellation feet sells SCROM from electron LOCATION Generalism St. UNIX 13,000 HONDER 13,000 12,000

TATOR COTTO PRODUCTION ON SUCH A PROPERTY OUTSING WINE PART DOLDER. APPLICATOR
PER LOCATION OF THE CONTRACTOR OF THE SUCH ON THE PER LOCATION OF THE PROPERTY OF THE PROPERTY OF THE PER LOCATION OF THE PER L

505 515# 814 13g SALVER OF THE SALVE 55NO7 CAMERON PARK DRIVE SNAG SIMINA BEL AIR #515 CAMERON PARK, CA





ALENSE FOR THE

SCHOOL STATE