TO: HONORABLE CHAIRMAN AND PLANNING COMMISSION

FROM: ED GALLAGHER, COMMUNITY DEVELOPMENT DIRECTOR

SUBJECT: PLANNED DEVELOPMENT 12-005 & REZONE 12-003 & SPECIFIC PLAN

AMENDMENT 12-003 (BUENA VISTA APARTMENTS - ARJUN)

DATE: JANUARY 22, 2013

Needs: For the Planning Commission to consider recommending that the City Council approve a project filed by Don Benson on behalf of Arjun Buena Vista Properties,

LLC, proposing the following applications:

• Rezone 12-003: to change the existing R1-B4 (Residential Single-Family, 1 acre lot) zoning designation to R3 (Residential Multifamily 12 units per acre). The rezone to R3 would bring the zoning designation into compliance with the existing General Plan Land Use designation (RMF-12).

- Specific Plan Amendment 12-003: to amend the Borkey Area Specific Plan (BASP) to accommodate the multi-family residential project.
- Development Plan 12-005: development plan to construct 142 apartment units on 12.5 acres located on the south side of Experimental Station Road between Buena Vista and River Oaks Drive.

Facts:

- 1. This project was reviewed by the Planning Commission on September 25, 2012. The Planning Commission continued the project in order to allow for the necessary 90 day review period associated with tribal consultation required by SB 18.
- 2. Attached is the Staff Report for the September 25th meeting which provides the background and analysis of issues (Attachment 1).
- 3. Please note that it has been determined that the current fees established in the Borkey Area Specific Plan can be applied to this project without the need for adjustment, since they will be applied on a per unit basis and do not differentiate between multi-family and single family uses.

Analysis and

Conclusion:

SB-18: Tribal Consultation:

SB 18 (2004) requires that local governments afford local Native American Tribes 90 days to request consultation for any proposed general plan or specific plan amendment. In late September the City notified local tribes. As of December 31, 2012, the City did not receive any requests for tribal consultation.

Traffic Study:

Concerns were raised by members of the public that the Cove project (51 single family residential units on the south side of Experimental Station Road adjacent to the project site) was not included in the Traffic Study. The Traffic Study was revised to include the Cove project, and the impacts from the Arjun Buena Vista project on transportation/traffic did not change.

School District:

At the September 25th meeting, there were questions asked from the public related to the projects impacts on the School District. The School District was informed of the RMF-12 General Plan designation as part of the 2003 General Plan Update. According to Government Code 65995(h), if school fees are charged with building permits (which is the case in the City), school impact mitigation is considered complete.

Policy Reference:

General Plan Land Use Element, Zoning Code, and 2006 Economic Strategy, Oak Tree Ordinance, California Public Resources Code.

Fiscal Impact:

There are no specific fiscal impacts associated with approval of this Planned Development.

Options:

After consideration of all public testimony, that the Planning Commission may choose the following options:

- a. 1. Recommend that the City Council adopt a Resolution approving a Mitigated Negative Declaration for the project;
 - Recommend that the City Council adopt Specific Plan Amendment 12-003: to amend the Borkey Area Specific Plan (BASP) to accommodate the multi-family residential project;
 - Recommend that the City Council adopt a Resolution approving Rezone 12-003: to change the existing R1-B4 (Residential Single-Family, 1 acre lot) zoning designation to R3 (Residential Multifamily 12 units per acre). The rezone to R3 would bring the zoning designation into compliance with the existing General Plan Land Use designation (RMF-12).
 - 4. Recommend that the City Council adopt a Resolution approving Development Plan 12-005: development plan to review the project site planning, architectural design and details, and landscaping;
- b. Amend, modify or reject the foregoing option.

Prepared by Darren Nash

Attachments:

1. September 25, 2012 Planning Commission Staff Report

2. Resolutions: Negative Declaration (with initial study and reports)

Specific Plan Amendment & Rezone

Planned Development Oak Tree Removal

3. Mail and Newspaper Affidavits

TO: HONORABLE CHAIRMAN AND PLANNING COMMISSION

FROM: ED GALLAGHER, COMMUNITY DEVELOPMENT DIRECTOR

SUBJECT: PLANNED DEVELOPMENT 12-005 & REZONE 12-003 & SPECIFIC

PLAN AMENDMENT 12-003 (BUENA VISTA APARTMENTS - ARJUN)

DATE: SEPTEMBER 25, 2012

Needs: For the Planning Commission to consider an application filed by Don Benson on behalf of Arjun Buena Vista Properties, LLC, proposing the

following applications:

 Rezone 12-003: to change the existing R1-B4 (Residential Single-Family, 1 acre lot) zoning designation to R3 (Residential Multifamily 12 units per acre). The rezone to R3 would bring the zoning designation into compliance with the existing General Plan Land Use designation (RMF-12).

- Specific Plan Amendment 12-003: to amend the Borkey Area Specific Plan (BASP) to accommodate the multi-family residential project, and establish updated Specific Plan fees;
- **Development Plan 12-005**: development plan to review the project site planning, architectural design and details, and landscaping.

Facts:

- 1. The project is located on the south side of Experimental Station Road, west of Buena Vista Drive. (see attached Vicinity Map).
- 2. The 12.5 -acre site includes the properties that are currently addressed 708, 802, 812, 908, 1002 Experimental Station Road (APN: 025-541-021, 025-391-006, 007, 80 & 81).
- 3. The General Plan designation is Residential Multi-Family, 12 units to the acre (RMF-12). The current zoning designation is R1-B4 (Residential Single Family, one-acre lot size). The request is to change the R1-B4 Zoning to R3, would bring the Zoning into compliance with the General Plan designation.

- 4. The project proposes to construct 141 unit market-rate apartment complex, with one care taker unit, for a total of 142 units. The project has a mix of attached two and three-story multi-family buildings that range from 3 to 8 units per building.
- 5. As required by the Zoning Code, when applying the 40 square feet per unit requirement of the Zoning Code, a minimum 5,680 square foot community building is required with this project. The plans provide for a 6,100 square foot building, where 3,444 square feet would be within the building interior, and 2,657 square feet would be on the exterior of the building within covered patio and porch areas.
- 6. Based on the 142 units, the Zoning Code requires that the project provide 3 tot lots and 2 other amenities. The project had been designed to provide 3 tot lots, 1 multi-sport court, 1 swimming pool, and 1 spa.
- 7. The project has provided 298 parking spaces, 143 within garages and 155 surface parking spaces. Of the 298 parking spaces, 28 spaces are for visitor parking.
- 8. An Arborist Report was prepared for the project and indicates that there are 22 oak trees located within the projects impact area. Of the 22 trees, 3 trees are requested to be removed. Of the 3 trees one of the trees (Tree No. 101) is dead.
- 9. The DRC reviewed the project on June 11, 2012. The DRC recommended that the Planning Commission approve this project and make the necessary recommendation to the City Council to approve the Rezone.
- 10. Pursuant to the Statutes and Guidelines of the California Environmental Quality Act (CEQA) and the City's Procedures for Implementing CEQA, an Initial Study and Mitigated Negative Declaration (MND) was prepared and circulated for public review and comment.

- 11. As part of the circulation of the MND, the City received a letter from the Native American Heritage Commission (NAHC) recommending consultation with certain tribes, as required by SB 18.
- 12. SB 18 (2004) requires consultation with tribes for any specific plan amendment.

Analysis and Conclusion:

Rezone:

With the adoption of the General Plan Update in 2003, the land use designation for the subject site was changed from RSF-1 to RMF-12. The intent of the change was to provide for the opportunity to develop multifamily residential in proximity to schools shopping and other services. This site has close proximity to Kermit King Elementary School, as well as Cuesta College. The site is also in close proximity to future neighborhood commercial within River Oaks, and the Regency Shopping Center.

Rezoning the property to R3 would bring the zoning into compliance with the RMF-12 General Plan Land Use designation.

Architecture:

The Architect has made an effort to design the project to complement the existing residential homes along the northern side of Experimental Station Road. The following design elements were presented by the Architect at the DRC meeting:

- Buildings along Experimental Station Road have been oriented so that the fronts of the residences face the road:
- All parking spaces/garages are located behind the buildings and are not visible from the street;
- Landscaping and fencing design will be complementary to the landscaping and fencing along the south side of Experimental Station Road;

Parking:

The project has been designed to provide 298 parking spaces as required by the Zoning Code based on the 142 units. Of the 298 parking spaces, 143 spaces will be located within garages and 155 parking spaces will be surface parking spaces located within the apartment complex. 28 visitor parking spaces will be displaced throughout the site.

Hwy 46 views:

The project has been designed to have a 30-foot landscaped setback from the property line along Highway 46 East. The property line is approximately 20-feet from the top of the slope, therefore the building are approximately 50-feet setback from the top of the slope. The project will be providing decorative fencing, landscaping, and a pedestrian path within the setback area. The setback along with the architectural treatments on the building would seem to provide for enhanced views of the project from Highway 46.

The proposed project is consistent with the zoning code regulations for an R3 development. As noted above, the General Plan land use designation for this site is RMF-12. Therefore, the General Plan anticipates that a multifamily development should be on this site. The Rezone request would bring the zoning designation (which is currently R-1) in compliance with the General Plan, by changing it to R3.

Oak Trees:

As mentioned above, there are 22 oak trees located within the area where the project is proposed to be built. Of the 22 trees, three are proposed to be removed. Tree No. 49 is a 15-inch Valley Oak that has poor structure and Tree No. 70 is an old tree that has been abused as a result of trimming for utility lines and past road improvements. Tree No. 101 is dead. A resolution is attached requesting that the City Council allow the removal of the three trees. Mitigation measures are included that will required replacement trees be planted and that all other oak trees be protected and preserved during construction as required by the Oak Tree Ordinance.

Environmental Review:

An environmental review was prepared for this project where it was determined that mitigation is necessary to reduce the project impacts to less than significant. The impacts are related to Noise, Air Quality, Green House Gas and Biological Resources. The mitigation measures have been incorporated into the project conditions of approval.

SB-18: Tribal Consultation:

The BASP EIR included an analysis of cultural/archaeological resources and concluded that there were none in the specific plan area. SB 18's requirements for consultation apply nonetheless. On September 19, staff sent a letter to the list of tribes included in NAHC's letter. State Law provides that tribes have 90 days to request a consultation. Therefore, the Planning Commission can open the public hearing, but continue it to January 8, 2013 to allow tribes 90 days to respond.

Policy

Reference: General Plan Land Use Element, Zoning Code, and 2006 Economic

Strategy, Oak Tree Ordinance, California Public Resources Code.

Fiscal

Impact: There are no specific fiscal impacts associated with approval of this Planned

Development.

Options: After opening the public hearing and taking public testimony, the Planning

Commission is requested to take one of the actions listed below:

a. Continue the public hearing to the Planning Commission hearing on

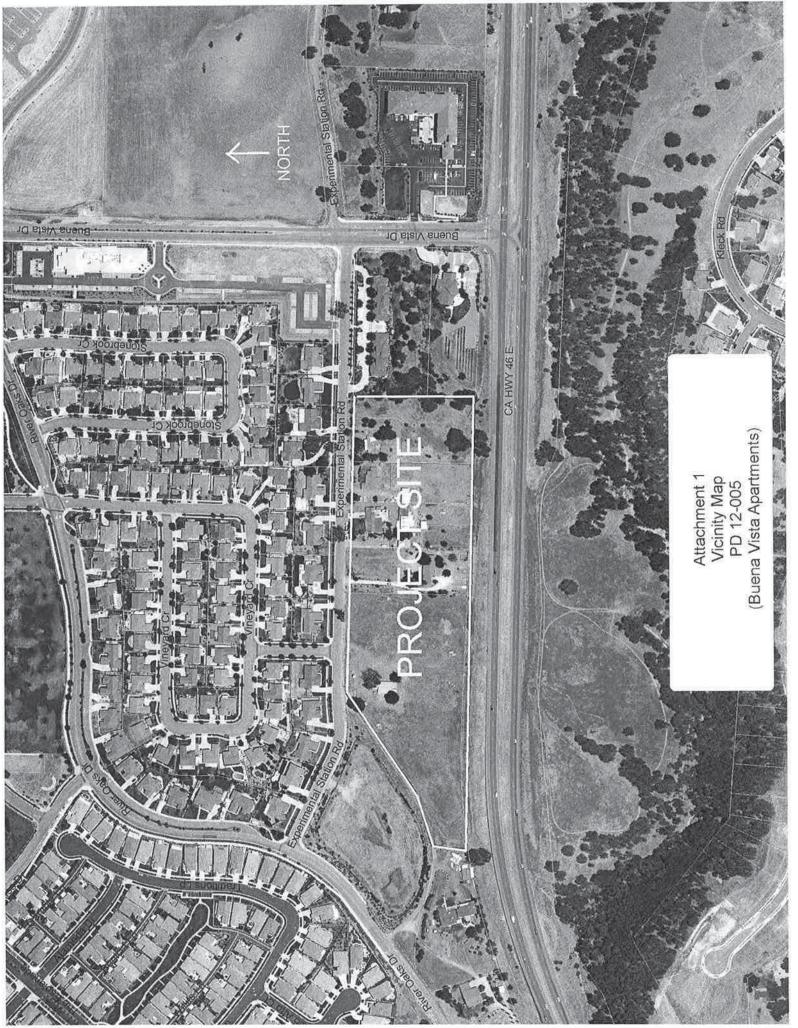
January 8, 2013.

b. Amend, modify, or reject the above-listed action.

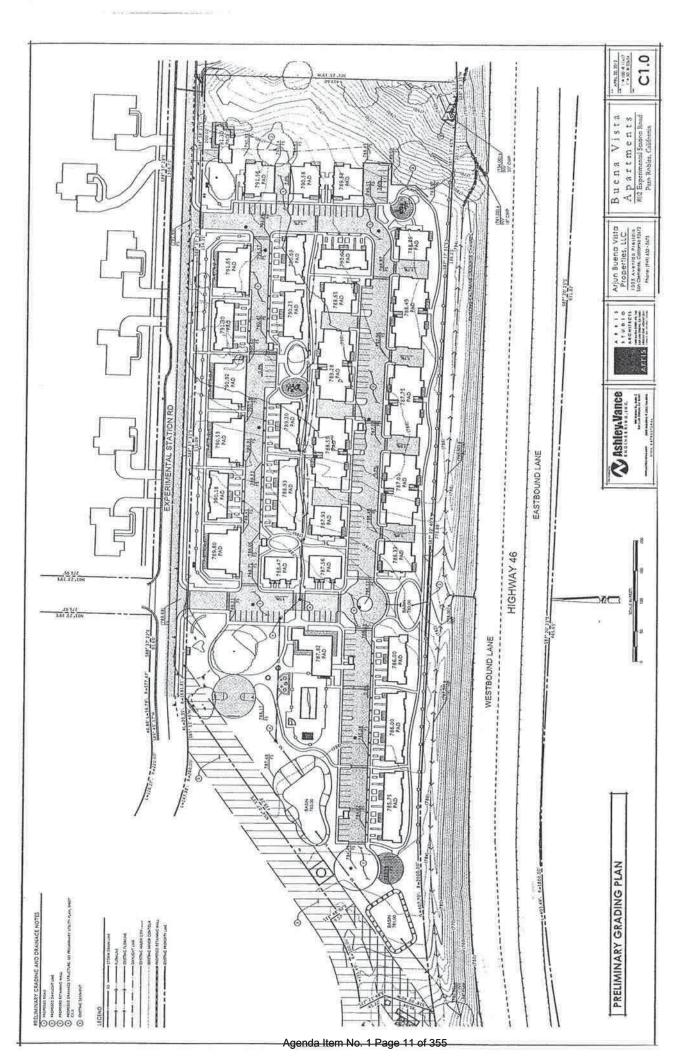
Prepared by Darren Nash

Attachments:

- 1. Vicinity Map
- 2. Site Plan
- 3. City Engineer's Memo
- 4. Draft Resolution to approve Mitigated Negative Declaration
- 5. Draft Ordinance adopting Rezone 12-002
- 6. Draft Resolution to approve PD 11-007
- 7. Draft Resolution to approve Oak Tree Removals
- 8. Mail and Newspaper Affidavits



Agenda Item No. 1 Page 10 of 355



Attachment 2 Site Plan Buena Vista Apartments

MEMORANDUM

TO:

Darren Nash

FROM:

John Falkenstien

SUBJECT:

PD 12-005 Buena Vista Apartments

DATE:

July 30, 2012

Streets

The project fronts on Experimental Station Road which is classified as a local street. While we recently updated our Public Works Standard Details and Specifications, we have not completed updates of the standard details for street sections to reflect the policies in the 2011 Circulation Element. One of the purposes of reviewing local street standards is to address neighborhood concerns with speeding; common throughout the City. A contributing cause of this behavior is the application of traditional highway lane widths to local streets.

These generous pavement widths provide comfort for the driver, leading to higher speeds and lack of attention, where attention is needed most. Experimental Station Road is no exception. Experimental Station Road accepts cut-through traffic between River Road and the highway. We receive regular complaints of speeding along the straight frontage of the subject project.

Traffic calming strategies incorporated into the design of frontage improvements will include a tighter curb to curb street section than traditional local street standards, with parking available on both sides. The architectural presentation of the project will encourage parking on Experimental Station Road, which tends to slow traffic and provide a better pedestrian environment. Curb extensions will be placed where parking is not available, near street intersections and to protect the oak tree.

Bikes and Pedestrians

The proposed project will construct pedestrian paths on site that will connect to new sidewalks on Experimental Station Road. Experimental Station Road improvements will compliment existing improvements in the neighborhood and will allow for pedestrian and bike access to Cuesta College and Kermit King Elementary School.

The Bicycle Master Plan conceives of a bike path connection under Highway 46E in the ravine area on the east boundary of the project. It is recommended that the open space in this area be dedicated to the public to accommodate this potential path.

Grading, Drainage and Storm Water Quality

The City is obligated by the Regional Water Quality Control Board to require all projects to implement low impact development best management practices to mitigate impacts to the quality of storm water run-off and to limit the increase in the rate and volume of storm water run-off to the maximum extent practical. As the Regional Board continues to work towards a long-term hydromodification mitigation strategy, they require us to implement interim criteria. The storm water report submitted with the application addresses these requirements.

Attachment 3
City Engineer Memo
PD 12-005
(Buena Vista Apartments)
Agenda Item No. 1 Page 12 of 355

Sewer and Water

An 8-inch sanitary sewer main is available to the project in Experimental Station Road. As indicated on the preliminary plans, the entire project will be served by a private sewer lift station.

Water is available to the project from an 8-inch water main in Experimental Station Road.

Conditions of Approval

Experimental Station Road shall be improved with curb, gutter, sidewalk and paving in accordance with plans approved by the City Engineer.

All existing overhead utility lines along Experimental Station Road and the northeast boundary of the project shall be relocated underground.

Low impact development best management practices as outlined in the project submittals shall be incorporated into the project grading plans and shall meet design criteria adopted by the City in effect at the time of development of the project.

The open space area along the eastern boundary of the project shall be dedicated to the City.

ORDINANCE NO. XXX N.S.

AN ORDINANCE OF THE CITY OF EL PASO DE ROBLES AMENDING THE BORKEY AREA SPECIFIC PLAN AND THE ZONING MAP ESTABLISHED BY REFERENCE IN SECTION 21.12.020 OF THE ZONING CODE (TITLE 21) (BUENA VISTA APARTMENTS)

WHEREAS, Don Benson on behalf of Arjun Buena Vista Apartments, LLC., has submitted Rezone 12-003, a proposal to change the zoning designation of a 12-acre site located on the south side of Experimental Station Road, west of Buena Vista Road from Residential Single-Family, one acre lot (R1-B4) to Residential Multi-Family, 12 units to the acre (R-3), to be consistent with the General Plan's designation of RMF-12; and

WHEREAS, the site is located with Subarea D of the Borkey Area Specific Plan; and

WHEREAS, the Specific Plan amendment is necessary to revise the plan to reflect the change in the Zoning designation for the site; and

WHEREAS, a public hearing was conducted by the Planning Commission on September 25, 2012, to consider facts as presented in the staff report prepared for this project, and to accept public testimony regarding this proposed environmental determination; and

WHEREAS, the Planning Commission on September 25, 2012, continued the project in order to allow for the necessary 90 day review period associated with tribal consultation required by SB 18 (2004); and

WHEREAS, a public hearing was conducted by the Planning Commission on January 22, 2013, to consider facts as presented in the staff report prepared for this project, and to accept public testimony regarding this proposed environmental determination; and

WHEREAS, at a meeting held on January 22, 2013, the Planning Commission took the following actions regarding this ordinance:

- a. Considered the facts and analysis, as presented in the staff report prepared for this project;
- b. Held a public hearing to obtain public testimony on the proposed ordinance;
- c. Recommended that the City Council approve the proposed ordinance; and

WHEREAS, based on information received at its meeting on February 19, 2013 the City Council took the following actions regarding this ordinance:

- a. Considered the facts and analysis, as presented in the staff report prepared for this project;
- b. Held a public hearing to obtain public testimony on the proposed ordinance;
- c. Considered the Planning Commission's recommendation from its January 22, 2013 public meeting;
- d. Introduced said ordinance for the first reading; and

WHEREAS, on March 5, 2013 the City Council held a second reading of said ordinance.

NOW, THEREFORE, the City Council of the City of El Paso de Robles does hereby ordain as follows:

The Borkey Area Specific Plan will be amended as described below in Sections 1-7, by a map change as noted, or by text change, where the text to be omitted is shown with a "strike through" and the text to be added sin shown in **bold**:

SECTION 1:

Replace Page II-6 (Existing Land Uses - Map), with updated map, Exhibit A. Delete Page II-8. Note: The revised Page II-6 will make the necessary changes to bring the BASP Land Use Map up to date with the current General Plan Land Use Map. Page II-8 is no longer necessary. All subsequent remaining pages in Chapter II will be renumbered according.

SECTION 2:

Replace Page II-9 (Proposed Zoning Designations - Map) with updated map that changes the zoning designation for the subject site from R1-B4 to R3, Exhibit B. Note: revised map will make the necessary changes to bring the BASP Zoning Map up to date with the current Zoning Code Map.

SECTION 3:

Section III, Page 6, Table 3-1, (Prescribed Land Uses and Permitted Densities, Parcel Sizes) would be amended as shown on Exhibit C.

SECTION 4:

Amend Section III, Page 10 as follows:

Subarea D

Designation by this plan of Subarea D for rural residential development is intended to protect and continue the existing pattern of rural residences already established in the area. Extending current development characteristics, this subarea would allow the ultimate development of a maximum of sixty-three rural residential units on one-acre minimum lots and fifteen single family residential units on a minimum of one-half acre lots. Except for the northeasterly portion of this subarea, extensive parcelization and associated rural residential development has already occurred. With the adoption of the 2003 General Plan, the transformation of Sub Area D from rural residential to other types of land uses began to take place. The 2003 General Plan changed the land use designation for the five properties totaling approximately 12.5-acres, located on the south side of Experimental Station Road, west of Buena Vista Drive, from RSF-1 to RMF-12. In 2012 the Buena Vista Apartment project was approved to develop 142 apartment units on the **Experimental Station Road site.** The 20 acre Ayres Resort parcel has a Parks and Open Space Zone, with a Resort/Lodging Overlay, and has an approved project consisting of 225 room Resort Hotel, with a wellness spa, conference room, restaurant, extended-stay units (included with the 225 rooms proposed), wine tasting/retail boutique, and ancillary parking, landscaping, gardens, orchards and vineyards. The existing commercial operation established at the northwest corner of Buena Vista Road and Highway 46 will be allowed to remain in place in this subarea as a legal use, under the conditional use permit currently applicable to the property.

<u>SECTION 5:</u> Section III, Page 11a, Figure D-3, (Sub Area D) would be amended as shown on Exhibit D.

<u>SECTION 6.</u> Section 21.12.020 of the Municipal Code (Zoning Map) is hereby amended as shown on the attached Exhibit E.

<u>SECTION 7.</u> <u>Publication</u>. The City Clerk shall cause this ordinance to be published once within fifteen (15) days after its passage in a newspaper of general circulation, printed, published and circulated in the City in accordance with Section 36933 of the Government Code.

<u>SECTION 8</u>. <u>Severability</u>. If any section, subsection, sentence, clause, or phrase of the Ordinance is, for any reason, found to be invalid or unconstitutional, such finding shall not affect the remaining portions of this ordinance.

The City Council hereby declares that it would have passed this ordinance by section, subsection, sentence, clause, or phrase irrespective of the fact that any one or more sections, subsections, sentences, clauses, or phrases are declared unconstitutional.

<u>SECTION 8</u>. <u>Inconsistency</u>. To the extent that the terms or provisions of this ordinance may be inconsistent or in conflict with the terms or conditions of any prior City ordinance(s), motion, resolution, rule, or regulation governing the same subject matter thereof, such inconsistent and conflicting provisions of prior ordinances, motions, resolutions, rules, and regulations are hereby repealed.

Introduced at a regular meeting of the City Council held on February 19, 2013, and passed and adopted by the City Council of the City of El Paso de Robles on the 5th day of March, 2013 by the following vote:

Caryn Jackson, Deputy City Clerk		
ATTEST:		
	Duane Picanco, Mayor	
ABSENT:		
ABSTAIN:		
NOES:		
AYES:		

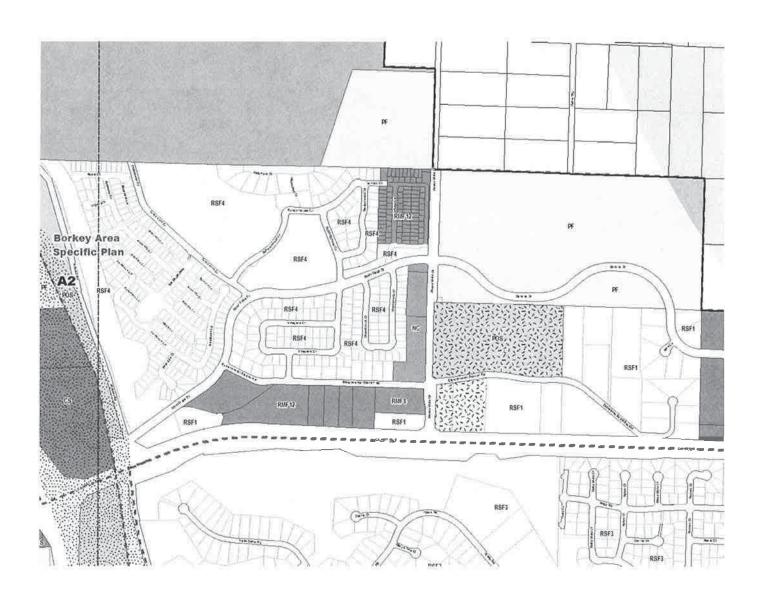


Exhibit A BASP - Land Use Map (Buena Vista Apartments)

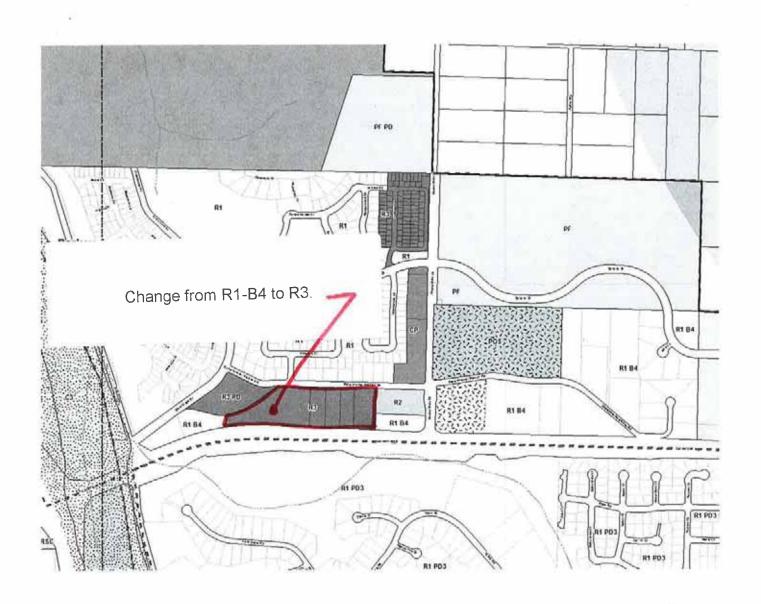


Exhibit B BASP - Zoning Map (Buena Vista Apartments)

TABLE 3-1 PRESCRIBED LAND USES AND PERMITTED DENSITIES, PARCEL SIZES BORKEY AREA SPECIFIC PLAN

Plan Subarea	Permitted Uses	Maximum Development Intensity	Minimum Lot Size
A	Agricultural and Resort Related	223 hotel rooms, suites or cottages, 20 employee housing units	20 acres
	Recreational: Tennis courts Water gardens Golf greens & tees Driving range Putting green Corn maze Equestrian Center: Show arena Training facilities Stables Hot springs and spa Hotel and conference	10,000 sq ft restaurant(s) 600 person capacity conference and/or banquet rooms 1200 person capacity amphitheatre and/or events assembly areas	
В	Single Family Residential	481 units total* *multiple family inclusive in sub area total	5,000- 20,000 s.f.
	Multiple Family	Up to 149 units	14.0 acres (overall)
	Public & Quasi-Public	(N/A)	
	Commercial	CP (Neighborhood Commercial) CS (Commercial Service)	6.0 acres (overall) 4.5 acres (overall)
С	Cuesta College (Public Facility)	(N/A)	(N/A)
D	Rural Residential Single Family Residential Multi-Family Residential Resort/Lodging Overlay	52 25 units 15 51 units 142 137 units + amenities	1.0 acres 0.5 ac. 4,000sf (N/A) (N/A)
E	Commercial/Industrial	C-3	(N/A)
F	Public & Quasi-Public	(N/A)	(N/A)

Exhibit C Revised Table 3-1 (Buena Vista Apartments)

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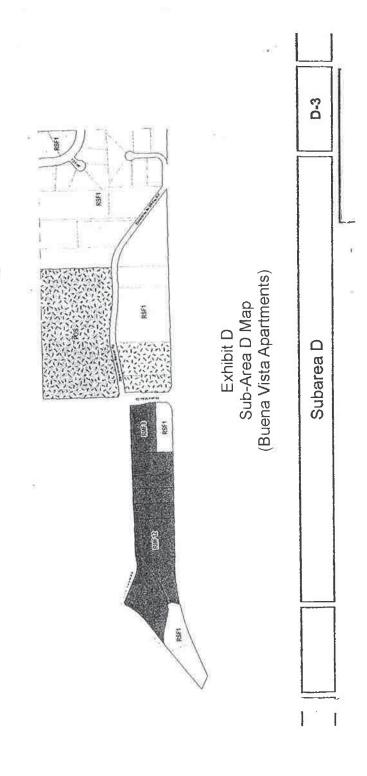
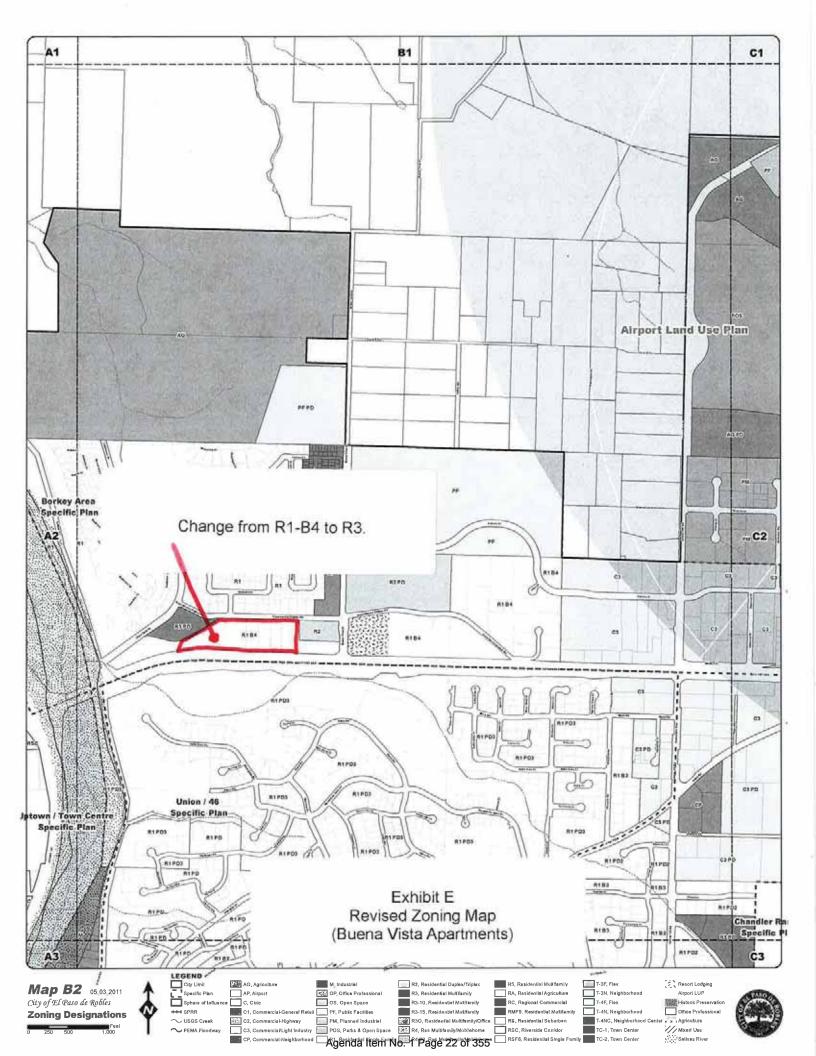


Figure 16A



RESOLUTION NO.:

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EL PASO DE ROBLES APPROVING PLANNED DEVELOPMENT 12-005

(Buena Vista Apartments) APN: 025-391-006, 007, 080 & 081 & 025-541-021

WHEREAS, PD 12-005, RZ 12-003, SPA 12-003 (The Project), has been submitted by Don Benson on behalf of Arjun Buena Vista, LLC to establish a 142 unit apartment complex; and

WHEREAS, the project is proposed to be located on the 12.5-acre site on the south side of Experimental Station Road, west of Buena Vista Drive; and

WHEREAS, the project entitlements needed to establish the project include the following:

Rezone: to change the existing R1-B4 (Residential Single-Family, 1 acre lot) zoning designation to R3 (Residential Multifamily 12 units per acre). The rezone to R3 would bring the zoning designation into compliance with the existing General Plan Land Use designation (RMF-12);

Specific Plan Amendment: to amend the Borkey Area Specific Plan to accommodate the multi-family residential project, and establish updated Specific Plan fees;

Development Plan: development plan to review the project site planning, architectural design and details, and landscaping; and

WHEREAS, a public hearing was conducted by the Planning Commission on September 25, 2012, to consider facts as presented in the staff report prepared for this project, and to accept public testimony regarding this proposed Development Plan, Rezone, Specific Plan Amendment, and associated Mitigated Negative Declaration; and

WHEREAS, the Planning Commission on September 25, 2012, continued the project in order to allow for the necessary 90 day review period associated with tribal consultation required by SB 18; and

WHEREAS, a public hearing was conducted by the Planning Commission on January 22, 2013, to consider facts as presented in the staff report prepared for this project, and to accept public testimony regarding this proposed environmental determination; and

WHEREAS, on January 22, 2013, the Planning Commission recommended that the City Council approve the Planned Development; and

WHEREAS, a public hearing was conducted by the City Council on February 19, 2013, to consider facts as presented in the staff report prepared for this project, and to accept public testimony regarding this proposed Mitigated Negative Declaration; and

WHEREAS, a resolution was adopted by the City Council approving a Mitigated Negative Declaration status for this project, and a Mitigated Negative Declaration was prepared for the proposed Planned Development and Rezone applications in accordance with the California Environmental Quality Act; and

WHEREAS, based upon the facts and analysis presented in the staff report and the attachments thereto, the public testimony received, and subject to the Conditions of Approval listed below, the City Council makes the following findings:

Section 1. Findings

In accordance with Sections 21.23.250 and 21.23B.050 of the Zoning Code, based on facts and analysis set forth in the staff report for this item, and taking into consideration comments received from the public and/or other governmental agencies having purview in the subject development plan application, the Planning Commission (City Council) hereby makes the following findings:

- a. The design and intensity (density of the proposed development is consistent with the following):
 - 1. The goals and policies established by the General Plan;
 - a. The approval of this development plan will allow for the development of a multifamily residential neighborhood consisting of buildings with four or more dwellings units per acre. The project will also meet the needs of persons seeking rental housing units at various price levels, and in a location that will be in close proximity to schools, shopping, and other services.
 - b. The project is designed to maximize protection of oaks and biological resources as called for in Policies C-3A and C-3B of the Conservation Element. Additionally, Condition #BR-6 of Resolution _____requires mitigation of impacts to Kit Fox habitat.
 - 2. The policies and development standards established by any applicable specific plan;
 - a. The proposed resort project is consistent with several of the 14 goals for the Borkey Area Specific Plan listed in Chapter 3.
 - 3. The Zoning Code, particularly the purpose and intent of the zoning district in which a development project is located;
 - (a) With the approval of the proposed Rezone, the project site will be located in the Residential Multi-Family (RMF) zoning district, which would bring the zoning into compliance with the General Plan. Apartment complexes are permitted in RMF zoning districts.

- 4. All other adopted codes, policies, standards, and plans of the City;
 - a. This resolution contains several conditions designed to implement the Municipal Code, City State, and Regional governmental policies, regulations and adopted standards related to public infrastructure (e.g., streets, water, sewer, storm drainage), building and fire safety, general public safety.
 - b. The project expands the City's inventory of multifamily housing, which advances the following policies in the 2006 Economic Strategy
 - (1) The "Place" policy, which calls to implement development policies to achieve more efficient use of infrastructure.
 - Encourage community development in live/work, mixed use, and compact, pedestrian oriented forms to accommodate all income levels and lifestyles;
 - Increase labor force residents in the City.
- b. The Buena Vista Apartment project is consistent with the adopted codes, policies, standards and plans of the City; since the project has gone through the development review process including, environmental review; and
- c. The Buena Vista Apartment project will not be detrimental to the health, safety, morals, comfort, convenience and general welfare of the residents and or businesses in the surrounding area, or be injurious or detrimental to property and improvements in the neighborhood or to the general welfare of the City; since the project will be required to comply with the recommended conditions of approval, including any environmental mitigation measures, and comply with any building and fire codes; and
- d. The Buena Vista Apartment project accommodates the aesthetic quality of the City as a whole, especially where development will be visible from the gateways to the City, scenic corridors and the public right-of-way; in this particular case, the project site is not located in a City gateway area or a scenic corridor and has minimal frontage to the public street, however, based on the project being designed to fit the subject site and based on the site plan, architecture and landscaping, the proposed development will accommodate the aesthetic quality of the City as a whole; and
- e. The Buena Vista Apartment project is compatible with, and is not detrimental to, surrounding land uses and improvements, provides an appropriate visual appearance, and contributes to the mitigation of any environmental and social impacts, because the project has been designed to provide significant buffers, including setbacks, and landscaping from the residential properties to the south and east, and additionally as a result of the site planning, building architecture and environmental mitigation, and included with this project.
- f. The Buena Vista Apartment project is compatible with existing scenic and environmental resources such as hillsides, oak trees, vistas, etc. as a result of the project being designed to limit the amount of grading and oak tree impacts by developing in the flatter areas of the site, which allows for the preservation of the existing hillsides and oak trees; and

g. The Buena Vista Apartment project contributes to the orderly development of the City as a whole, since the project will utilize the existing infrastructure in Buena Vista and Experimental Station Roads, consisting of sewer water and other utilities; and

Section 2. Conditions of Approval

NOW, THEREFORE, BE IT RESOLVED, that the City Council of the City of El Paso de Robles approves Planned Development 12-005 subject to the following conditions:

PLANNING:

- 1. This PD 12-005 along allows for the development of the 12.5-acre site into a 142 unit apartment complex where one of the 142 units is a care taker unit.
- 2. The project is proposed to be developed in 3 phases. In the event that the applicant wishes to change the phasing order, after verification from the City Engineer that there are no concerns, the Development Review Committee (DRC) may approve the phasing change request.
- 3. The project shall be constructed in substantial conformance with the Conditions of Approval established by this Resolution and it shall be constructed in substantial conformance with the following Exhibits:

EXHIBIT	DESCRIPTION
Α	Standard Conditions
В	Title Sheet – Project Data
С	Architectural Site Plan
D	Details
E	Building 1 Floor Plans
F	Building 1 Elevations
G	Building 2 Floor Plans
Н	Building 2 Elevations
I	Building 3 Floor Plans
J	Building 3 Elevations
K	Building 4 Floor Plans
L	Building 4 Elevations
M	Building 5 Floor Plans/Elevations
N	Building 6 Floor Plans
Ο	Building 6 Elevations
Р	Building 7 Floor Plans
Q	Building 7 Elevations
R	Building 8 Floor Plans/Elevations
S	Conceptual Landscape Plan
T	Preliminary Grading Plan
U	Preliminary Utility Plan

- 4. Prior to the issuance of a building permit, the Development Review Committee (DRC) shall review the following items to insure substantial compliance with the above listed Exhibits:
 - Final site details such as landscaping, decorative paving, benches, exterior lighting and any other site planning details;
 - Architectural elevations, including final materials, colors and details;
 - Final details for tot lots. Each tot lot needs to include a minimum of three (3) play equipment features (e.g., slide, swings, monkey bars, etc.);
 - Demonstrate that all trash enclosures provide for recycling bins and that an adequate number of trash enclosures have been provided to serve the development;
 - All visitor parking spaces are clearly marked and well distributed throughout the apartment complex.
 - Equipment such as back flow devices, transformers, a/c condensers and appropriate screening methods for both views and noise;
 - Final grading and drainage plans;
 - Signage;
- 5. The project landscape plan is subject to the requirements within the City's Landscape Ordinance. Since the landscape area is over 1 acre, a Landscape Documentation Package (LDP) is required to be submitted to the City prior to the issuance of a Building Permit.
- 6. The final landscape plan shall be redesigned to address the following areas:
 - Plan shows extensive areas where turf borders concrete sidewalks. Landscape ordinance requires a 24" border of mulch or rock between turf and sidewalks to prevent or minimize overspray to paved areas. Modify plans to place drought-tolerant landscape buffer between pavement/concrete and turf areas.
 - Small, narrow, irregular-shaped turf areas around Tot Lot in center of parcel will be inefficient to irrigate and do not appear to meet ordinance requirement that turf areas exceed 8 ft. in width to minimize overspray and irrigation inefficiencies. These turf areas are too small to provide a play surface. These areas need to be changed to drought-tolerant plantings on drip irrigation.
 - Oval turf area depicted will be very inefficient to irrigate. Modify oval shape so the end curves are not so severe to increase irrigation efficiency.
 - Southern Magnolia has only moderate drought tolerance. Recommend a substitute that is more drought tolerant.

ENGINEERING:

7. Experimental Station Road shall be improved with curb, gutter, sidewalk and paving in accordance with plans approved by the City Engineer.

- 8. Landscaping shall be provided in the public right-of-way along Experimental Station Road subject to plans approved by the DRC. The project owners shall maintain the frontage landscaping in good condition in perpetuity.
- 9. All public improvements shall be maintained by the project owner for a period of one year after acceptance by the City. A maintenance bond shall be placed in order to guarantee maintenance within the terms of a maintenance agreement established by the City.
- 10. All existing overhead utility lines along Experimental Station Road and the northeast boundary of the project shall be relocated underground.
- 11. Low impact development best management practices as outlined in the project submittals shall be incorporated into the project grading plans and shall meet design criteria adopted by the City in effect at the time of development of the project.
- 12. The open space area along the eastern boundary of the project shall be dedicated to the City.
- 13. Prior to the issuance of a Building Permit, calculations shall be provided that update the Borkey Specific Plan fees related to the apartment project.
- 14. The owner shall petition to annex the multi-family residential project into the City of Paso Robles Community Facilities District No. 2005-1 for the purposes of mitigation of impacts on the City's Police and Emergency Services Departments.

Section 3. Environmental Mitigation Measures

Air Quality:

AQ-1: In accordance with SLOAPCD-recommendations, projects with grading areas that are greater than 4 acres or are within 1,000 feet of any sensitive receptor shall implement the following mitigation measures to manage fugitive dust emissions such that they do not exceed the APCD 20-percent opacity limit (APCD Rule 401) and do not impact offsite areas prompting nuisance violations (APCD Rule 402) (Mutziger 2012):

Fugitive Dust:

- a. Reduce the amount of the disturbed area where possible;
- b. Use of water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site. Increased watering frequency would be required whenever wind speeds exceed 15 mph. Reclaimed (non-potable) water should be used whenever possible;
- c. All dirt stock pile areas should be sprayed daily as needed;
- d. Permanent dust control measures identified in the approved project revegetation and landscape plans should be implemented as soon as possible, following completion of any soil disturbing activities;
- e. Exposed ground areas that are planned to be reworked at dates greater than one month after initial grading should be sown with a fast germinating, non-invasive, grass seed and watered until vegetation is established;

- f. All disturbed soil areas not subject to revegetation should be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the APCD;
- g. All roadways, driveways, sidewalks, etc. to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used;
- h. Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site:
- i. All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (minimum vertical distance between top of load and top of trailer) in accordance with CVC Section 23114:
- j. Install wheel washers where vehicles enter and exit unpaved roads onto streets, or wash off trucks and equipment leaving the site;
- k. Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers with reclaimed water should be used where feasible;
- I. All PM₁₀ mitigation measures required shall be shown on grading and building plans; and,
- m. The contractor or builder shall designate a person or persons to monitor the fugitive dust emissions and enhance the implementation of the measures as necessary to minimize dust complaints, reduce visible emissions below 20-percent opacity, and to prevent transport of dust offsite. Their duties shall include holidays and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the APCD Compliance Division prior to the start of any grading, earthwork or demolition.

<u>Diesel-Exhaust Particulate Matter</u>: To help reduce sensitive receptor emissions impact of diesel vehicles and equipment used to construct the project, the applicant shall implement the following idling control techniques:

California Diesel Idling Regulations

- n. On-road diesel vehicles shall comply with Section 2485 of Title 13 of the California Code of Regulations. This regulation limits idling from diesel-fueled commercial motor vehicles with gross vehicular weight ratings of more than 10,000 pounds and licensed for operation on highways. It applies to California and non-California based vehicles. In general, the regulation specifies that drivers of said vehicles:
 - 1. Shall not idle the vehicle's primary diesel engine for greater than 5 minutes at any location, except as noted in Subsection (d) of the regulation; and,
 - 2. Shall not operate a diesel-fueled auxiliary power system (APS) to power a heater, air conditioner, or any ancillary equipment on that vehicle during sleeping or resting in a sleeper berth for greater than 5.0 minutes at any location when within 1,000 feet of a restricted area, except as noted in Subsection (d) of the regulation.
- o. Off-rood diesel equipment shall comply with the 5-minute idling restriction identified in Section 2449(d)(2) of the California Air Resources Board's In-Use off-Road Diesel regulation.

- p. Signs must be posted in the designated queuing areas and job sites to remind drivers and operators of the state's 5-minute idling limit.
- q. The specific requirements and exceptions in the regulations can be reviewed at the following websites: www.arb.ca.gov/msprogltruck-idlingl2485.pdf and www.arb.ca.gov/regact/2007/ordiesl07/frooal.pdf;
- r. In addition to the State required diesel idling requirements, the project applicant shall comply with these more restrictive requirements to minimize impacts to nearby sensitive receptors:
 - 1. Staging and queuing areas shall not be located within 1,000 feet of sensitive receptors;
 - 2. Diesel idling within 1,000 feet of sensitive receptors shall not be permitted;
 - 3. Use of alternative fueled/electrically-powered equipment is recommended; and
 - 4. Signs that specify the no idling areas must be posted and enforced at the site.
 - 5. Any proposed construction truck routes should be evaluated and selected to ensure routing patterns have the least impact to residential dwellings and other sensitive receptors, such as schools, parks, day care centers, nursing homes, and hospitals.
 - 6. Fuel all off-road and portable diesel powered equipment with CARB-certified motor vehicle diesel fuel (non-taxed version suitable for use off-road);
 - 7. Use diesel construction equipment meeting CARB's Tier 2 certified engines or cleaner off-road heavy-duty diesel engines, and comply with the State off-Road Regulation (CCR Title 13, Article 4.8, Chapter 9, Section 2449);

<u>Additional Measures</u>: The following additional mitigation measures shall also be implemented:

- s. To the extent practical, reuse and recycle construction waste (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard.
- t. Prior to the issuance of grading permits, the applicant shall demonstrate through updated modeling that the actual construction fleet that is secured will not exceed the construction phase thresholds when the construction mitigation is implemented. Should the actual fleet exceed any threshold, then phasing changes or other mitigation shall be proposed and approved by the APCD such that the project will be below the construction phase air quality thresholds of significance of 2.5 tons/quarter ROG+NOx.
- u. Demolition of existing structures shall comply with applicable requirements, as stipulated in the National Emission Standard for Hazardous Air Pollutants (40CFR61, Subpart M-Asbestos NESHAP). These requirements include, but are not limited to: 1) notification requirements to the APCD, 2) asbestos survey conducted by a Certified Asbestos Inspector, and 3) applicable removal and disposal requirements of identified ACM.

v. The contractor or builder shall use paints/coatings that comply with or that have a lower VOC content than specified in APCD Rule 433. APCD Rule 433 is available at website url: http://www.arb.ca.gov/drdb/slo/cur.htm.

Biological Resources:

- BR-1 Nuisance water will be piped into the project's stormwater system. A new bioswale will be created to filter nuisance water from the subject parcel.
 - A. The bioswale is located along the southern property boundary, and will be part of the project's linear landscaping and stormwater detention system.
 - B. Prior to issuance of a grading permit for work that would affect the wetland and swale feature, the Regional Water Quality Control Board and the California Department of Fish and Game will be contacted to determine if permits to impact the nuisance water wetland are required under the Porter Cologne Act, Clean Water Act, or Fish and Game Code. If permits are required, applications will be made to appropriate agencies and approvals received.
- BR-2 Tree canopies and trunks within 50 feet of proposed disturbance zones should be mapped and numbered by a certified arborist or qualified biologist and a licensed land surveyor. Data for each tree should include date, species, number of stems, diameter at breast height (DBH) of each stem, critical root zone (CRZ) diameter, canopy diameter, tree height, health, habitat notes, and nests observed.
- BR-3 An oak tree protection plan shall be prepared and approved by the City of Paso Robles.
- BR-4 Impacts to the oak canopy or critical root zone (CRZ) should be avoided where practicable. Impacts include pruning, any ground disturbance within the dripline or CRZ of the tree (whichever distance is greater), and trunk damage.
- BR-5 Impacts to oak trees shall be assessed by a licensed arborist. Mitigations for impacted trees shall comply with the City of Paso Robles tree ordinance.
- BR-6 Replacement oaks for removed trees must be equivalent to 25% of the diameter of the removed tree(s). For example, the replacement requirement for removal of two trees of 15 inches DBH (30 total diameter inches), would be 7.5 inches (30" removed x 0.25 replacement factor). This requirement could be satisfied by planting five 1.5 inch trees, or three 2.5 inch trees, or any other combination totaling 7.5 inches. A minimum of two 24 inch box, 1.5 inch trees shall be required for each oak tree removed.
- BR-7 Replacement trees should be seasonally maintained (browse protection, weed reduction and irrigation, as needed) and monitored annually for at least 7 years. Replacement trees shall be of local origin, and of the same species as was impacted or removed.

- BR-8 Within one week of ground disturbance activities, if work occurs between March 15 and August 15, nesting bird surveys shall be conducted. If surveys do not locate nesting birds, construction activities may be conducted. If nesting birds are located, no construction activities shall occur within 100 feet of nests until chicks are fledged. A pre-construction survey report shall be submitted to the lead agency immediately upon completion of the survey. The report shall detail appropriate fencing or flagging of the buffer zone and make recommendations on additional monitoring requirements. A map of the Project site and nest locations shall be included with the report. The Project biologist conducting the nesting survey shall have the authority to reduce or increase the recommended buffer depending upon site conditions.
- BR-9 Occupied nests of special status bird species shall be mapped using GPS or survey equipment. Work shall not be allowed within the 100 foot buffer while the nest is in use. The buffer zone shall be delineated on the ground with orange construction fencing or flagging where it overlaps work areas
- BR-10 Occupied nests of special status bird species that are within 100 feet of project work areas shall be monitored at least every two weeks through the nesting season to document nest success and check for project compliance with buffer zones. Once burrows or nests are deemed inactive and/or chicks have fledged and are no longer dependent on the nest, work may commence in these areas.
- BR-11 Pre-construction surveys for burrowing owls shall be conducted not more than 14 days prior to any work that affects habitat containing burrows. The pre-construction surveys shall be conducted in a manner sufficient to determine no burrowing owls are present in the work areas. Pre-construction surveys shall be conducted throughout the year, when work is proposed, to account for breeding, wintering, and transient owls.
- BR-12 If burrowing owls are present in the work areas during the breeding season (February 1 through August 31), the burrows must be monitored to determine if a breeding pair is present. If a breeding pair is confirmed, the burrow must be avoided and protected from impacts via a 250 foot setback from the burrow. If a breeding pair is not present, passive relocation may be used. If burrowing owls are present during the non-breeding season, a passive relocation effort, such as a one-way door, may be implemented. Monitoring and mitigation must be conducted under guidance from a qualified wildlife biologist. Mitigation and protection procedures should incorporate recommendations outlined in the burrowing owl protocol survey guidelines (California Burrowing Owl Consortium 1993).

- BR-13 A focused pre-construction survey for legless lizard shall be conducted within the project site prior to construction Pre-construction surveys shall be conducted where ground disturbance will occur in potential legless lizard habitat, around existing trees and shrubs where soils are friable. The pre-construction survey shall be conducted by a qualified biologist familiar with legless lizard ecology and survey methods. The scope of the survey shall be determined by a qualified biologist and shall be sufficient to determine presence or absence in the project areas. If the focused survey results are negative, a letter report shall be submitted to the County, and no further action shall be required. If legless lizards are found to be present in the proposed work areas the following steps shall be taken:
 - Obtain approval from California Department of Fish and Game for project biologist to relocate of special status species prior to start of construction activities. Prepare and submit a Management Plan pertaining to the capture and relocation of legless lizards, including a map of proposed relocation sites, to CDFG.
 - Legless lizards shall be captured by hand by the project biologist and relocated to an appropriate location well outside the project areas.
 - Construction monitoring shall be required for all new ground-breaking activities located within legless lizard habitat.
- BR-14 Perform a focused survey for the presence of Western spadefoot toad beginning in January, during the rainy season. Surveys shall focus on determining presence or absence of adult or juvenile spadefoots on the Property, and on determining if the subject puddle is suitable for breeding.
- BR-15 If spadefoot toads are found on the property, a Management Plan shall be developed. This plan shall address monitoring ground disturbance activities near breeding pools to relocate disturbed spadefoot toads, relocation of toads to appropriate habitat outside the Project area or creation of and relocation to on-site habitat.
- BR-16 If the focused survey does not identify spadefoot toads on the Property, a biological monitor shall be present during initial site preparation and grubbing. If no spadefoot toads are found, construction activities may continue without daily monitoring. If special status species are found, a qualified biologist shall move them to the nearest safe location. At that time, the Project biologist shall have the authority to recommend additional monitoring if it is determined that spadefoot toads could move onto the Project site during construction, or be forced out of underground burrows during grading.
- BR-17 Prior to removal of any trees over 20 inches DBH, a survey shall be conducted by a qualified biologist to determine if any of the trees proposed for removal or trimming harbor sensitive bat species or maternal bat colonies. Maternal bat colonies may not be disturbed.
- BR-18 Prior to demolition of existing structures, a survey shall be conducted to determine if roosting bats or maternal bat colonies are present. Roosting bats may be excluded from the structure in consultation with the project biologist. Maternal bat colonies may not be disturbed. If maternal bat colonies are present, demolition shall not commence without consultation with the California Department of Fish and Game.

- BR-19 Prior to issuance of grading and/or construction permits, the applicant shall submit evidence to the City of Paso Robles, Department of Community Development, Planning Division (City) that states that one or a combination of the following three San Joaquin kit fox mitigation measures has been implemented:
 - a. Provide for the protection in perpetuity, through acquisition of fee or a conservation easement of 5.8 acres of suitable habitat in the kit fox corridor area (e.g. within the San Luis Obispo County kit fox habitat area, northwest of Highway 46), either on-site or offsite, and provide for a non-wasting endowment to provide for management and monitoring of the Property in perpetuity. Lands to be conserved shall be subject to the review and approval of the California Department of Fish and Game (Department) and the City.
 - This mitigation alternative (a.) requires that all aspects of this program must be in place before City permit issuance or initiation of any ground disturbing activities.
 - b. Deposit funds into an approved in-lieu fee program, which would provide for the protection in perpetuity of suitable habitat in the kit fox corridor area within San Luis Obispo County, and provide for a non-wasting endowment for management and monitoring of the Property in perpetuity.
 - Mitigation alternative (b) above, can be completed by providing funds to The Nature Conservancy (TNC) pursuant to the Voluntary Fee-Based Compensatory Mitigation Program (Program). The Program was established in agreement between the Department and TNC to preserve San Joaquin kit fox habitat, and to provide a voluntary mitigation alternative to project proponents who must mitigate the impacts of projects in accordance with the California Environmental Quality Act (CEQA). The fee, payable to "The Nature Conservancy", would total \$14,500. This fee is calculated based on the current cost-perunit of \$2500 per acre of mitigation, which is scheduled to be adjusted to address the increasing cost of Property in San Luis Obispo County and the City of El Paso de Robles; your actual cost may increase depending on the timing of payment. This fee must be paid after the Department provides written notification about your mitigation options but prior to County permit issuance and initiation of any ground disturbing activities.
 - c. Purchase [Total number of mitigation acres required] credits in a Department-approved conservation bank, which would provide for the protection in perpetuity of suitable habitat within the kit fox corridor area and provide for a non-wasting endowment for management and monitoring of the Property in perpetuity.
 - Mitigation alternative (c) above, can be completed by purchasing credits from the Palo Prieto Conservation Bank. The Palo Prieto Conservation Bank was established to preserve San Joaquin kit fox habitat, and to provide a voluntary mitigation alternative to project proponents who must mitigate the impacts of projects in accordance with the California Environmental Quality Act (CEQA). The cost for purchasing credits is payable to the owners of The Palo Prieto Conservation Bank, and would total \$14,500. This fee is calculated based on the current cost-per-credit of \$2500 per acre of mitigation. The fee is established by the conservation bank owner and may change at any time. Your actual cost may increase depending on the timing of payment. Purchase of credits must be completed prior to City permit issuance and initiation of any ground disturbing activities.

- **BR-20** Prior to issuance of grading and/or construction permits, the applicant shall provide evidence that they have retained a qualified biologist acceptable to the City. The retained biologist shall perform the following monitoring activities:
 - i. Prior to issuance of grading and/or construction permits and within 30 days prior to initiation of site disturbance and/or construction, the biologist shall conduct a pre-activity (i.e. pre-construction) survey for known or potential kit fox dens and submit a letter to the City reporting the date the survey was conducted, the survey protocol, survey results, and what measures were necessary (and completed), as applicable, to address any kit fox activity within the project limits.
 - ii. The qualified biologist shall conduct weekly site visits during site-disturbance activities (i.e. grading, disking, excavation, stock piling of dirt or gravel, etc.) that proceed longer than 14 days, for the purpose of monitoring compliance with required Mitigation Measures 0 through 0. Site disturbance activities lasting up to 14 days do not require weekly monitoring by the biologist unless observations of kit fox or their dens are made on-site or the qualified biologist recommends monitoring for some other reason (see BR-15iii). When weekly monitoring is required, the biologist shall submit weekly monitoring reports to the City.
 - iii. Prior to or during project activities, if any observations are made of San Joaquin Kit fox, or any known or potential San Joaquin kit fox dens are discovered within the project limits, the qualified biologist shall re-assess the probability of incidental take (e.g. harm or death) to kit fox. At the time a den is discovered, the qualified biologist shall contact USFWS and the CDFG for guidance on possible additional kit fox protection measures to implement and whether or not a Federal and/or State incidental take permit is needed. If a potential den is encountered during construction, work shall stop until such time the USFWS determines it is appropriate to resume work.

If incidental take of kit fox during project activities is possible, before project activities commence, the applicant must consult with the USFWS. The results of this consultation may require the applicant to obtain a Federal and/or State permit for incidental take during project activities. The applicant should be aware that the presence of kit foxes or known or potential kit fox dens at the project site could result in further delays of project activities.

- iv. **In addition**, the qualified biologist shall implement the following measures:
 - 1. Within 30 days prior to initiation of site disturbance and/or construction, fenced exclusion zones shall be established around all known and potential kit fox dens. Exclusion zone fencing shall consist of either large flagged stakes connected by rope or cord, or survey laths or wooden stakes prominently flagged with survey ribbon. Each exclusion zone shall be roughly circular in configuration with a radius of the following distance measured outward from the den or burrow entrances:

Potential kit fox den: 50 feet

Known or active kit fox den: 100 feet

• Kit fox pupping den: 150 feet

- 2. All foot and vehicle traffic, as well as all construction activities, including storage of supplies and equipment, shall remain outside of exclusion zones. Exclusion zones shall be maintained until all project-related disturbances have been terminated, and then shall be removed.
- 3. If kit foxes or known or potential kit fox dens are found on site, daily monitoring by a qualified biologist shall be required during ground disturbing activities.

Monitoring: Required prior to issuance of a grading and/or construction permit. Compliance will be verified by the City of Paso Robles, Planning Division.

- BR-21 Prior to issuance of grading and/or construction permits, the applicant shall clearly delineate the following as a note on the project plans: "Speed signs of 25 mph (or lower) shall be posted for all construction traffic to minimize the probability of road mortality of the San Joaquin kit fox". Speed limit signs shall be installed on the project site within 30 days prior to initiation of site disturbance and/or construction.
- **BR-22 During the site disturbance and/or construction phase**, grading and construction activities after dusk shall be prohibited unless coordinated through the City, during which additional kit fox mitigation measures may be required.
- BR-23 Prior to issuance of grading and/or construction permit and within 30 days prior to initiation of site disturbance and/or construction, all personnel associated with the project shall attend a worker education training program, conducted by a qualified biologist, to avoid or reduce impacts on sensitive biological resources (i.e. San Joaquin kit fox). At a minimum, as the program relates to the kit fox, the training shall include the kit fox's life history, all mitigation measures specified by the City, as well as any related biological report(s) prepared for the project. The applicant shall notify the City shortly prior to this meeting. A kit fox fact sheet shall also be developed prior to the training program, and distributed at the training program to all contractors, employers and other personnel involved with the construction of the project.
- BR-24 During the site-disturbance and/or construction phase, to prevent entrapment of the San Joaquin kit fox, all excavations, steep-walled holes and trenches in excess of two feet in depth shall be covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks. Trenches shall also be inspected by construction workers for entrapped kit fox each morning prior to onset of field activities and immediately prior to covering with plywood at the end of each working day. Before such holes or trenches are filled, they shall be thoroughly inspected for entrapped kit fox. Any kit fox so discovered shall be allowed to escape before field activities resume, or removed from the trench or hole by a qualified biologist and allowed to escape unimpeded.
- **BR-25 During the site-disturbance and/or construction phase,** any pipes, culverts, or similar structures with a diameter of four inches or greater, stored overnight at the project site shall be thoroughly inspected for trapped San Joaquin kit foxes before the subject pipe is subsequently buried, capped, or otherwise used or moved in any way. If during the construction phase a kit fox is discovered inside a pipe, that section of pipe will not be moved. If necessary, the pipe may be moved only once to remove it from the path of activity, until the kit fox has escaped.

- **BR-26** During the site-disturbance and/or construction phase, all food-related trash items such as wrappers, cans, bottles, and food scraps shall be disposed of only in closed containers. These containers shall be regularly removed from the site. Food items may attract San Joaquin kit foxes onto the project site, consequently exposing such animals to increased risk of injury or mortality. No deliberate feeding of wildlife shall be allowed.
- **BR-27** Prior to, during and after the site-disturbance and/or construction phase, use of pesticides or herbicides shall be in compliance with all local, State and Federal regulations. This is necessary to minimize the probability of primary or secondary poisoning of endangered species utilizing adjacent habitats, and the depletion of prey upon which San Joaquin kit foxes depend.
- BR-28 During the site-disturbance and/or construction phase, any contractor or employee that inadvertently kills or injures a San Joaquin kit fox or who finds any such animal either dead, injured, or entrapped shall be required to report the incident immediately to the applicant and City. In the event that any observations are made of injured or dead kit fox, the applicant shall immediately notify the USFWS and CDFG by telephone. In addition, formal notification shall be provided in writing within three working days of the finding of any such animal(s). Notification shall include the date, time, location and circumstances of the incident. Any threatened or endangered species found dead or injured shall be turned over immediately to CDFG for care, analysis, or disposition.
- **BR-29** Prior to final inspection, or occupancy, whichever comes first, should any long internal or perimeter fencing be proposed or installed, the applicant shall do the following to provide for kit fox passage:
 - i. If a wire strand/pole design is used, the lowest strand shall be no closer to the ground than 12 inches.
 - ii. If a more solid wire mesh fence is used, 8" x 12" openings near the ground shall be provided every 100 yards
 - iii. Upon fence installation, the applicant shall notify the City to verify proper installation. Any fencing constructed after issuance of a final permit shall follow the above guidelines

Monitoring (San Joaquin Kit Fox Measures 0 to 0): Compliance will be verified by the City of Paso Robles Planning Division in consultation with the California Department of Fish and Game. As applicable, each of these measures shall be included on construction plans.

GHG Mitigations

GHG-1: The project applicant shall coordinate with the City of Paso Robles and the SLOAPCD to identify and implement GHG-reduction measures sufficient to reduce operational GHG emissions to below the SLOAPCD's significance threshold of 1,150 MTCO2e/year. GHG-reduction measures may include, but are not limited to, implementation of measures that would reduce energy use, water use, and motor vehicle trips. Examples of measures to be implemented are included in the Air Quality & Greenhouse Gas Impact Assessment, Appendix B. If the project does not implement sufficient adopted GHG reduction measures to reduce the emissions below the GHG threshold, the applicant shall pay off-site mitigation fees at the rate established by SLOAPCD to fund local GHG reduction projects subject to approval by the City of Paso Robles.

Oak Trees:

- Oak 1. Protect and monitor oaks on and adjacent to the Project Impact Area. Provide protection during construction for all trees not proposed for removal. Upon completion of grading plans and prior to issuance of permits, prepare a Tree Protection Plan Sheet illustrating locations of tree protection fencing and calling out specific measures for each tree in the Project Impact Area.
 - a. All native trees will be tagged with permanent numbered tags (round aluminum tags, 1.25 inches in diameter). Completed September 2004, checked May 2012.
 - b. Any changes in the project referenced in this report will need Project Arborist review to ensure the report is still valid.
 - c. Tree protection fencing (orange construction fencing) will be installed at the outer limit of the CRZ or, where feasible, the TPZ with t-posts placed in the ground no further apart than six (6) to eight (8) feet. Construction fencing will be firmly affixed with wire or zip ties. Trees that may be impacted shall be protected with construction fencing, depending on the impacts expected within the dripline (see Appendix D).
 - o Protective fencing is required between all construction activities and native trees. Fence locations will be established at the direction and approval of the Project Arborist prior to commencing construction.
 - o Protective fencing shall be installed prior to any site disturbance or construction, and shall remain in place until all construction is complete.
 - No grading, trenching, materials storage, soil storage, debris or site disturbance shall occur within the protected area. No concrete, plaster, or paint washout shall be allowed within the protected area. No concrete, plaster, or paint washout shall be allowed within the tree protection zone. Under no circumstance shall lack of space be used as reason to remove protective fencing.
 - Weather-proof signs shall be permanently posted on protection fences every 50 feet (maximum) with the following information:

Tree protection zone

No personnel, equipment, materials, and vehicles are allowed.

Do not remove or replace this fence.

Project Manager [name and phone number].

- d. An environmental monitor or arborist shall conduct a worker education meeting for the contractors and operators prior to ground-breaking activities. The briefing shall include a walk-through to identify each of the trees in the work area: the trees to be protected, and the trees that may be impacted or removed. The project manager shall be responsible for instructing workers about tree protection goals, implementing protection of root zones, dust control, and installing and maintaining protective fencing.
- e. The monitor shall check weekly to determine if the listed trees are being protected.

- **Oak 2.** Monitor all tree impacts and removals. Prepare a monitoring program to implement the required mitigation measures.
 - a. All impacts and disturbance within the root zone shall be documented and reported to the project manager and to the arborist who must treat and/or assess damaged branches and roots.
 - b. Removals will be documented by the monitor who will tabulate mitigation obligations.
 - c. The project will be reviewed by the arborist at various times of the development. Meetings with the arborist shall be arranged at least 48 hours in advance. The arborist shall review the project:
 - i. Prior to issuance of a grading permit to ensure proper installation of protective fencing and signage;
 - ii. At the time there is any work within the CRZ of an oak tree;
 - iii. Prior to certificate of occupancy;
 - iv. Any other critical times the arborist deems necessary (i.e., during installation of totlot improvements)
 - v. At the time of each monitoring site visit, a field report form (see example in Appendix D) will be filled out and given to the Project Manager and the City of Paso Robles Planning Department.
- **Oak 3.** Replace oaks that are removed with eight (8) 24-inch boxed oaks.
 - a. The City of Paso Robles Tree Preservation Ordinance¹ requires mitigation for native trees removed. The sizes protected are six inches (6") DBH or greater, for native deciduous trees. Replacement trees shall be locally grown, native stock (if available) of the same species as the removed tree.
 - b. Table 4 provides a summary of the mitigation obligation for removal of Trees 49 and 70. Replacement oak caliper diameter must be equivalent to 25% of the diameter of the removed trees².

TABLE 4. Tree replacement calculated to mitigate for proposed removals^{3.} Trees will be replaced with 24-inch box trees with a minimum caliper of 1.5 inches.

Tag #	Common Name	Health/ Aesthetic Rating	DBH (inches)	Mitigation caliper required (inches)	Number of 24" box trees, 1.5" caliper
49	Valley Oak	Fair (63%)	15.5	3.9	3
70	Valley Oak	Poor (38%)	32.0	8.0	5
	Totals		47.5	11.94	8 trees

¹ City of El Paso de Robles - Ordinance No. 835 N.S.

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² For example, the replacement requirement for removal of two trees of 15 inches DBH (30 inches, total) would be 7.5 inches (caliper, measured at the base of the young tree). This requirement could be satisfied by planting five 1.5-inch trees, or three 2.5-inch trees, or any other combination totaling 7.5 inches. A minimum of two 24-inch box, 1.5-inch trees shall be required for each oak tree removed. (City of El Paso de Robles - Ordinance No. 835 N.S., page 5)

³ Tree 101 is not included in this table because it is dead.

⁴ Calculation: 47.5 inches * 25% = 11.9 inches mitigation ÷ 1.5 inches/mitigation tree = 7.9 mitigation trees

- c. If a senescent or decadent tree rated "Poor" proposed for removal dies of natural causes during the planning process, the tree will be removed from the mitigation calculation.
- d. The environmental monitor will keep a running tally of the total number of trees removed during construction of the project. A final mitigation obligation determination will be provided by the environmental monitor to the project manager and to the City of Paso Robles.
- **Oak 4.** Pruning and wound care shall be done under the supervision of a Certified Arborist or City approved tree care specialist.
 - a. All cuts to roots over 1 inch and branches over 3 inches in diameter will be treated, as appropriate, to reduce fungal, bacterial, and insect infections. A Certified Arborist or tree care specialist shall be contracted to care for damaged roots and branches during construction. Appropriate antifungal, antibacterial, and pesticide treatments should be used on cut roots and branches. Black tree paint shall not be used on either roots or branches.
 - b. Treat large wounds to roots and branches by cutting perpendicular to the root direction. Cut back to undamaged wood.
 - c. Roots exposed during demolition and construction shall be treated, as appropriate, by a tree care specialist and covered by a layer of soil.
- **Oak 5.** Prepare and implement a Mitigation Monitoring and Reporting Plan.
 - a. The mitigation plan will include tree planting, protection, maintenance, and monitoring for seven (7) years. Success criteria will include tree height and total numbers of live trees at the end of seven years. The final landscape bond amount will not be returned until the success criteria have been met.
 - b. The mitigation plantings will be monitored by a City-qualified tree specialist (biologist or arborist).
- **Oak 6.** Use porous pavers when paving is required within the CRZ.
 - a. Trees 71, 74 and 75 are large oaks located near proposed parking, driveways, and sidewalks. These hardscapes encroach within the CRZ of each tree. Any paving within the CRZ shall be done with porous pavers that will allow oxygen and moisture exchange to occur within the root zone. Porous pavers shall be approved by arborist. The pavers shall cover the CRZ at minimum, and should cover the largest possible portion of the paved area surrounding the tree with a minimum amount of base material.
- **Oak 7**. Show all tree protection requirements on final grading plans.
 - a. All trees to be protected from unauthorized impacts will be clearly shown on grading plans.
 - b. Tree protection recommendations approved by the project arborist will be shown on the grading plans.

Oak 8. Tot lot construction shall minimize impacts to Tree 89.

h:darren/PD/BVApartments /012213 PC Res

- a. A 6-inch layer of mulch shall be placed in the CRZ of Tree 89.
- b. Configure the tot lot play equipment such that no foundations or ground-disturbing work is necessary within the CRZ.
- c. Trenching within the CRZ must be approved by the project arborist, and shall be done by hand. Roots will be treated by the project arborist or approved tree care specialist.

CARYN JACKSON, DEPUTY CITY CLERK	
ATTEST:	
	MAYOR DUANE PICANCO
ABSTAIN:	
ABSENT:	
NOES:	
AYES:	
PASSED AND ADOPTED THIS 19th day of Fe	ebruary, 2013 by the following Roll Call Vote:

Agenda Item No. 1 Page 41 of 355

EXHIBIT A OF RESOLUTION

CITY OF EL PASO DE ROBLES STANDARD DEVELOPMENT CONDITIONS

Approval Body: City Council Applicant: Buena Vista Apartments Location: Exp. Station Road APN: 025-391-014 The following conditions that have been checked are standard conditions of approval for the above referenced project. The checked conditions shall be complied with in their entirety before the project can be finalized, unless otherwise specifically indicated. In addition, there may be site specific conditions of approval that apply to this project in the resolution. COMMUNITY DEVELOPMENT DEPARTMENT - The applicant shall contact the Community Development Department, (805) 237-3970, for compliance with the following conditions: A. GENERAL CONDITIONS – PD/CUP: 1. This project approval shall expire on October 16, 2014 unless a time extension request is filed with the Community Development Department, or a State mandated automatic time extension is applied prior to expiration. 2. The site shall be developed and maintained in accordance with the approved plans and unless specifically provided for through the Planned Development process shall not waive compliance with any sections of the Zoning Code, all other applicable City Ordinances, and applicable Specific Plans. 3. To the extent allowable by law, Owner agrees to hold City harmless from costs and expenses, including attorney's fees, incurred by City or held to be the liability of City in connection with City's defense of its actions in any proceeding brought in any State or Federal court challenging the City's actions with respect to the project. Owner understands and acknowledges that City is under no obligation to defend any legal actions challenging the City's actions with respect to the project.	⊠ PI	anned [Development	Conditional Use Permit
Applicant: Buena Vista Apartments Location: Exp. Station Road APN: 025-391-014 The following conditions that have been checked are standard conditions of approval for the above referenced project. The checked conditions shall be complied with in their entirety before the project can be finalized, unless otherwise specifically indicated. In addition, there may be site specific conditions of approval that apply to this project in the resolution. COMMUNITY DEVELOPMENT DEPARTMENT - The applicant shall contact the Community Development Department, (805) 237-3970, for compliance with the following conditions: A. GENERAL CONDITIONS – PD/CUP: 1. This project approval shall expire on October 16, 2014 unless a time extension request is filed with the Community Development Department, or a State mandated automatic time extension is applied prior to expiration. 2. The site shall be developed and maintained in accordance with the approved plans and unless specifically provided for through the Planned Development process shall not waive compliance with any sections of the Zoning Code, all other applicable City Ordinances, and applicable Specific Plans. 3. To the extent allowable by law, Owner agrees to hold City harmless from costs and expenses, including attorney's fees, incurred by City or held to be the liability of City in connection with City's defense of its actions in any proceeding brought in any State or Federal court challenging the City's actions with respect to the project. Owner understands and acknowledges that City is under no obligation to defend any legal actions challenging the City's actions with respect to the	ПТе	ntative I	Parcel Map	Tentative Tract Map
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(Adopted by Planning Commission Resolution _____)

4.	Any site specific condition imposed by the Planning Commission in approving this project (Conditional Use Permit) may be modified or eliminated, or new conditions may be added, provided that the Planning Commission shall first conduct a public hearing in the same manner as required for the approval of this project. No such modification shall be made unless the Commission finds that such modification is necessary to protect the public interest and/or neighboring properties, or, in the case of deletion of an existing condition, that such action is necessary to permit reasonable operation and use for this approval.
5.	The site shall be kept in a neat manner at all times and the landscaping shall be continuously maintained in a healthy and thriving condition.
6.	All signs shall be subject to review and approval as required by Municipal Code Section 21.19 and shall require a separate application and approval prior to installation of any sign.
7.	All walls/fences and exposed retaining walls shall be constructed of decorative materials which include but are not limited to splitface block, slumpstone, stuccoed block, brick, wood, crib walls or other similar materials as determined by the Development Review Committee, but specifically excluding precision block.
8.	Prior to the issuance of a Building Permit a landscape and irrigation plan consistent with the Landscape and Irrigation Ordinance, shall be submitted for City review and approval. The plan needs to be designed in a manner that utilizes drought tolerant plants, trees and ground covers and minimizes, if not eliminates the use of turf. The irrigation plan shall utilize drip irrigation and limit the use of spray irrigation. All existing and/or new landscaping shall be installed with automatic irrigation systems.
9.	A reciprocal parking and access easement and agreement for site access, parking, and maintenance of all project entrances, parking areas, landscaping, hardscape, common open space, areas and site lighting standards and fixtures, shall be recorded prior to or in conjunction with the Final Map. Said easement and agreement shall apply to all properties, and be referenced in the site Covenants, Conditions and Restrictions (CC&Rs).
10.	All outdoor storage shall be screened from public view by landscaping and walls or fences per Section 21.21.110 of the Municipal Code.
11.	For commercial, industrial, office or multi-family projects, all refuse enclosures are required to provide adequate space for recycling bins. The enclosure shall be architecturally compatible with the primary building. Gates shall be view obscuring and constructed of durable materials. Check with Paso Robles Waste Disposal to determine the adequate size of enclosure based on the number and size of containers to be stored in the enclosure.

	12.	For commercial, industrial, office or multi-family projects, all existing and/or new ground-mounted appurtenances such as air-conditioning condensers, electrical transformers, backflow devices etc., shall be screened from public view through the use of decorative walls and/or landscaping subject to approval by the Community Development Director or his designee. Details shall be included in the building plans.
	13.	All existing and/or new roof appurtenances such as air-conditioning units, grease hoods, etc. shall be screened from public view. The screening shall be architecturally integrated with the building design and constructed of compatible materials to the satisfaction of the Community Development Director or his designee. Details shall be included in the building plans.
	14.	All existing and/or new lighting shall be shielded so as to be directed downward in such a manner as to not create off-site glare or adversely impact adjacent properties. The style, location and height of the lighting fixtures shall be submitted with the building plans and shall be subject to approval by the Community Development Director or his designee.
	15.	All walls/fences and exposed retaining walls shall be constructed of decorative materials which include but are not limited to splitface block, slumpstone, stuccoed block, brick, wood, crib walls or other similar materials as determined by the Development Review Committee, but specifically excluding precision block.
	16.	It is the property owner's responsibility to insure that all construction of private property improvements occur on private property. It is the owner's responsibility to identify the property lines and insure compliance by the owner's agents.
	17.	Any existing Oak trees located on the project site shall be protected and preserved as required in City Ordinance No.835 N.S., Municipal Code No. 10.01 "Oak Tree Preservation", unless specifically approved to be removed. An Oak tree inventory shall be prepared listing the Oak trees, their disposition, and the proposed location of any replacement trees required. In the event an Oak tree is designated for removal, an approved Oak Tree Removal Permit must be obtained from the City, prior to removal.
\boxtimes	18.	No storage of trash cans or recycling bins shall be permitted within the public right-of-way.
	19.	Prior to recordation of the map or prior to occupancy of a project, all conditions of approval shall be completed to the satisfaction of the City Engineer and Community Developer Director or his designee.
	20.	Two sets of the revised Planning Commission approved plans incorporating all Conditions of Approval, standard and site specific, shall be submitted to the Community Development Department prior to the issuance of building permits.

	21.	Prior to the issuance of building permits, the Development Review Committee shall approve the following: Planning Division Staff shall approve the following:		
		 A detailed site plan indicating the location of all structures parking layout, outdoor storage areas, walls, fences and trash enclosures; 		
		 b. A detailed landscape plan; c. Detailed building elevations of all structures indicating materials, colors, and architectural treatments; 		
		d. Other:		
B.	GENE	RAL CONDITIONS – TRACT/PARCEL MAP:		
	1.	In accordance with Government Section 66474.9, the subdivider shall defend indemnify and hold harmless the City, or its agent, officers and employees, from any claim, action or proceeding brought within the time period provided for in Government Code section 66499.37, against the City, or its agents, officers, or employees, to attack, set aside, void, annul the City's approval of this subdivision. The City will promptly notify subdivider of any such claim or action and will cooperate fully in the defense thereof.		
	2.	The Covenants, Conditions, and Restrictions (CC&Rs) and/or Articles Affecting Real Property Interests are subject to the review and approval of the Community Development Department, the Public Works Department and/or the City Attorney. They shall be recorded concurrently with the Final Map or prior to the issuance of building permits, whichever occurs first. A recorded copy shall be provided to the affected City Departments.		
	3.	The owner shall petition to annex residential Tract (or Parcel Map) into the City of Paso Robles Community Facilities District No. 2005-1 for the purposes of mitigation of impacts on the City's Police and Emergency Services Departments.		
	4.	Street names shall be submitted for review and approval by the Planning Commission, prior to approval of the final map.		
	5.	The following areas shall be permanently maintained by the property owner. Homeowners' Association, or other means acceptable to the City:		
****	*****	***********		
(Adopte	ed by Plar	nning Commission Resolution)		

ENGINEERING DIVISION- The applicant shall contact the Engineering Division, (805) 237-3860, for compliance with the following conditions:

All conditions marked are applicable to the above referenced project for the phase indicated.

All COIT	idition is i	Trained are applicable to the above referenced project for the phase indicated.
C.	PRIOR	TO ANY PLAN CHECK:
	1.	The applicant shall enter into an Engineering Plan Check and Inspection Services Agreement with the City.
D.	PRIOR	TO ISSUANCE OF A GRADING PERMIT:
	1.	Prior to approval of a grading plan, the developer shall apply through the City, to FEMA and receive a Letter of Map Amendment (LOMA) issued from FEMA. The developer's engineer shall provide the required supporting data to justify the application.
	2.	Any existing Oak trees located on the project site shall be protected and preserved as required in City Ordinance No. 553, Municipal Code No. 10.01 "Oak Tree Preservation", unless specifically approved to be removed. An Oak tree inventory shall be prepared listing the Oak trees, their disposition, and the proposed location of any replacement trees required. In the event an Oak tree is designated for removal, an approved Oak Tree Removal Permit must be obtained from the City, prior to its removal.
	3.	A complete grading and drainage plan shall be prepared for the project by a registered civil engineer and subject to approval by the City Engineer. The project shall conform to the City's Storm Water Discharge Ordinance.
	4.	A Preliminary Soils and/or Geology Report providing technical specifications for grading of the site shall be prepared by a Geotechnical Engineer.
	5.	A Storm Water Pollution Prevention Plan per the State General Permit for Strom Water Discharges Associated with Construction Activity shall be provided for any site that disturbs greater than or equal to one acre, including projects that are less than one acre that are part of a larger plan of development or sale that would disturb more than one acre.
E.	PRIOR	TO ISSUANCE OF A BUILDING PERMIT:
	1.	All off-site public improvement plans shall be prepared by a registered civil engineer and shall be submitted to the City Engineer for review and approval. The improvements shall be designed and placed to the Public Works Department Standards and Specifications.

	2.	The applicant shall submit a composite utility plan signed as approved by a representative of each public utility.	
	3.	Landscape and irrigation plans for the public right-of-way shall be incorporated into the improvement plans and shall require approval by the Streets Division Supervisor and the Community Development Department.	
	4.	In a special Flood Hazard Area as indicated on a Flood Insurance Rate Map (FIRM) the owner shall provide an Elevation Certificate in accordance with the National Flood Insurance program. This form must be completed by a land surveyor or civil engineer licensed in the State of California.	
F.	PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY OR RECORDATION OF THE FINAL MAP:		
	const	Planning Commission has made a finding that the fulfillment of the ruction requirements listed below are a necessary prerequisite to the y development of the surrounding area.	
	1.	The applicant shall pay any current and outstanding fees for Engineering Plan Checking and Construction Inspection services.	
	2.	All public improvements are completed and approved by the City Engineer, and accepted by the City Council for maintenance.	
	3.	The owner shall offer to dedicate and improve the following street(s) to the standard indicated:	
		Experimental Station Local Street Name City Standard Standard Drawing No.	
	4.	If, at the time of approval of the final map, any required public improvements have not been completed and accepted by the City the owner shall be required to enter into a Subdivision Agreement with the City in accordance with the Subdivision Map Act.	
		Bonds required and the amount shall be as follows: Performance Bond100% of improvement costs. Labor and Materials Bond50% of performance bond.	
	5.	If the existing City street adjacent to the frontage of the project is inadequate for the traffic generated by the project, or will be severely damaged by the construction, the applicant shall excavate the entire structural section and replace it with a standard half-width street plus a 12' wide travel lane and 8' wide graded shoulder adequate to provide for two-way traffic.	

	6.	If the existing pavement and structural section of the City street adjacent to the frontage of the project is adequate, the applicant shall provide a new structural section from the proposed curb to the edge of pavement and shall overlay the existing paving to centerline for a smooth transition.
	7.	Due to the number of utility trenches required for this project, the City Council adopted Pavement Management Program requires a pavement overlay on along the frontage of the project.
	8.	The applicant shall install all utilities. Street lights shall be installed at locations as required by the City Engineer. All existing overhead utilities adjacent to or within the project shall be relocated underground except for electrical lines 77 kilovolts or greater. All utilities shall be extended to the boundaries of the project.
	9.	The owner shall offer to dedicate to the City the following easement(s). The location and alignment of the easement(s) shall be to the description and satisfaction of the City Engineer:
		 a. Public Utilities Easement; b. Water Line Easement; c. Sewer Facilities Easement; d. Landscape Easement; e. Storm Drain Easement.
	10.	The developer shall annex to the City's Landscape and Lighting District for payment of the operating and maintenance costs of the following:
		 a. Street lights; b. Parkway/open space landscaping; c. Wall maintenance in conjunction with landscaping; d. Graffiti abatement; e. Maintenance of open space areas.
	11.	For a building with a Special Flood Hazard Area as indicated on a Flood Insurance Rate Map (FIRM), the developer shall provide an Elevation Certificate in accordance with the National Flood Insurance Program. This form must be completed by a lands surveyor or civil engineer licensed in the State of California.
\boxtimes	12.	All final property corners shall be installed.
	13.	All areas of the project shall be protected against erosion by hydro seeding or landscaping.
	14.	All construction refuse shall be separated (i.e. concrete, asphalt concrete, wood gypsum board, etc.) and removed from the project in accordance with the City's Source Reduction and Recycling Element.

(Adopted by Planning Commission Resolution _____)

	15.	Clear blackline mylars and paper prints of record drawings, signed by the engineer of record, shall be provided to the City Engineer prior to the final inspection. An electronic autocad drawing file registered to the California State Plane – Zone 5 / NAD83 projected coordinate system, units in survey feet, shall be provided.		
PAS the l	O ROBLI	ES DEPARTMENT OF EMERGENCY SERVICES- The applicant shall contact ent of Emergency Services, (805) 227-7560, for compliance with the following		
G . C	SENERAL	Prior to the start of construction: ☐ Plans shall be reviewed, approved and permits issued by Emergency Services for underground fire lines. ☐ Applicant shall provide documentation to Emergency Services that required fire flows can be provided to meet project demands. ☐ Fire hydrants shall be installed and operative to current, adopted edition of the California Fire Code. ☐ A based access road sufficient to support the department's fire apparatus (HS-20 truck loading) shall be constructed and maintained for the duration of the construction phase of the project. ☐ Access road shall be at least twenty (20) feet in width with at least thirteen (13) feet, six (6) inches of vertical clearance.		
2.		Provide central station monitored fire sprinkler system for all residential, commercial and industrial buildings that require fire sprinklers in current, adopted edition of the California Building Code, California Fire Code and Paso Robles Municipal Code. Plans shall be reviewed, approved and permits issued by Emergency Services for the installation of fire sprinkler systems.		
3.		Provide central station monitored fire alarm system for all residential, commercial and industrial buildings that require fire alarm system in current, adopted edition of the California Building Code, California Fire Code and Paso Robles Municipal Code.		
4.		If required by the Fire Chief, provide on the address side of the building if applicable: Fire alarm annunciator panel in weatherproof case. Knox box key entry box or system. Fire department connection to fire sprinkler system.		

5.		le temporary turn-around to current City Engineering Standard for phased uction streets that exceed 150 feet in length.	
6.	•	ect shall comply with all requirements in current, adopted edition of California Code and Paso Robles Municipal Code.	
7.	Prior t	o the issuance of Certificate of Occupancy:	
		Final inspections shall be completed on all underground fire lines, fire sprinkler systems, fire alarm systems and chemical hood fire suppression systems.	
		Final inspections shall be completed on all buildings.	

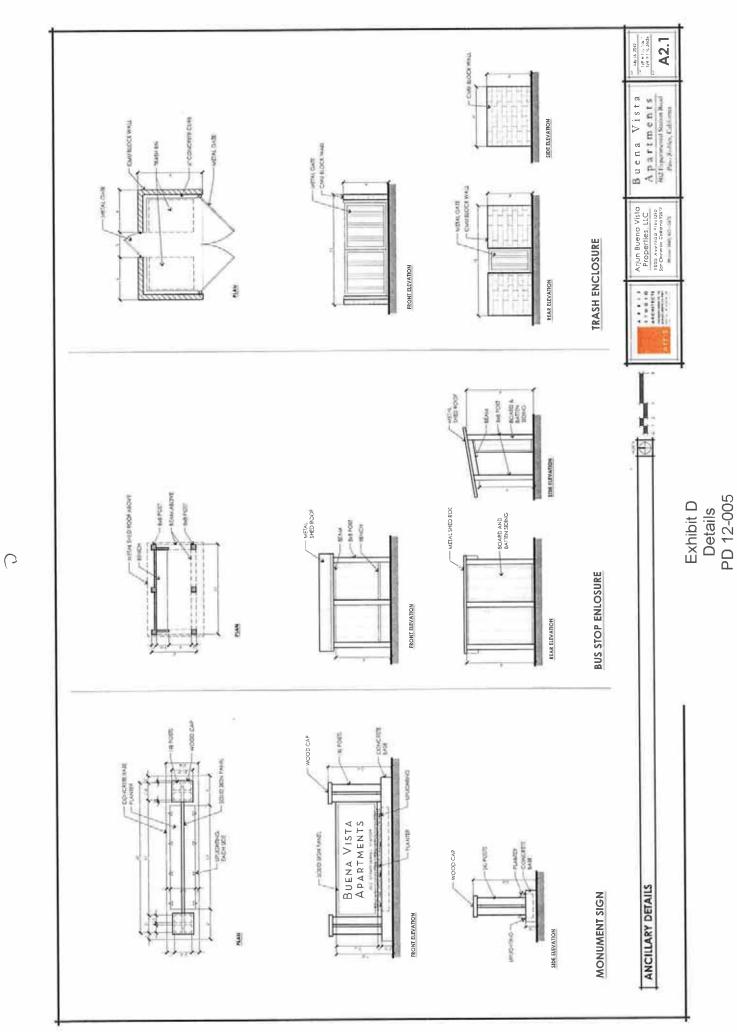
(Adopted by Planning Commission Resolution _____)

SARMS STUDIO ARCHITECTS 15-40 MARSH STREET, SUITE 150 5.8A ULIS OBISPO. CA, 93-401 TEL: (805) 547-2240 FAX: (805) 547-2240 CONTACT: HOW JESS EMAIL: TIESSGAR RRISSTUDIO ARCH COM E FIRMA 1 1877 TANK FARM ROAD, SUITE 230 2 NA UJIS OBISPO CA 93401 TEL: (805) 781-9800 FAX: (805) 781-9800 FAX: IJM BURSPOWS CONTACT: JIM BURSPOWS EMAIL: JIM@FIRMACONSUITANTS COM ARJUAN BUENA VISTA PROPERTIES, LLC 1005 AVENUE REBEIDIO 5AN CLEMENTE, OR 26272 TEL: GONIACE: DON BENSON CONTACT: DON BENSON A1.1 SAN LUIS OBISPO, CA 93401 TEL: CONTACT: ROBERT WINSLOW EMAIL: ROBERT® ASHLEYVANCE, COM ASHLEY & VANCE ENGINEERING, INC. 860 WALNUT STREET, SUITE C A p artment Salion Road Paso Robes, California PROJECT DIRECTORY Buena LANDSCAPE ARCHITECT; ARCHITECT: CIVIL ENGINEER: Arjun Buena Vista Properties, LLC 1005 Avenda Presidio San Chemente colloma 92672 Phone |949, 633 - 5675 BUILDING TYPE I - FLOOR PLANS BUILDING TYPE I - LELVATIONS BUILDING TYPE 2 - ELCOP PLANS BUILDING TYPE 2 - ELCATIONS BUILDING TYPE 3 - ELCOR PLANS BUILDING TYPE 3 - ELCOR PLANS BUILDING TYPE 3 - ELCOR PLANS BUILDING TYPE 5 - ELCOR PLANS BUILDING TYPE 6 - ELCOR PLANS BUILDING TYPE 7 - FLOOR PLANS BUILDING TYPE 7 - ELEVATIONS BUILDING TYPE 8 - FLOOR PLANS & ELEVS J α PRELIMINARY GRADING PLAN PRELIMINARY UTILITY PLAN 110000 ARCHITECTURAL SITE PLAN a LANDSCAPE INDEX L-1 LANDSCAPE SITE PLAN 0 \Box SHEET INDEX **EXISTING CONDITIONS SURVEY** COVER SHEET ARCHITECTURAL INDEX D 0 S \Box CIVIL INDEX 0 4 S 0 α σ THIS PROJECT PROPOSES THE CONSTRUCTION OF 141 MULTIFAMILY APARTMENT UNITS ALONG WITH A CLUBHOUSE, CARETAKERS RESIDENCE AND OTHER AMENITIES ON APPROXIMATELY 12.2 ACRES. EXTENSIVE "GREEN" FEATURES HAVE BEEN INCORPORATED INTO THE PROJECT INCLUDING BIO-SWALE, DROUGHT TOLREAM TO TO AND THE SAVING FRITERS AND LOW MAINTENANCE EXTERIOR FINISH MATERALS. THE PROPERTY IS CURRENTLY FIVE SEPARATE PARCELS AND WILL BE MERGED INTO A SINGLE PARCEL AS PART OF THIS APPLICATION THE PROPERTY IS CURRENTLY ZONED R-1 A REZONE TO R-3 IS A PART OF THIS APPLICATION - Project Site ىد 0 PROJECT DESCRIPTION VICINITY MAP Exhibit B Ø S 4 4 ω O 0 Ξ Ø Ω PARKING REQUIRED (28) 1-BEDRM UNITS x 1 SPACES / UNIT = 42 SPACES (114) 2 & 3-BEDRM UNITS x 2 SPACES / UNIT = 228 SPACES 1 VISTOR SPACE 5 SUNITS = 228 SPACES TOTAL REQUIRED = 2298 SPACES 143 GARAGE SPACES 155 SURFACE SPACES 298 TOTAL SPACES 0 R-1 (RSF-4) R-3 (RMF-12) 2 8 3 142 3,356 SF 158,089 SF 0 531, 530 SF (12.2 ACRES) 802 EXPERIMENTAL STATION ROAD 025-541-021, 025-391-006, 007, 080, 081 RMF-12 88 OUTDOOR ACTIVE AREA REQUIRED: 142 UNIS x 375 SF / UNIT = 53,250 SF OUTDOOR ACTIVE AREA PROVIDED 84,850 SF 154.733 SF 12 UNITS / ACRE 142 UNITS / 12 2 ACRES = 11 6 UNITS / ACRE O \propto ۵ AMENITIES PROVIDED: TOT LOTS MULTI-SPORT COURT SWIMMING POOL SPA (DOES NOT INCLUDE PRIVATE DECKS) CURRENT GENERAL PLAN DESIGNATION: X PROJECT DATA AMENITIES REQUIRED: TOT LOTS OTHER AMENITIES NUMBER OF STORIES ALLOWED: NUMBER OF STORIES PROPOSED: BUILDING HEIGHT ALLOWED: BUILDING HEIGHT PROPOSED: NUMBER OF DWELLING UNITS: 0 RESIDENTIAL FLOOR AREA: CLUBHOUSE FLOOR AREA: TOTAL FLOOR AREA: S PROPOSED ZONING: PARKING PROVIDED: DENSITY ALLOWED: DENSITY PROPOSED; N CURRENT ZONING: Ø 0 SITE AREA: ADDRESS ∞ | 1900 | 1900 | 2 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 190 AREA 2000 ST 2 BUILDING DATA QUANTITY BURCHIO 1980

Exhibit B Title Sheet - Project Data PD 12-005 (Buena Vista Apartments)



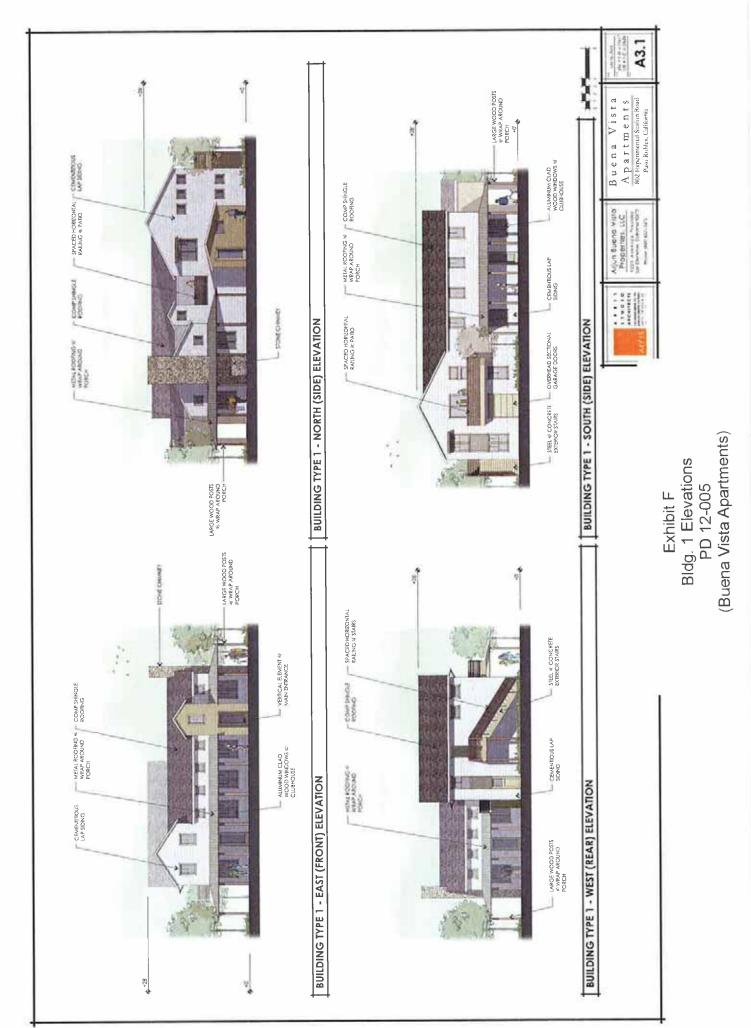
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(Buena Vista Apartments)

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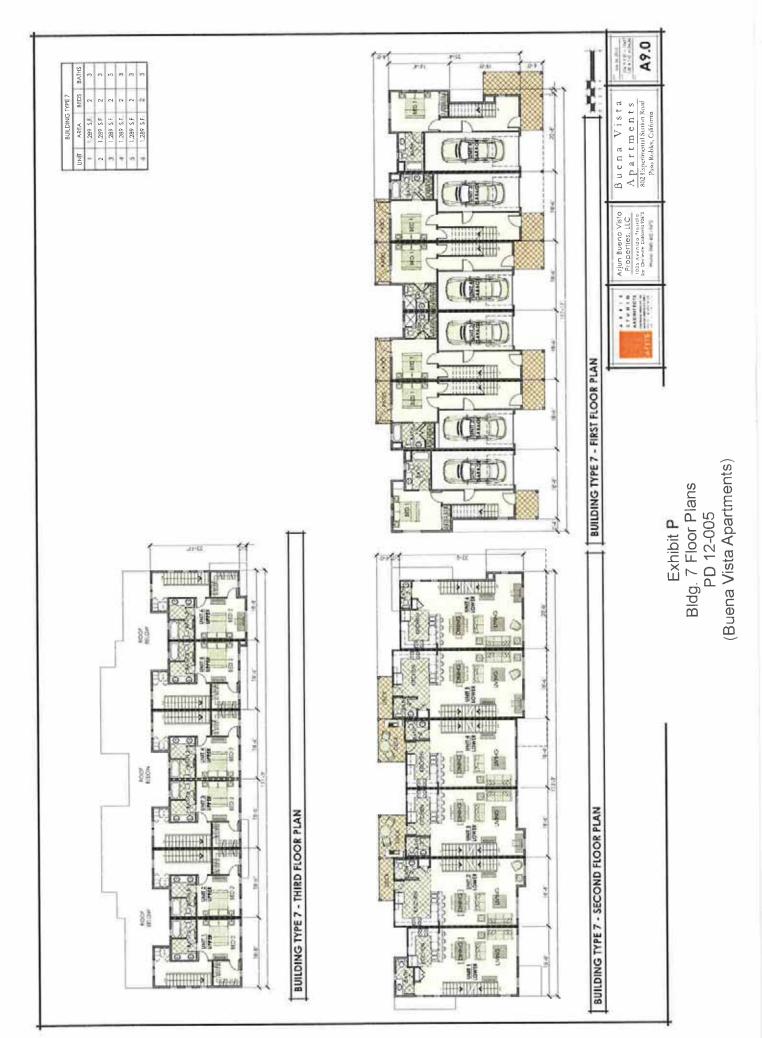
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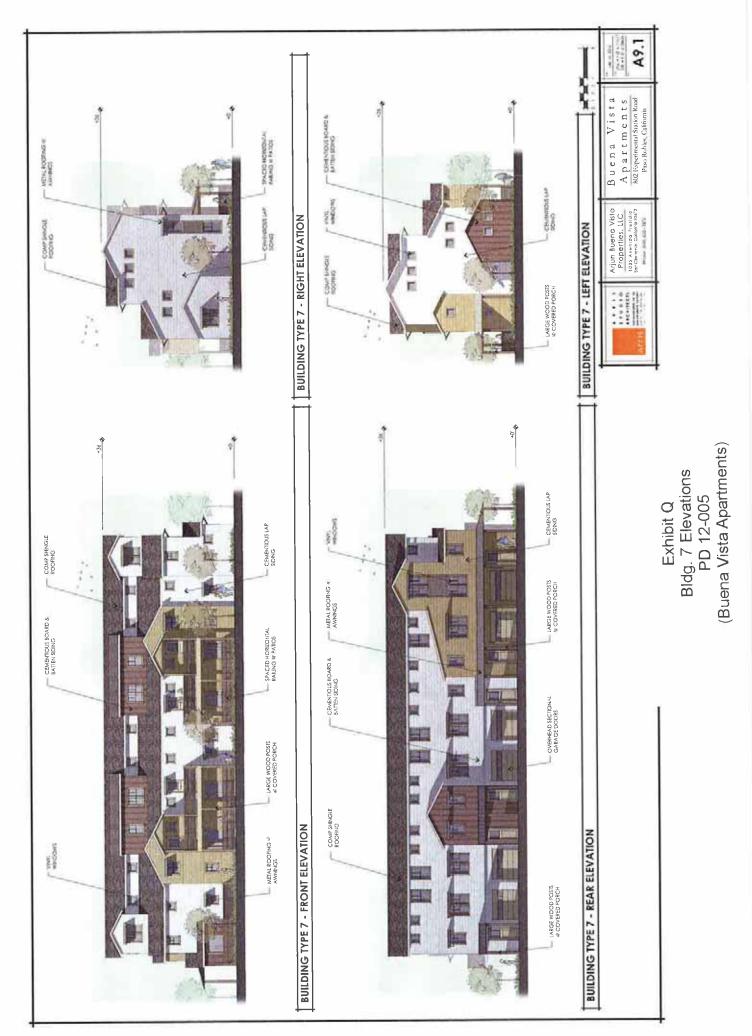




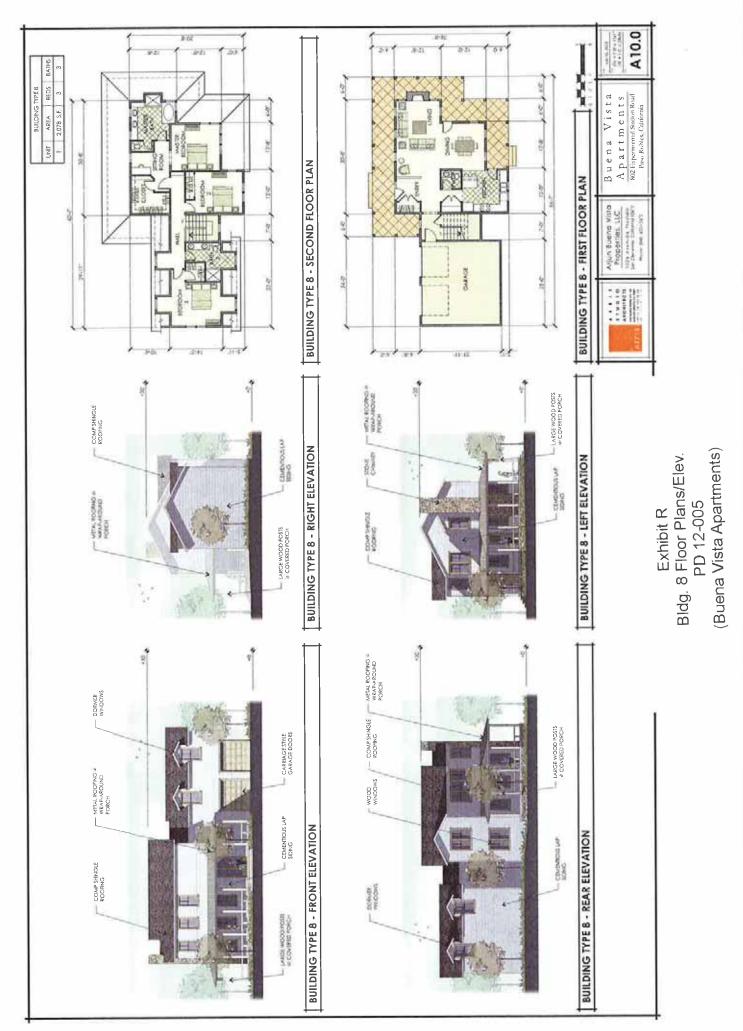
(Buena Vista Apartments)

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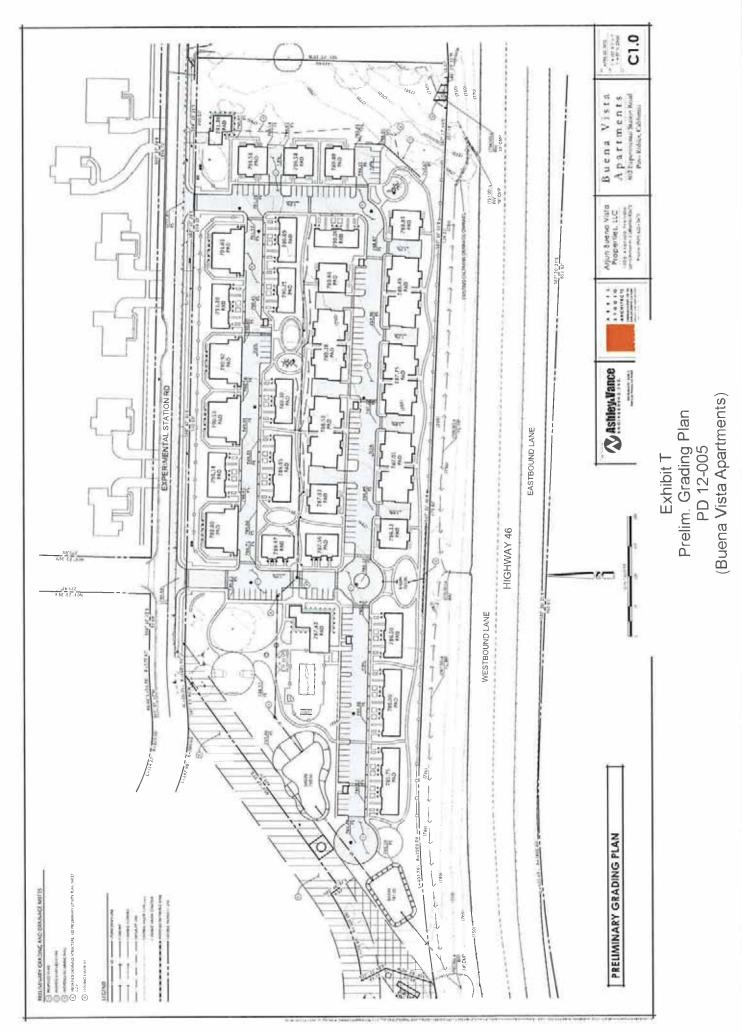


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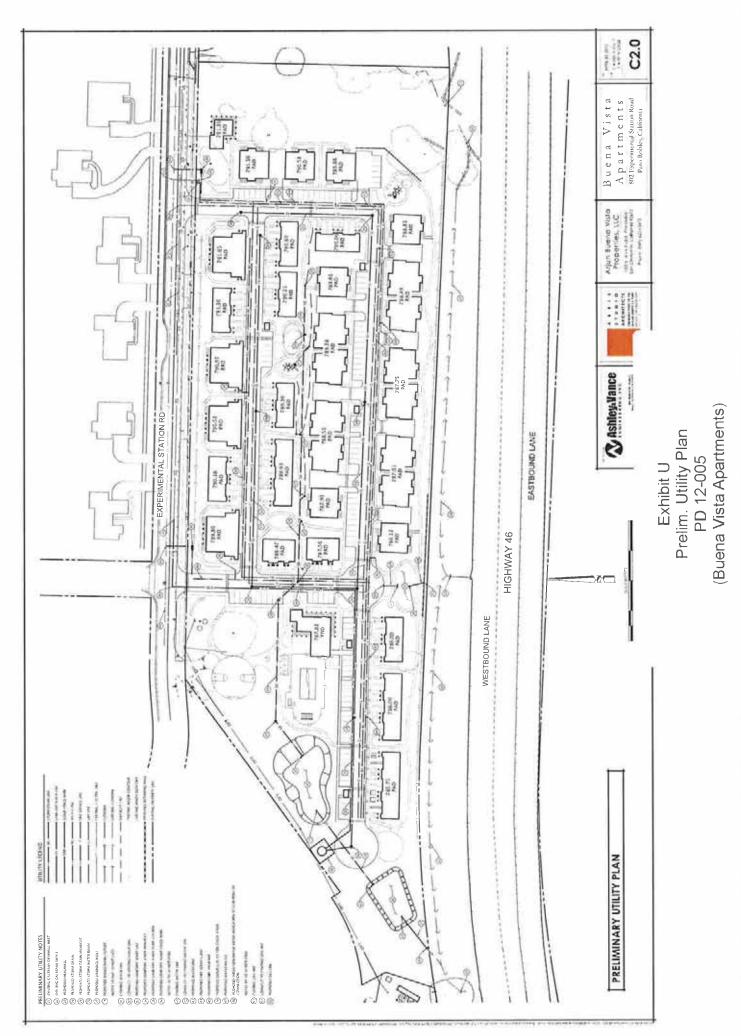


(Buena Vista Apartments)

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RESOLUTION NO:

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF EL PASO DE ROBLES APPROVING A MITIGATED NEGATIVE DECLARATION FOR REZONE 12-003, BORKEY SPECIFIC PLAN AMENDMENT 12-003 & PLANNED DEVELOPMENT 12-005 (Buena Vista Apartments)

APN: 025-391-006, 007, 080 & 081 & 025-541-021

WHEREAS, PD 12-005, RZ 12-003, SPA 12-003 (The Project), has been submitted by Don Benson on behalf of Arjun Buena Vista, LLC to establish a 142 unit apartment complex; and

WHEREAS, the project is proposed to be located on the 12.5-acre site on the south side of Experimental Station Road, west of Buena Vista Drive; and

WHEREAS, the project entitlements needed to establish the project include the following:

Rezone: to change the existing R1-B4 (Residential Single-Family, 1 acre lot) zoning designation to R3 (Residential Multifamily 12 units per acre). The rezone to R3 would bring the zoning designation into compliance with the existing General Plan Land Use designation (RMF-12).

Specific Plan Amendment: to amend the Borkey Area Specific Plan to accommodate the multi-family residential project, and establish updated Specific Plan fees;

Development Plan: development plan to review the project site planning, architectural design and details, and landscaping.

WHEREAS, an Initial Study was prepared for this project (attached as Exhibit A) which concludes that a Mitigated Negative Declaration may be approved; and

WHEREAS, Public Notice of the proposed Mitigated Negative Declaration was distributed as required by Section 21092 of the Public Resources Code and no written comments have been submitted; and

WHEREAS, a public hearing was conducted by the Planning Commission on September 25, 2012, to consider facts as presented in the staff report prepared for this project, and to accept public testimony regarding this proposed environmental determination; and

WHEREAS, the Planning Commission on September 25, 2012, continued the project in order to allow for the necessary 90 day review period associated with tribal consultation required by SB 18; and

WHEREAS, a public hearing was conducted by the Planning Commission on January 22, 2013, to consider facts as presented in the staff report prepared for this project, and to accept public testimony regarding this proposed environmental determination; and

WHEREAS, on January 22, 2013, the Planning Commission recommended that the City Council approve the Mitigated Negative Declaration; and

WHEREAS, a public hearing was conducted by the City Council on February 19, 2013, to consider facts as presented in the staff report prepared for this project, and to accept public testimony regarding this proposed Mitigated Negative Declaration; and

WHEREAS, the applicant has entered into a signed Mitigation Agreement with the City of Paso Robles (prior to Planning Commission action on the Mitigated Negative Declaration) that establishes obligation on the part of the property owner to mitigate potential future impacts as identified in the environmental document; and

WHEREAS, the Mitigation Monitoring Program, attached as Exhibit B to this resolution, has been reviewed by the City Council in conjunction with its review of this project and shall be carried out by the responsible parties by the identified deadlines; and

WHEREAS, based on the information contained in the Initial Study prepared for this project and testimony received as a result of the public notice, the City Council finds no substantial evidence that there would be a significant impact on the environment based on the attached Mitigation Agreement and mitigation measures described in the Initial Study and contained in the resolution approving Planned Development 12-005 (Section 3) as site specific conditions summarized below.

Topic of Mitigation	Condition #
Air Quality	AQ 1- AQ 5
Greenhouse Gas	GHG-1
Biological (Kit Fox & Oak Trees)	BR 1 – BR 16
Noise	N1-N3

NOW, THEREFORE, BE IT RESOLVED, by the City Council of the City of El Paso de Robles, based on its independent judgment, approves a Mitigated Negative Declaration for PD 12-005, RZ 12-003, & SPA 12-003, in accordance with the California Environmental Quality Act; and

PASSED AND ADOPTED by the City Council of the City of Paso Robles this 19th day of February, 2013 by the following vote:

AYES: NOES: ABSTAIN: ABSENT:		
ATTEST:	Duane Picanco, Mayor	
Caryn Jackson, Deputy City Clerk	_	

ENVIRONMENTAL INITIAL STUDY CHECKLIST FORM CITY OF PASO ROBLES

1. PROJECT TITLE: Buena Vista Apartments

Concurrent Entitlements: PD 12-005, RZ 12-003, SA 12-003

2. LEAD AGENCY: City of Paso Robles

1000 Spring Street

Paso Robles, CA 93446

Contact:

Phone: (805) 237-3970

Email:

3. PROJECT LOCATION: South side of Experimental Station Road, west

of Buena Vista, Paso Robles, CA (APN 025-541-021, 025-391-006, 007, 080 & 081)

4. PROJECT PROPONENT: Arjun Buena Vista Properties, LLC

Contact Person: Donald Benson

Phone: (805) 237-6212

Email: dollarbill93447@yahoo.com

5. GENERAL PLAN DESIGNATION: RMF-12 (Residential Multi-Family, 12 units

per acre)

6. ZONING: R1-B4 (Residential Single-family, 1 acre)

PROJECT DESCRIPTION: This is a proposal to establish a 142 unit apartment complex along with a club house, swimming pool, play areas, and other amenities.

The project entitlements needed to establish the project include the following:

Rezone: to change the existing R1-B4 (Residential Single-Family, 1 acre lot) zoning designation to R3 (Residential Multifamily 12 units per acre). The rezone to R3 would bring the zoning designation into compliance with the existing General Plan Land Use designation (RMF-12).

Specific Plan Amendment: to amend the Borkey Area Specific Plan to accommodate the multifamily residential project, and establish updated Specific Plan fees;

Development Plan: development plan to review the project site planning, architectural design and details, and landscaping.

- 7. ENVIRONMENTAL SETTING: The property currently consists of five parcels, each with existing residences and out-buildings. Structures on these parcels include existing single family homes or trailers, barns, garages, sheds, and fences. These parcels also have existing landscaping, driveways, materials and equipment storage, and debris. Portions of these parcels are currently used for pasture by horses, goats, and chickens. Various types of fencing surround each parcel. All areas of the proposed project have been substantially disturbed by human use.
- 8. OTHER AGENCIES WHOSE APPROVAL IS REQUIRED (AND PERMITS NEEDED): None.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving

	one impact that is a "Poteing pages.	ntially Si	ignificant Impact" as indicated	d by th	e checklist on the
	Aesthetics		Agriculture and Forestry Resources		Air Quality
\boxtimes	Biological Resources		Cultural Resources		Geology /Soils
	Greenhouse Gas Emissions		Hazards & Hazardous Materials		Hydrology / Water Quality
	Land Use / Planning		Mineral Resources	\boxtimes	Noise
	Population / Housing		Public Services		Recreation
	Transportation/Traffic		Utilities / Service Systems		Mandatory Findings of Significance
	RMINATION: (To be conbasis of this initial evaluat		by the Lead Agency)		
	I find that the proposed a NEGATIVE DECLAR		COULD NOT have a significal will be prepared.	nt effe	ect on the environment, and
	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.				
	I find that the proposed ENVIRONMENTAL IN		MAY have a significant effect REPORT is required.	on the	e environment, and an
	significant unless mitigated adequately analyzed in a been addressed by mitig	ated" imp an earlie ation m ENTAL	MAY have a "potentially significant on the environment, but as a document pursuant to applic easures based on the earlier as a IMPACT REPORT is required.	t least able le nalysis	one effect 1) has been egal standards, and 2) has as described on attached
	because all potentially soor NEGATIVE DECLA or mitigated pursuant to	ignificar RATIO that ear	I project could have a significant effects (a) have been analyz N pursuant to applicable standier EIR or NEGATIVE DECIMPOSED upon the proposed pr	ed ade lards, a LARA	equately in an earlier EIR and (b) have been avoided TION, including revisions
Signature	:			Dat	e

EVALUATION OF ENVIRONMENTAL IMPACTS:

- 1. 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).
- 2. All answers must take account of the whole action involved. Answers should address 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, then 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 substantial evidence 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 (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
- 5. 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:
 - a. 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 Measures 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.
- 6. 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.
- 7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8. 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 significance

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
I. A	AESTHETICS: Would the project:				
a.	Have a substantial adverse effect on a scenic vista?				
b.	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				
c.	Substantially degrade the existing visual character or quality of the site and its surroundings?			\boxtimes	
	Discussion (a-c): The project site is visible It is within an urbanized area of the City at the north, east and west. The property based border.	and is surrounde	ed by existing re	sidential neigh	borhoods to
	The visual quality of the site is fairly low family residential lots with older homes horse pastures. While the project will development has been designed in a mark Station Road. Landscaping and low fencing fencing on the north side of the street. The should be minimal as a result of the differ foot landscape buffer. The site is not whighway as designated by the City's Gene project could not result in a substantial in result in significant impacts to scenic reso	, fencing and a alter the visua nner where res ng that will be the units will batence in elevation within or adjace to a Plan or other npact on scenic	accessory uses, al character of idential units we installed to com ck up to Highwe on from the high ent to a scenic er adopted plans	such as out but the existing sit ill front on Explement the larmay 46 East, how way to the site vista, gateway or policies. The	tildings and te, the new experimental adscape and ever views and the 30-y, or scenic erefore, the
d.	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? (Sources: 1, 2, 10)			\boxtimes	
	Discussion: The proposed building and s result in significant new light or glare on with the City's requirements for light shie property. Therefore, the proposed project glare.	to the surround lding and would	ling properties. d be downcast to	The light fixtu not shed light	res comply on adjacent

II.	AGRICULTURE AND FOREST RESOURCES: In determining whether impacts to as	gricultural
Lar	ources are significant environmental effects, lead agencies may refer to the California Agend Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Coun optional model to use in assessing impacts on agriculture and farmland. Would the project	nservation
a.	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	
	Discussion: The project site is identified in the City General Plan, Open Space Element OS-1, State Farmland Mapping and Monitoring Program (FMMP). The property is identified that is "Farmland of Local Importance". The project would not convert Prim or Farmland of Statewide Importance to other uses. The property has not been used for aguses in the last several decades, and is surrounding by urban land uses. Therefore, the would result in less than significant impacts to agricultural soils monitored in the State FM.	entified as ne, Unique gricultural nis project
b.	Conflict with existing zoning for agricultural use, or a Williamson Act	\times
	Discussion: The site is not under Williamson Act contract, nor is it currently used for as purposes. Additionally, agricultural uses such as "crop production" are not permitt existing multi-family zoning district.	
c.	Conflict with existing zoning for, or cause rezoning of, forest, land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 5114(g))?	lacktriangle
	Discussion: There are no forest land or timberland resources within the City of Paso Robl	es.
d.	Result in the loss of forest land or conversion of forest land to non-forest use?	
	Discussion: See II c. above.	

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact		
e.	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?						
	Discussion: Given the existing characterilocation to the State Highway and City is significant impact to agricultural or forestr	nfrastructure, o	_	_			
qua	III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality manage-ment or air pollution control district may be relied upon to make the following determinations. Would the project:						
a.	Conflict with or obstruct implementation of the applicable air quality plan? (Source: Attachment 5)						
	Discussion: According to the SLOAPCI analysis with the Clean Air Plan is require necessary for a Project Level environment Project-Level environmental reviews white Plan (CAP) and Smart/Strategic Growth Project-Level environmental reviews white Plan (CAP) and Smart/Strategic Growth Project-Level environmental reviews white Plan (CAP) and Smart/Strategic Growth Project-Level environmental reviews white Plan (CAP) and Smart/Strategic Growth Project-Level environmental reviews white Plan (CAP) and Smart/Strategic Growth Project-Level environmental reviews white Plan (CAP) and Smart/Strategic Growth Project Level environmental reviews white Plan (CAP) and Smart/Strategic Growth Project Level environmental reviews white Plan (CAP) and Smart/Strategic Growth Project Level environmental reviews white Plan (CAP) and Smart/Strategic Growth Project Level environmental reviews white Plan (CAP) and Smart/Strategic Growth Project Level environmental reviews white Plan (CAP) and Smart/Strategic Growth Project Level environmental reviews white Plan (CAP) and Smart/Strategic Growth Project Level environmental reviews white Plan (CAP) and Smart/Strategic Growth Project Level environmental reviews white Plan (CAP) and Smart/Strategic Growth Project Level environmental reviews white Plan (CAP) and Smart/Strategic Growth Project Level environmental reviews white Plan (CAP) and Smart/Strategic Growth Project Level environmental reviews white Plan (CAP) and Smart/Strategic Growth Project Level environmental reviews white Plan (CAP) and Smart/Strategic Growth Project Level environmental reviews white Plan (CAP) and Smart/Strategic Growth Project Level environmental reviews white Plan (CAP) and Smart/Strategic Growth Project Level environmental reviews white Plan (CAP) and Smart/Strategic Growth Project Level environmental reviews white Plan (CAP) and Smart/Strategic Growth Project Level environmental reviews white Plan (CAP) and Smart/Strategic Growth Project Level environmental reviews white Plan (CAP) and Smart/Strategic Growth Pro	d for a Programatal review, do ch may requir	m Level environs epending on the e consistency an	nental review, project being alysis with the	and may be considered. c Clean Air		

large residential developments and large commercial/industrial developments. For such projects, evaluation of consistency is based on a comparison of the proposed project with the land use and transportation control measures and strategies outlined in the CAP. If the project is consistent with these measures, the project is considered consistent with the CAP (SLOAPCD 2009).

The CAP includes a variety of policies and strategies, including land use policies intended to result in reductions in overall vehicle miles traveled, as well as, various transportation control measures. The CAP would reduce emissions through implementation of the following adopted control measures:

- Campus-Based Trip Reduction
- Voluntary Trip Reduction Program
- Local Transit System Improvements
- **Regional Transit Improvements**
- Bicycling and Bikeway Enhancements
- Park and Ride Lots
- Motor Vehicle Inspection and Control Program
- Traffic Flow Improvements
- Telecommuting, Teleconferencing, and Telelearning

Potentially	Less Than	Less Than	No
Significant	Significant	Significant	Impact
Impact	with	Impact	_
-	Mitigation	-	
	Incorporated		

The CAP also includes various land use policies to encourage the use of alternative forms of transportation, increase pedestrian access and accessibility to community services and local destinations, reduce vehicle miles traveled within the County, and promote congestion management efforts.

The current zoning for the project site is R1, single-family residential. The proposed project would rezone the site to R-3, multi-family residential, with a proposed density of 11.6 units/acre. The proposed project would provide for the development of 142 residential dwellings within the urban core of the city with access to nearby commercial and transit services.

Existing transit service is located approximately 0.1 mile of the project site, along River Oaks Drive. A planned future "Class III" bikeway is located along Experimental Station Road, which extends along the northern boundary of the project site. "Class II" bikeways are also planned along the nearby segments of River Oaks Drive and Buena Vista Road. In addition, a "Class I" bike path is planned adjacent to the eastern boundary of the project site, extending southward beneath Highway 46 East, to the south towards Union Road. The specific location of this planned bike path has not yet been determined. The proposed site plan prepared for the project includes a "natural terrain" area within the eastern portion of the project site, which would accommodate the planned bike path. As such, the proposed project has been designed to provide ease of access to all existing and future planned transit, bicycle and pedestrian routes.

The above discussed project features would be anticipated to result in overall reductions in vehicle miles traveled (VMT) and associated mobile-source emissions. In addition, as discussed in Impact C below, the proposed project would not result in operational emissions that would exceed applicable SLOCAPCD-recommended significance thresholds. For these reasons, the proposed project would not conflict with or obstruct continued implementation of the CAP. **This impact is considered less than significant.**

b.	Violate any air quality standard or contribute substantially to an existing or projected air quality violation? (Source: 11)				
	Discussion: As noted in Impact C, below, so concentrations of pollutants that could advertise impact is considered potentially significant. discussions of air quality impacts attributable	sely affect r Refer to "Ir	nearby sensitive annual C" of this	receptors. As a report for more	result, this detailed

measures.

Potentially	Less Than	Less Than	No
Significant	Significant	Significant	Impact
Impact	with	Impact	_
-	Mitigation	-	
	Incorporated		

Mitigation Measures:

Implementation of Mitigation Measure AQ-1, as identified in "Impact C" below, would reduce this impact to a less-than-significant level.

c.	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone		
	precursors)? (Source: Attachment 4)		

Tables discussed in this section are included in Attachment 4 (Air Quality Study)

Discussion:

Short-term Construction Emissions

Construction-generated emissions are of temporary duration, lasting only as long as construction activities occur, but have the potential to represent a significant air quality impact. The construction of the proposed project would result in the temporary generation of emissions associated with site grading and excavation, paving, motor vehicle exhaust associated with construction equipment and worker trips, as well as the movement of construction equipment on unpaved surfaces. Short-term construction emissions would result in increased emissions of ozone-precursor pollutants (i.e., ROG and NO_X) and emissions of PM. Emissions of ozone-precursors would result from the operation of on- and off-road motorized vehicles and equipment. Emissions of airborne PM are largely dependent on the amount of ground disturbance associated with site preparation activities and can result in increased concentrations of PM that can adversely affect nearby sensitive land uses.

Construction of the proposed project would likely occur in two phases with initial development occurring within the western, approximately one-half, of the project site. Detailed construction information (i.e., equipment requirements and construction schedules) associated with each phase of development have not yet been identified. To be conservative, construction-generated emissions were quantified assuming that the entire project would be developed over an approximate 1.5 year period, based on the default modeling assumptions and construction phase durations identified in the CalEEMod computer program. This assumption assumes that project phases I and II would occur consecutively with total project buildout occurring prior to year 2014. Demolition, site preparation, grading and asphalt paving were assumed to occur during Phase I. Building construction for phases I and II were distributed over an estimated 300-day construction period, based on the default

construction schedule assumptions contained in the model. Equipment load factors were revised to match those identified in the Carl Moyer Program Guidelines (2011), per SLOAPCD recommendations. Asphalt paving emissions were quantified based on the area of asphalt paving and coating applications for parking stalls and handicap markers. No offsite hauling of fill material is anticipated to be required.

Estimated daily construction emissions of ROG, NO_X, PM₁₀ and PM_{2.5} associated with individual construction activities is presented in **Table 7**. Estimated maximum daily emissions in comparison to SLOAPCD significance thresholds, taking into account the potential overlapping of some construction activities, is summarized in **Table 8**. As indicated in **Table 8**, projected maximum daily emissions of ROG+NO_X would total approximately 88.79 lbs/day and emissions of DPM would total approximately 4.21 lbs/day. Daily construction-generated emissions would not exceed the SLOCAPCD's corresponding daily significance thresholds of 137 and 7 lbs/day, respectively.

Estimated quarterly construction-generated emissions are summarized in **Table 9** and compared to SLOAPCD's significance thresholds in **Table 10**. As indicated in **Table 10**, projected maximum quarterly emissions of ROG+NO_X would total approximately 2.13 tons/quarter, which would not exceed SLOAPCD's significance threshold of 2.5 tons/quarter. Emissions of DPM would total 0.09 tons/quarter and emissions of fugitive dust would total 0.2 tons/quarter. Quarterly construction-generated emissions of DPM and fugitive dust would not exceed the SLOCAPCD's corresponding quarterly significance thresholds of 0.13 and 2.5 tons/quarter, respectively.

Estimated quarterly construction-generated emissions are summarized in **Table 9** and compared to SLOAPCD's significance thresholds in **Table 10**. As indicated in **Table 10**, projected maximum quarterly emissions of ROG+NO_X would total approximately 2.13 tons/quarter, which would not exceed SLOAPCD's significance threshold of 2.5 tons/quarter. Emissions of DPM would total 0.09 tons/quarter and emissions of fugitive dust would total 0.2 tons/quarter. Quarterly construction-generated emissions of DPM and fugitive dust would not exceed the SLOCAPCD's corresponding quarterly significance thresholds of 0.13 and 2.5 tons/quarter, respectively.

As noted above, daily and quarterly construction-generated emissions would not exceed applicable SLOAPCD's significance thresholds. However, the proposed project is located near existing sensitive receptors, the nearest of which include residential dwellings located north of the project site, across Experimental Station Road. The SLOAPCD has determined that construction activities located within 1,000 feet of sensitive receptors may result in localized pollutant concentrations that could adversely affect nearby receptors. As a result, this impact is considered *potentially significant*.

Mitigation Measures

See AQ-1 in Mitigation Summary, Attachment 3.

Significance After Mitigation

The above SLOAPCD-recommended mitigation measures have been incorporated to ensure compliance with SLOAPCD's 20-percent opacity limit (APCD Rule 401) nuisance rule (APCD Rule 402) for the purpose of minimizing impacts to nearby sensitive receptors. Additional mitigation measures have also been included to encourage the reuse and recycling of construction materials to use of heavy-duty construction equipment meeting CARB's Tier 2 engine emission standards, and to minimize emissions of TACs during demolition. As noted earlier in this report, uncontrolled maximum daily and quarterly construction-generated emissions would not exceed SLOAPCD's significance thresholds. Implementation of the proposed mitigation measures would result in further reductions of construction-generated PM, including an estimated 60-percent reduction in fugitive PM. With mitigation, fugitive PM emissions would be reduced to approximately 7.3 lbs/day and approximately 0.8 tons/quarter. With mitigation, this impact would be considered *less than significant*.

Long-term Operational Emissions

Long-term operational emissions associated with the proposed project would be predominantly associated with mobile sources. To a lesser extent, emissions associated with area sources, such as landscape maintenance activities, as well as, use of electricity and natural gas would also contribute to increased emissions.

As previously discussed, it is anticipated that development of the proposed project would occur in two phases. However, detailed construction schedules for development of the proposed project have not yet been identified. As a result, this analysis assumed that construction of the two phases could potentially occur consecutively with total project buildout occurring in Year 2014. Given that a project-specific traffic analysis has not been prepared for this project and to ensure a conservative analysis, the trip-generation rates for the proposed project were based on default rates identified in the CalEEMod computer program for weekday, Saturday, and Sunday conditions. However, it is important to note that based on data obtained from the City of Paso Robles Circulation Element Update (2011), the average daily trip-generation rate for multi-family land uses located within the city is approximately 20 percent lower than the rates identified in the CalEEMod computer program. As a result, actual project-generated mobile-source emissions would likely be lower than indicated in this report. However, to ensure a conservative analysis, this analysis relies on the default trip-generation rates contained in the CalEEMod computer program. Vehicle trips lengths were based on the default assumptions contained in the model for urban conditions. According to the project applicant, the proposed project would not include wood-burning hearth devices. Emissions were quantified for both existing and proposed land uses. Emissions modeling assumptions and results are included in Appendix B of the Air Quality Study (Attachment 4).

Potentially	Less Than	Less Than	No
Significant	Significant	Significant	Impact
Impact	with	Impact	
	Mitigation		
	Incorporated		

Daily unmitigated operational emissions for existing and proposed land uses are summarized in **Table 11**. Annual unmitigated operational emissions are summarized in **Table 12**. Daily and annual unmitigated operational emissions in comparison to SLOAPCD significance thresholds are summarized in **Table 13**. It is important to note, however, that mitigation measures being incorporated to reduce GHG emissions, as discussed later in this report, would also result in reductions in operational emissions of criteria air pollutants. As indicated in **Table 13**, implementation of the GHG mitigation measures, as well as, anticipated reductions in mobile-source emissions due to the project's proximity to existing local transit, would result in further reductions in operational emissions. As noted in **Table 13**, operational emissions of criteria air pollutants would not exceed SLOAPCD's corresponding daily or annual significance thresholds. As a result, this impact is considered **less than significant**.

d.	Expose sensitive receptors to substantial pollutant concentrations?	\boxtimes	
	(Source: Attachment 4)		
	Discussion:		

The exposure of sensitive receptors to substantial pollutant concentrations may potentially occur during construction and long-term operation of the proposed project. Short-term exposure to TACs during the construction phase would be primarily associated with emissions from diesel-fueled off-road equipment. Long-term exposure to pollutant concentrations are typically associated with potential increases in localized concentrations of mobile-source CO at nearby congested roadway intersections and TACs associated with increased exposure to motor vehicle traffic, particularly among roadways that experience high volumes of diesel-fueled trucks. Potential increases in localized concentrations of pollutants associated with short-term construction and long-term operation of the proposed project are discussed separately, as follows:

Naturally-Occurring Asbestos

Naturally-occurring asbestos, which was identified as a TAC in 1986 by CARB, is located in many parts of California and is commonly associated with ultramafic rock. The project site is not located near any areas that are likely to contain ultramafic rock. As a result, risk of exposure to asbestos during the construction process would be considered less than significant. A map depicting the project site location in relation to areas likely to contain ultramafic rock is included in **Appendix A** of the Air Quality Study, Attachment 4.

Asbestos Material in Demolition

Demolition activities can have potential negative air quality impacts, including issues surrounding proper handling, demolition, and disposal of asbestos containing material (ACM). Asbestos containing materials could be encountered during demolition or remodeling of existing buildings. Asbestos can also be found in utility pipes/pipelines (transite pipes or insulation on pipes). Various regulatory requirements may apply, including the requirements stipulated in the National Emission Standard for Hazardous Air Pollutants (40CFR61, Subpart M - asbestos NESHAP). These requirements include but are not limited to: 1) notification to the APCD, 2) an asbestos survey conducted by a Certified Asbestos Inspector, and, 3) applicable removal and disposal requirements of identified ACM (SLOAPCD 2012).

Asbestos containing materials could be encountered during demolition of the existing structures, which could adversely impact nearby sensitive land uses. As a result, this impact is considered *potentially significant*.

Construction-Generated PM

Implementation of the proposed project would result in the generation of fugitive PM and diesel particulate matter (DPM) emitted during construction. Fugitive PM emissions are primarily associated with earth-moving and material handling activities, as well as, vehicle travel on unpaved and paved surfaces. Fugitive PM emissions can result in localized concentrations of PM that could adversely impact nearby sensitive receptors.

DPM emissions are largely associated with the use of off-road diesel equipment during site grading and excavation, paving and other construction activities, as well as, onroad vehicles traveling to and from the project site. Health-related risks associated with diesel-exhaust emissions are primarily associated with long-term exposure and associated risk of contracting cancer. For residential land uses, the calculation of cancer risk associated with exposure of to TACs are typically calculated based on a 70-year period of exposure. The use of diesel-powered construction equipment, however, would be temporary and episodic and would occur over a relatively large area.

As noted in Impact C, localized uncontrolled concentrations of fugitive PM and DPM could adversely affect nearby sensitive receptors. As a result, uncontrolled emissions of fugitive dust and DPM would be considered *potentially significant*.

Mitigation Measure:

Implement **AQ-1**, See Mitigation Measure Summary as identified in "Impact C" above.

Significance After Mitigation

Mitigation Measure AQ-1 includes measures for the control of localized pollutant concentrations, including emissions of fugitive PM, DPM, and asbestos containing materials during demolition. With implementation of **Mitigation Measure AQ-1**, this impact would be considered less than significant.

Long-term Air Quality Impacts

Toxic Air Contaminants

Implementation of the proposed project would not result in the long-term operation of any major onsite stationary sources of TACs, nor would project implementation result in a significant increase in diesel-fueled vehicles traveling along area roadways.

As noted in the Air Quality Study (Attachment 4), refer to **Table 2**, the ARB recommends that sensitive land uses not be located within 500 feet of a major roadway. A major roadway is defined as a roadway designated as a "freeway", urban roadways with volumes of 100,000 vehicles/day, or greater, or rural roadways with volumes of 50,000 vehicles/day, or greater. "Freeways" are generally defined as high-capacity facilities that primarily serve long-distance travel with access limited to interchanges that are typically spaced at least one mile apart. For proposed sensitive land uses located within 500 feet of a major roadway, a more detailed assessment of potential mobile-source health risks is recommended.

The nearest roadways within 500 feet of the project site include Highway 46, Experimental Station Road, and River Oaks Drive. No roadways designated as "freeway" are located within 500 feet of the project boundary (City of Paso Robles 2011). The nearest designated freeway is US 101 located approximately 1,700 feet west of the project site. The highest volume roadway in the project vicinity, Highway 46, averages approximately 26,000 vehicles/day (City of Paso Robles 2011). No roadways are located within 500 feet that would exceed the ARB's definition of a "major roadway." As a result, additional analysis of potential mobile-source health risks is not required. For these reasons, long-term exposure to TACs would be considered *less than significant*.

Mobile-Source Carbon Monoxide

Carbon monoxide is the primary criteria air pollutant of local concern associated with the proposed project. Under specific meteorological and operational conditions, such as near areas of heavily congested vehicle traffic, CO concentrations may reach unhealthy levels. If inhaled, CO can be adsorbed easily by the blood stream and can inhibit oxygen delivery to the body, which can cause significant health effects ranging from slight headaches to death. The most serious effects are felt by individuals susceptible to oxygen deficiencies, including people with anemia and those suffering from chronic lung or heart disease.

Potentially	Less Than	Less Than	No
Significant	Significant	Significant	Impact
Impact	with	Impact	
-	Mitigation	-	
	Incorporated		

Mobile-source emissions of CO are a direct function of traffic volume, speed, and delay. Transport of CO is extremely limited because it disperses rapidly with distance from the source under normal meteorological conditions. For this reason, modeling of mobile-source CO concentrations is typically recommended for sensitive land uses located near signalized roadway intersections that are projected to operate at unacceptable levels of service (i.e., LOS E or F). The nearest signalized intersection in relation to the project site is the intersection of Highway 46 and Buena Vista Road. This intersection was recently evaluated in the traffic analysis prepared by Penfield & Smith for the proposed Ayres Paso Robles, LTD. project Initial Study/Mitigated Negative Declaration (2012). Based on this analysis, the intersection of Highway 46 and Buena Vista Road currently operates at LOS B/C during pm/am peak hours, respectively. Implementation of the proposed project would not be anticipated to result in or contribute to unacceptable levels of service (i.e., LOS E, or worse) at this intersection. In addition, implementation of the proposed project would not result in localized emissions of CO that would exceed SLOAPCD's localized CO significance threshold of 550 lbs/day. For the reasons discussed above and given the relatively low background CO concentrations in the project area, this impact would be considered *less than significant*.

e.	Create objectionable odors affecting a substantial number of people? (Source: 11)		
	Discussion:		

The occurrence and severity of odor impacts depends on numerous factors, including: the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of the receptors. While offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress among the public and often generating citizen complaints to local governments and regulatory agencies. Projects with the potential to frequently expose members of the public to objectionable odors would be deemed to have a significant impact.

The proposed project would not result in the installation of any equipment or processes that would be considered major odor-emission sources. However, construction of the proposed project would involve the use of a variety of gasoline or diesel-powered equipment that would emit exhaust fumes. Exhaust fumes, particularly diesel-exhaust, may be considered objectionable by some people. In addition pavement coatings and architectural coatings used during project construction would also emit temporary odors. However, construction-generated emissions would occur intermittently throughout the workday and would dissipate rapidly within increasing distance from the source. As a result, short-term construction activities would not expose a substantial number of people to frequent odorous emissions. For these reasons, potential exposure of sensitive receptors to odorous emissions would be considered *less than significant*.

Potentially Less Significant Significant Impact wi Mitig

Less Than Significant with Mitigation Incorporated Less Than Significant Impact Impact

No Impact

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

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				
	(Source: Attachment 6,7&8)				
	Discussion (a-f):				

a. The property currently consists of five parcels, each with existing residences and out-buildings. Structures on these parcels include existing single family homes or trailers, barns, garages, sheds, and fences. These parcels also have existing landscaping, driveways, materials and equipment storage, and debris. Portions of these parcels are currently used for pasture by horses, goats, and chickens. Various types of fencing surround each parcel. All areas of the proposed project have been substantially disturbed for human use.

There is an isolated wetland adjacent to Experimental Station Road that will be completely removed. The wetland was created by residential nuisance water. A mitigation measure has been added that will require that a new bio-swale be created along with the creation of a storm water system to handle nuisance water from the project. See Attachment 3, Mitigation Measures Summary. There are no creeks, streams or other surface water resources located within the disturbed project area.

The property is located within a San Joaquin Kit Fox (SJKF) migration corridor and the site grassland provides suitable habitat for this species. The SJKF is listed by the State as a "threatened" species, and Federally listed as an "endangered" species. The SJKF and their habitat are protected under the Endangered Species Act (ESA). Due to the site's isolated location in the migration corridor, construction of the project has a low potential to result in direct take of kit fox, however the potential can be reduced to a less than significant level through implementation of standard construction-related kit fox protection measures. Impacts to their habitat would be considered significant unless mitigated. The project incorporates on-site mitigation as well as off-site mitigation. A Kit Fox Habitat Evaluation was prepared for this project. It resulted in recommended habitat mitigation of 2:1. The applicant will coordinate with the City and the California Department of Fish and Game to execute appropriate mitigation as provided in Attachment 3, Mitigation Measures Summary.

There are 23 oak trees that are located within the project area. There are another 30 oak trees located on the property, but out of the project area that will not be impacted by this project. Of the 23 oak trees in the project area, 3 trees are proposed to be removed, 1 of the 3 trees is dead. An Arborist Report has been provided that provides mitigation measures for the replacement trees for the two removed and the necessary mitigation measures to protect the remaining trees during construction and on-going operation of the apartment complex. Impacts to the oak trees will be less than significant with mitigation measures incorporated.

There are no Habitat Conservation Plans or other related plans applicable in the City of Paso Robles.

v.	CULTURAL RESOURCES: Would the project	ect:		
a.	Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?			
b.	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?			
c.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			
d.	Disturb any human remains, including those interred outside of formal cemeteries?		\boxtimes	
	(Source: Attachment 8)			
	Discussion (a-d):			

There are no historic resources (as defined), located on the site. There are also no archaeological or paleontological resources known to be present on the site or in the near vicinity. Since the property is not located within proximity to a creek or river or known cultural resource it is unlikely that there are resources located on the site. Additionally, the property currently consists of five parcels, each with existing residences and out-buildings. Structures on these parcels include existing single family homes or trailers, barns, garages, sheds, and fences. These parcels also have existing landscaping, driveways, materials and equipment storage, and debris. Portions of these parcels are currently used for pasture by horses, goats, and chickens. Various types of fencing surround each parcel. All areas of the proposed project have been substantially disturbed for human use.

There are no known human remains on the project site, however if human remains are found during site disturbance, all grading and/or construction activities shall stop, and the County Coroner shall be contacted to investigate.

Therefore, this project will result in less than significant impacts on cultural resources.

VI. GEOLOGY AND SOILS: Would the project: a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the \boxtimes П 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. (Sources: 1, 2, & 3) Discussion: The potential for and mitigation of impacts that may result from fault rupture in the project area are identified and addressed in the General Plan EIR, pg. 4.5-8. There are two known fault zones on either side of the Salinas Rivers valley. The Rinconada Fault system runs on the west side of the valley, and grazes the City on its western boundary. The San Andreas Fault is on the east side of the valley and is situated about 30 miles east of Paso Robles. The City of Paso Robles recognizes these geologic influences in the application of the California Building Code (CBC) to all new development within the City. Review of available information and examinations indicate that neither of these faults is active with respect to ground rupture in Paso Robles. Soils and geotechnical reports and structural engineering in accordance with local seismic influences would be applied in conjunction with any new development proposal. Based on standard conditions of approval, the potential for fault rupture and exposure of persons or property to seismic hazards is not considered significant. There are no Alquist-Priolo Earthquake Fault Zones within City limits. ii. Strong seismic ground shaking? \boxtimes (Sources: 1, 2, & 3) Discussion: The proposed project will be constructed to current CBC codes. The General Plan EIR identified impacts resulting from ground shaking as less than significant and provided mitigation measures that will be incorporated into the design of this project including adequate

structural design and not constructing over active or potentially active faults. Therefore, impacts that may result from seismic ground shaking are considered less than significant.

			Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	iii.	Seismic-related ground failure, including liquefaction? (Sources: 1, 2 & 3)				
		Discussion: Per the General Plan EIR that have a low potential for liquefaction and soil conditions. To implement the impact, the City has a standard condition which include site-specific analysis of construction, and incorporation of the project.	on or other type EIR's mitigati on to require so liquefaction po	e of ground failu on measures to abmittal of soils otential for all bu	are due to seism reduce this pote and geotechnic ailding permits	nic events ential cal reports, for new
	iv.	Landslides?			\boxtimes	
		Discussion: Per the General Plan Safe a low-risk area for landslides. Therefore significant.	•			_
b.		sult in substantial soil erosion or the s of topsoil? (Sources: 1, 2, & 3)			\boxtimes	
	suc issu gra tha	scussion: Per the General Plan EIR the ch, no significant impacts are anticipated uance of building permits that will evaluating and retaining walls proposed. This t will ensure that potential impacts due all be required to be approved by the Cit	d. A geotechnicate the site spe s study will det to soil stability	cal/ soils analys: ecific soil stabilitermine the nece will not occur.	is will be requir ty and suitability ssary grading to An erosion cor	red prior to ty of echniques ntrol plan
c.	is uns pot land	located on a geologic unit or soil that unstable, or that would become stable as a result of the project, and centially result in on- or off-site dslide, lateral spreading, subsidence, unefaction or collapse?				
	Dis	scussion: See response to item a.iii, abo	ove.			
d.	in T Bui	located on expansive soil, as defined Fable 18-1-B of the California ilding Code, creating substantial risks life or property?				
	Dis	scussion: See response to item a.iii, abo	ove.			

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				
	Discussion: The development will be continued therefore there would not be impacts related to the continued of the continued		•	vastewater syste	em,
VI	I. GREENHOUSE GAS EMISSIONS:	Would the proj	ject:		
a.	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?				
b.	Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gasses?		\boxtimes		
	(Source: Attachment 4)				
	Discussion (a-b):				
	The Tables referenced in the sections belo Attached as Attachment 4.	ow are included	in the Air Quali	ty & GHG Stud	ly,
	Estimated GHG emissions attributable to increases of CO ₂ from mobile sources. T				

Short-term Greenhouse Gas Emissions

Estimated increases in GHG emissions associated with construction of the proposed project are summarized in **Table 16**. Based on the modeling conducted, annual emissions of greenhouse gases associated with construction of the proposed project would range from approximately 323 to 535 MTCO₂e/year. In total, construction of the proposed project would generate approximately 859 MTCO₂e, which averages approximately 17 MTCO₂e/year when amortized over the assumed 50-year life of the project. There would also be a small amount of GHG emissions from waste generated during construction; however, this amount is speculative. Actual emissions may vary, depending on the final construction schedules, equipment required, and activities conducted.

N₂O, would also be generated. Short-term and long-term GHG emissions associated with the

development of the proposed project are discussed in greater detail, as follows:

Long-term Greenhouse Gas Emissions

Estimated long-term increases in GHG emissions associated with the proposed project are summarized in **Table 17**. Based on the modeling conducted, operational GHG emissions would be predominantly associated with mobile sources, which would constitute roughly 75 percent of total project-generated GHG emissions. To a lesser extent, GHG emissions would also be associated with energy use, solid waste generation, as well as, water use and conveyance.

As noted in **Table 17**, the proposed project would generate a total of approximately 1,354 MTCO₂e/year at buildout. Project-generated GHG emissions would exceed the SLOAPCD's significance threshold of 1,150 MTCO₂e/year. Project-generated GHG emissions would be considered to have a potentially significant impact on the environment, which could conflict with implementation of applicable plans, policies and regulations pertaining to the reduction of GHG emissions, including AB32.

Mitigation Measure

See GHG-1 in Mitigation Summary, Attachment 3.

Significance After Mitigation

Estimated GHG emissions, with implementation of the above measures, are summarized in **Table 18**. It is important to note that the proposed project has been designed to incorporate many of the features that have been identified as mitigation, such as the prohibited use of wood-burning hearth devices and incorporation of features to enhance pedestrian and bicycle use. It is also important to

note that the proposed pool and clubhouse have been designed to utilize energy to be obtained from a solar photovoltaic (PV) system. However, the size of the PV system has not yet been identified and, therefore, was not included in this analysis. These features have been included as mitigation to ensure implementation during project construction. As noted, implementation of the proposed mitigation measures would reduce buildout operational GHG emissions to approximately 1,043 MTCO₂e/year; an estimated reduction of approximately 311 MTCO₂e/year. With implementation of the proposed mitigation measures, this impact would be considered less than significant.

VI	II. HAZARDS AND HAZARDOUS MATER	RIALS: V	Vould the project:		
a.	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				
	Discussion: The project would use industry-st which would be stored in compliance with all include use of, transport, storage or disposal or	applicable	e safety requireme	nts. The proje	ect does not

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	hazard to the public or environment.				
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?				\boxtimes
	Discussion: See VIII a. above.				
c.	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				\boxtimes
	Discussion: The proposed apartment compimpact schools within the vicinity.	olex project wil	l not emit hazaro	lous materials a	and will not
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?				\boxtimes
	Discussion: The project site is not identifi	ed as a hazardo	ous site per state	Codes.	
e.	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				
f.	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				
	Discussion: (e. & f.) The project site is no	ot located with	in an airport safe	ty zone.	

		Significant Impact	Significant with Mitigation Incorporated	Significant Impact	No Impact
g.	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				
	Discussion: The project will not impair or plans.	r interfere with	adopted emerge	ncy response ro	outes or
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?				
	Discussion: The project is not in the vicin	ity of wildland	fire hazard area	s.	
IX	. HYDROLOGY AND WATER QUALIT	Γ Υ: Would the	e project:		
a.	Violate any water quality standards or waste discharge requirements?				
	Discussion: The proposed project is desivarious low-impact development (LID) impervious surfaces, preserve existing veg bioretention through implementation of maintained and discharge requirements. Therefore, impacts to water quality and discharge requirements.	features. The getation, and prothese measures will be in com	ne project was omote groundwas. Thus, water appliance with S	been designed ater recharge by quality standa tate and local	to reduce employing ards will be
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., Would the production rate of pre-existing nearby wells drop to a level which would not support existing land uses or planned uses for which permits have been granted)? Would decreased rainfall infiltration or groundwater recharge reduce stream baseflow? (Source: 7)				

Potentially	Less Than	Less Than	No
Significant	Significant	Significant	Impact
Impact	with	Impact	
	Mitigation		
	Incorporated		

Discussion: The proposed project would be on the City's municipal water supply system, therefore it could not individually impact nearby well production. The site is designed to reduce impervious surfaces where possible and to direct surface drainage to onsite retention systems to facilitate groundwater recharge.

The City has sufficient groundwater resource capacity in combination with surface water resources to adequately serve this project. The proposed project complies with the RMF-12 General Plan designation, which anticipates a multi-family project with up to 12-units per acre, such as the proposed project. Therefore, this project would not substantially deplete groundwater supplies or interfere with groundwater recharge such that there would be a net deficit in aquifer volume or lowering of the groundwater basin, and impacts to groundwater resources would be less than significant.

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? (Source: 10)				
	Discussion: The drainage pattern on the site this project since the project largely maintain and drainage will be maintained on the project historic drainage areas for percolation in biproperty. There are no streams, creeks or refrom this project or result in erosion or site patterns and facilities would less than significant	ns the existi ect site. Ad oswale drai rivers on or ltation on-	ng, historic draina ditionally, surface nage features at the near the project s	nge pattern of flow would be ne southwest of ite that could	the property, be directed to corner of the be impacted
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? (Source: 10)				

Discussion: See IX c. above. Drainage resulting from development of this property will be maintained onsite and will not contribute to flooding on- or off-site. Thus, flooding impacts from the project are considered less than significant.

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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? (Source: 10)				
	Discussion: As noted in IX a. above, surroffsite drainage facilities. Additionally, pollutants before they enter the groundw from this project would be less than significant	onsite LID dra ater basin. Th	ainage facilities	will be design	ed to clean
f.	Otherwise substantially degrade water quality?				
	Discussion: See answers IX $a e$. This propulation quality.	roject will resu	lt in less than sig	nificant impact	s to water
g.	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				
	Discussion: The site is not within or near result in flood related impacts to housing.	a flood hazard	area. Therefore t	his project cou	ld not
h.	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				
	Discussion: See IX h. above.				
i.	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				
	Discussion: See IX h. above. Additionally	y, there are no	levees or dams in	n the City.	

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
j.	Inundation by mudflow?				
	Discussion: In accordance with the Paso on or near the project site. Therefore, the		•		
k.	Conflict with any Best Management Practices found within the City's Storm Water Management Plan?				
	Discussion: The project will implement Management Practices, and would therefore				Plan - Best
1.	Substantially decrease or degrade watershed storage of runoff, wetlands, riparian areas, aquatic habitat, or associated buffer zones?				
	Discussion: The project will incorporate site. There is no wetland or riparian are impacts to aquatic habitat. Therefore, t resources.	eas in the near v	ricinity, and the	project could r	not result in
X.	LAND USE AND PLANNING: Would to	the project:			
a.	Physically divide an established community?				\boxtimes
	Discussion: The project is largely surrou located to the north of the site, condor proposed small-lot single family resident not physically divide an established common proposed small-lot single family resident not physically divide an established common proposed small-lot single family resident not physically divide an established common proposed small-lot single family resident not physically divide an established common proposed small-lot single family resident not physically divide an established common proposed small-lot single family resident not physically divide an established common proposed small-lot single family resident not physically divide an established common proposed small-lot single family resident not physically divide an established common proposed small-lot single family resident not physically divide an established common proposed small-lot single family resident not physically divide an established common proposed small-lot single family resident not physically divide an established common physical physical divide an established common physic	miniums located ial project adjac	d on the adjace	nt site to the	east, and a
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?				

Discussion: The project scope includes an amendment to the Zoning Code that would change the current R1 zoning to R3 to bring the zoning into compliance with the General Plan Land Use designation of RMF-12. It also includes an amendment to the Borkey Area Specific Plan for consistency. The proposed change of land use designation and zoning would complement and be compatible with the surrounding land.

c.	Conflict with any applicable habitat conservation plan or natural community conservation plan?				
	Discussion: There are no habitat conservation established in this area of the City. Therefore				plans
ΧI	. MINERAL RESOURCES: Would the pro	oject:			
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? (Source: 1)				
	Discussion: There are no known mineral res	sources at th	is project site.		
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? (Source: 1)				
	Discussion: There are no known mineral res	sources at th	is project site.		
	I. 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? (Source: 1)				
	Discussion: A Noise Impact Analysis was a result of the location of this project to lindoor and outdoor noise levels for the apar	Highway 46	East, that mitiga	tion is necess	ary to bring

Summary.

be conditioned to execute appropriate mitigation as provided in Attachment 3, Mitigation Measures

Potentially	Less Than	Less Than	No
Significant	Significant	Significant	Impact
Impact	with	Impact	
-	Mitigation	-	
	Incorporated		

The Noise Analysis also indicated that mitigation is necessary if any of the proposed units would be within 160-feet to any loading or unloading area for the San Antonio Winery site, to the east. Since nearest unit would be over 350-feet from the winery service driveway, no mitigation is necessary related to loading/unloading noise for the winery.

b.	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?				
	Discussion: The project may result in short the however, the construction noise is not antice. Therefore, impacts from groundborne vibration	ipated to be ex	cessive nor ope	erate in evenir	ng hours.
c.	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				
	Discussion: The proposed apartment project therefore not result in contributing permanent				
d.	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?				
	Discussion: See XII a. – c. above.				
e.	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? (Sources: 1, 4)				
	Discussion: The project is not located within will thus not be impacted by airport related no	•	subject to an air	port land use p	olan, and

ΧI	II. POPULATION AND HOUSING: Would	the project:		
a.	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? (Source: 1)			
	Discussion: The proposed project is consister acre, therefore the project will not induce substantial.		e plan of 12 ui	nits per
b.	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?			
c.	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?		\boxtimes	
	Discussion (b-c): There are five existing hom to accommodate this project. However 142 re project will not displace a substantial number	sidential units w		

Potentially Less Than Less Than No Significant Significant Significant Impact Mitigation Incorporated Impact

ass ph	XIV. PUBLIC SERVICES: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:					
a.	Fire protection? (Sources: 1,10)					
b.	Police protection? (Sources: 1,10)			\boxtimes		
c.	Schools?			\boxtimes		
d.	Parks?			\boxtimes		
e.	Other public facilities? (Sources: 1,10) Discussion (a-e): Since this project is con addition of the 142 units will not result in	n a significant	demand for ad	ditional new,	and the	
	incremental impacts to services can be miti Therefore, impacts that may result from thi significant.	0 1	. •			
XV	XV. RECREATION					
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?					

No Impact
pen space cludes on- Based on rks, other
ewalk and Plan. The the City's

Discussion (b): The traffic study prepared for this project by LSA evaluated project related traffic impacts for existing plus-project traffic conditions. The study determined that no project-specific impacts are projected for either Buena Vista Drive or the 3 nearby intersections, including N. River Rd/River Oaks Dr., Buena Vista/Experimental Station Road, and SR 46/Buena Vista Dr.

Based on the LOS analysis of the three study areas intersections, a significant intersection impact is forecast at Buena Vista Drive/SR-46. The project will be required to pay transportation impact fees established by City Council in affect at the time of occupancy to mitigate future impacts with planned improvements by the City and Caltrans.

Based on the proposed 141 unit multi-family project (and 1 care taker unit) being in compliance with the City's General Plan Land Use Element, and based on this projects requirement to pay transportation impact fees, the impacts of this project related to Transportation and Traffic, will be less than significant.

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?				
	Discussion: The project site is not located with	thin an airport la	and use planning	g area.	
d.	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				\boxtimes
	Discussion: There are no hazardous design fe this project.	atures associate	d with, planned	for or will res	ult from
e.	Result in inadequate emergency access?				
	Discussion: The project will not impede emergency access safety features and to City 6	•	_	in compliance	with all
f.	Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?				\boxtimes
	Discussion: The project incorporates multi-m lanes, sidewalks, walkways and a transit stop.				

plans regarding these facilities.

XV	/II. UTILITIES AND SERVICE SYSTEMS:	Would the proje	ect:		
a.	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				\boxtimes
	Discussion: The project will comply with required by the City, RWQCB and the State. wastewater treatment from this project.				
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?				
	Discussion: Per the City's General Plan EIR, Management Plan, the City's water and wa including planned facility upgrades, to provi resulting from this project. Therefore, this pracilities.	astewater treatr de water neede	nent facilities ed for this proj	are adequately ect and treat	y sized, effluent
c.	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				
	Discussion: All new stormwater resulting from will not enter existing storm water drainag facilities. Therefore, the project will not impact	e facilities or	require expans	ion of new o	
d.	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				
	Discussion: As noted in section IX on Hydrol project than planned for under existing zonin resource entitlements available and will not recovered.	ng. The project	et can be serve	d with existin	ig water

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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 projects projected demand in addition to the providers existing commitments?				
	Discussion: Per the City's SSMP The City serve this project as well as existing comm		treatment facilit	y has adequate	capacity to
f.	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				\boxtimes
	Discussion: Per the City's Landfill Master accommodate construction related and open				y to
g.	Comply with federal, state, and local statutes and regulations related to solid waste?				\boxtimes
	Discussion: The project will comply with	all federal, sta	te, and local soli	d waste regulati	ions.
XV	/III. MANDATORY FINDINGS OF SIG	NIFICANCE			
a.	Does the project 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?				
	Discussion: As noted within this enviro	onmental docu	ment, and with	the mitigation	n measures

Potentially	Less Than	Less Than	No
Significant	Significant	Significant	Impact
Impact	with	Impact	
	Mitigation		
	Incorporated		

outlined in the document, the projects impacts related to habitat for wildlife species (San Joaquin Kit Fox) will be less than significant with mitigation incorporated. There will be no impact to fish habitat as well as no impact to fish and wildlife populations. The site is routinely maintained and mowed, so impact to fish, wildlife, of plant habitat is less than significant.

b.	Does the project 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)?				
	Discussion: The project will not have impacts considerable.	that are individ	dually limited, b	out cumulativel	у
c.	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				
	Discussion: The project will not cause substan or indirectly.	tial adverse effe	ects on human b	eings, either d	irectly

EARLIER ANALYSIS AND BACKGROUND MATERIALS.

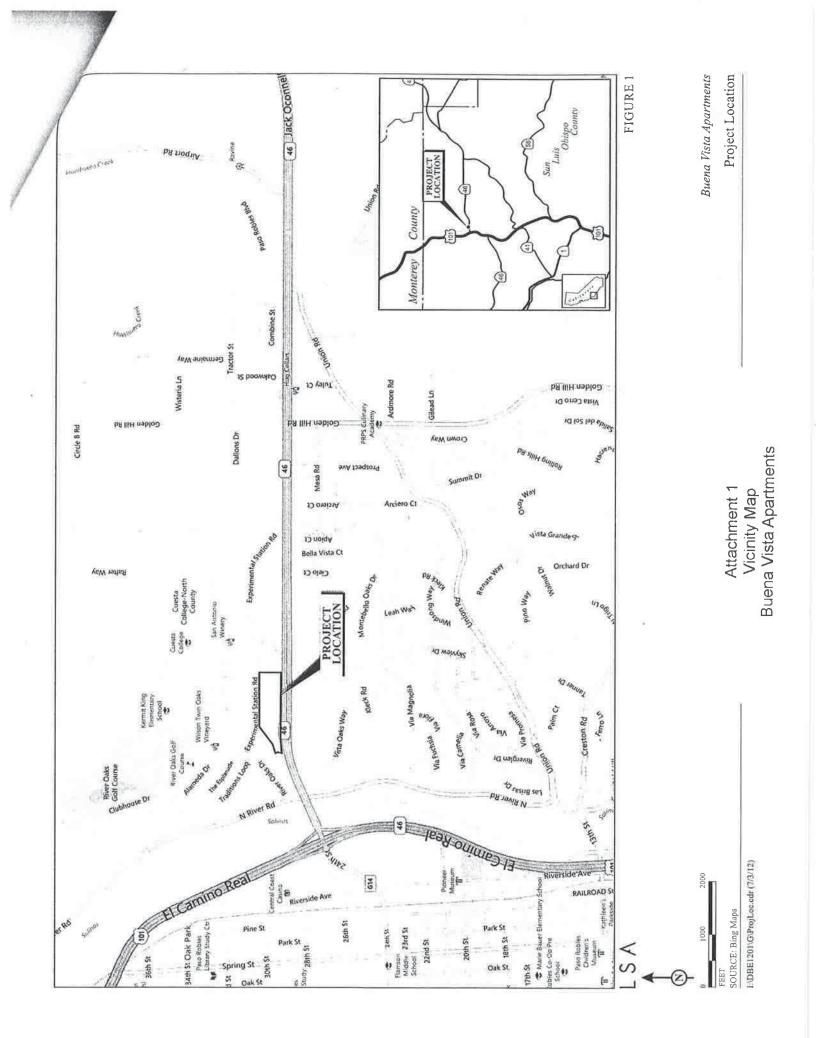
Earlier analyses may be used where, pursuant to tiering, program EIR, or other CEQA process, one or more effects have been adequately analyzed in an earlier EIR or negative declaration. Section 15063 (c)(3)(D).

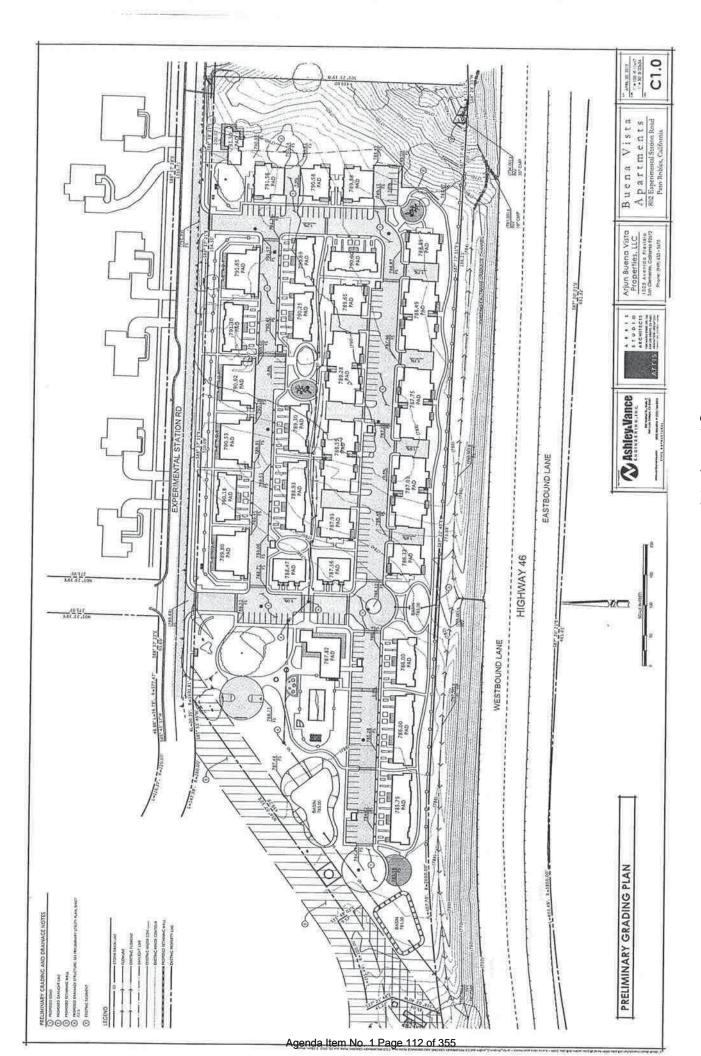
Earlier Documents Prepared and Utilized in this Analysis and Background / Explanatory Materials

Reference #	Document Title	Available for Review at:
1	City of Paso Robles General Plan	City of Paso Robles Community Development Department 1000 Spring Street Paso Robles, CA 93446
2	City of Paso Robles Zoning Code	Same as above
3	City of Paso Robles Environmental Impact Report for General Plan Update	Same as above
4	2005 Airport Land Use Plan	Same as above
5	City of Paso Robles Municipal Code	Same as above
6	City of Paso Robles Water Master Plan	Same as above
7	City of Paso Robles Urban Water Management Plan 2005	Same as above
8	City of Paso Robles Sewer Master Plan	Same as above
9	City of Paso Robles Housing Element	Same as above
10	City of Paso Robles Standard Conditions of Approval for New Development	Same as above
11	San Luis Obispo County Air Pollution Control District Guidelines for Impact Thresholds	APCD 3433 Roberto Court San Luis Obispo, CA 93401
12	San Luis Obispo County – Land Use Element	San Luis Obispo County Department of Planning County Government Center San Luis Obispo, CA 93408
13	USDA, Soils Conservation Service, Soil Survey of San Luis Obispo County, Paso Robles Area, 1983	Soil Conservation Offices Paso Robles, Ca 93446

Attachments:

- 1. Vicinity Map
- 2. Site Plan
- 3.
- 4.
- Mitigation Measure Summary
 Air Quality and GHG Assessment
 Biological Study with San Joaquin Kit Fox Evaluation 5.
- Traffic Impact Analysis **6.**





Attachment 2 Site Plan Buena Vista Apartments

Mitigation Measures Summary

Air Quality:

AQ-1: In accordance with SLOAPCD-recommendations, projects with grading areas that are greater than 4 acres or are within 1,000 feet of any sensitive receptor shall implement the following mitigation measures to manage fugitive dust emissions such that they do not exceed the APCD 20-percent opacity limit (APCD Rule 401) and do not impact offsite areas prompting nuisance violations (APCD Rule 402) (Mutziger 2012):

Fugitive Dust:

- a. Reduce the amount of the disturbed area where possible;
- b. Use of water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site. Increased watering frequency would be required whenever wind speeds exceed 15 mph. Reclaimed (non-potable) water should be used whenever possible;
- c. All dirt stock pile areas should be sprayed daily as needed;
- d. Permanent dust control measures identified in the approved project revegetation and landscape plans should be implemented as soon as possible, following completion of any soil disturbing activities:
- e. Exposed ground areas that are planned to be reworked at dates greater than one month after initial grading should be sown with a fast germinating, non-invasive, grass seed and watered until vegetation is established;
- f. All disturbed soil areas not subject to revegetation should be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the APCD;
- g. All roadways, driveways, sidewalks, etc. to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used;
- h. Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site:
- i. All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (minimum vertical distance between top of load and top of trailer) in accordance with CVC Section 23114:
- j. Install wheel washers where vehicles enter and exit unpaved roads onto streets, or wash off trucks and equipment leaving the site;
- k. Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers with reclaimed water should be used where feasible;
- I. All PM₁₀ mitigation measures required shall be shown on grading and building plans; and,
- m. The contractor or builder shall designate a person or persons to monitor the fugitive dust emissions and enhance the implementation of the measures as necessary to minimize dust complaints, reduce visible emissions below 20-percent opacity, and to prevent transport of dust offsite. Their duties shall include holidays and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the APCD Compliance Division prior to the start of any grading, earthwork or demolition.

<u>Diesel-Exhaust Particulate Matter</u>: To help reduce sensitive receptor emissions impact of diesel vehicles and equipment used to construct the project, the applicant shall implement the following idling control techniques:

California Diesel Idling Regulations

- n. On-road diesel vehicles shall comply with Section 2485 of Title 13 of the California Code of Regulations. This regulation limits idling from diesel-fueled commercial motor vehicles with gross vehicular weight ratings of more than 10,000 pounds and licensed for operation on highways. It applies to California and non-California based vehicles. In general, the regulation specifies that drivers of said vehicles:
 - 1. Shall not idle the vehicle's primary diesel engine for greater than 5 minutes at any location, except as noted in Subsection (d) of the regulation; and,
 - 2. Shall not operate a diesel-fueled auxiliary power system (APS) to power a heater, air conditioner, or any ancillary equipment on that vehicle during sleeping or resting in a sleeper berth for greater than 5.0 minutes at any location when within 1,000 feet of a restricted area, except as noted in Subsection (d) of the regulation.
- o. Off-rood diesel equipment shall comply with the 5-minute idling restriction identified in Section 2449(d)(2) of the California Air Resources Board's In-Use off-Road Diesel regulation.
- p. Signs must be posted in the designated queuing areas and job sites to remind drivers and operators of the state's 5-minute idling limit.
- q. The specific requirements and exceptions in the regulations can be reviewed at the following websites: www.arb.ca.gov/msprogltruck-idlingl2485.pdf and www.arb.ca.gov/regact/2007/ordiesl07/frooal.pdf;
- r. In addition to the State required diesel idling requirements, the project applicant shall comply with these more restrictive requirements to minimize impacts to nearby sensitive receptors:
 - 1. Staging and queuing areas shall not be located within 1,000 feet of sensitive receptors;
 - 2. Diesel idling within 1,000 feet of sensitive receptors shall not be permitted;
 - 3. Use of alternative fueled/electrically-powered equipment is recommended; and
 - 4. Signs that specify the no idling areas must be posted and enforced at the site.
 - 5. Any proposed construction truck routes should be evaluated and selected to ensure routing patterns have the least impact to residential dwellings and other sensitive receptors, such as schools, parks, day care centers, nursing homes, and hospitals.
 - 6. Fuel all off-road and portable diesel powered equipment with CARB-certified motor vehicle diesel fuel (non-taxed version suitable for use off-road);

7. Use diesel construction equipment meeting CARB's Tier 2 certified engines or cleaner off-road heavy-duty diesel engines, and comply with the State off-Road Regulation (CCR Title 13, Article 4.8, Chapter 9, Section 2449);

Additional Measures: The following additional mitigation measures shall also be implemented:

- s. To the extent practical, reuse and recycle construction waste (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard.
- t. Prior to the issuance of grading permits, the applicant shall demonstrate through updated modeling that the actual construction fleet that is secured will not exceed the construction phase thresholds when the construction mitigation is implemented. Should the actual fleet exceed any threshold, then phasing changes or other mitigation shall be proposed and approved by the APCD such that the project will be below the construction phase air quality thresholds of significance of 2.5 tons/quarter ROG+NOx.
- u. Demolition of existing structures shall comply with applicable requirements, as stipulated in the National Emission Standard for Hazardous Air Pollutants (40CFR61, Subpart M-Asbestos NESHAP). These requirements include, but are not limited to: 1) notification requirements to the APCD, 2) asbestos survey conducted by a Certified Asbestos Inspector, and 3) applicable removal and disposal requirements of identified ACM.
- v. The contractor or builder shall use paints/coatings that comply with or that have a lower VOC content than specified in APCD Rule 433. APCD Rule 433 is available at website url: http://www.arb.ca.gov/drdb/slo/cur.htm.

Biological Resources:

- **BR-1.** Nuisance water will be piped into the project's stormwater system. A new bioswale will be created to filter nuisance water from the subject parcel.
 - <u>A.</u> The bioswale is located along the southern property boundary, and will be part of the project's linear landscaping and stormwater detention system.
 - <u>B.</u> Prior to issuance of a grading permit for work that would affect the wetland and swale feature, the Regional Water Quality Control Board and the California Department of Fish and Game will be contacted to determine if permits to impact the nuisance water wetland are required under the Porter Cologne Act, Clean Water Act, or Fish and Game Code. If permits are required, applications will be made to appropriate agencies and approvals received.
- **BR-2.** Tree canopies and trunks within 50 feet of proposed disturbance zones should be mapped and numbered by a certified arborist or qualified biologist and a licensed land surveyor. Data for each tree should include date, species, number of stems, diameter at breast height (DBH) of each stem, critical root zone (CRZ) diameter, canopy diameter, tree height, health, habitat notes, and nests observed.
- **BR-3.** An oak tree protection plan shall be prepared and approved by the City of Paso Robles.
- **BR-4.** Impacts to the oak canopy or critical root zone (CRZ) should be avoided where practicable. Impacts include pruning, any ground disturbance within the dripline or CRZ of the tree (whichever distance is greater), and trunk damage.

- **BR-5.** Impacts to oak trees shall be assessed by a licensed arborist. Mitigations for impacted trees shall comply with the City of Paso Robles tree ordinance.
- **BR-6.** Replacement oaks for removed trees must be equivalent to 25% of the diameter of the removed tree(s). For example, the replacement requirement for removal of two trees of 15 inches DBH (30 total diameter inches), would be 7.5 inches (30" removed x 0.25 replacement factor). This requirement could be satisfied by planting five 1.5 inch trees, or three 2.5 inch trees, or any other combination totaling 7.5 inches. A minimum of two 24 inch box, 1.5 inch trees shall be required for each oak tree removed.
- **BR-7.** Replacement trees should be seasonally maintained (browse protection, weed reduction and irrigation, as needed) and monitored annually for at least 7 years. Replacement trees shall be of local origin, and of the same species as was impacted or removed.
- **BR-8.** Within one week of ground disturbance activities, **if work occurs between March 15 and August 15**, nesting bird surveys shall be conducted. If surveys do not locate nesting birds, construction activities may be conducted. If nesting birds are located, no construction activities shall occur within 100 feet of nests until chicks are fledged. A pre-construction survey report shall be submitted to the lead agency immediately upon completion of the survey. The report shall detail appropriate fencing or flagging of the buffer zone and make recommendations on additional monitoring requirements. A map of the Project site and nest locations shall be included with the report. The Project biologist conducting the nesting survey shall have the authority to reduce or increase the recommended buffer depending upon site conditions.
- **BR-9.** Occupied nests of special status bird species shall be mapped using GPS or survey equipment. Work shall not be allowed within the 100 foot buffer while the nest is in use. The buffer zone shall be delineated on the ground with orange construction fencing or flagging where it overlaps work areas
- **BR-10.** Occupied nests of special status bird species that are within 100 feet of project work areas shall be monitored at least every two weeks through the nesting season to document nest success and check for project compliance with buffer zones. Once burrows or nests are deemed inactive and/or chicks have fledged and are no longer dependent on the nest, work may commence in these areas.
- **BR-11.** Pre-construction surveys for burrowing owls shall be conducted not more than 14 days prior to any work that affects habitat containing burrows. The pre-construction surveys shall be conducted in a manner sufficient to determine no burrowing owls are present in the work areas. Pre-construction surveys shall be conducted throughout the year, when work is proposed, to account for breeding, wintering, and transient owls.
- **BR-12.** If burrowing owls are present in the work areas during the breeding season (February 1 through August 31), the burrows must be monitored to determine if a breeding pair is present. If a breeding pair is confirmed, the burrow must be avoided and protected from impacts via a 250 foot setback from the burrow. If a breeding pair is not present, passive relocation may be used. If burrowing owls are present during the non-breeding season, a passive relocation effort, such as a one-way door, may be implemented. Monitoring and mitigation must be conducted under guidance from a qualified wildlife biologist. Mitigation and protection procedures should incorporate recommendations outlined in the burrowing owl protocol survey guidelines (California Burrowing Owl Consortium 1993).

- **BR-13.** A focused pre-construction survey for legless lizard shall be conducted within the project site prior to construction Pre-construction surveys shall be conducted where ground disturbance will occur in potential legless lizard habitat, around existing trees and shrubs where soils are friable. The pre-construction survey shall be conducted by a qualified biologist familiar with legless lizard ecology and survey methods. The scope of the survey shall be determined by a qualified biologist and shall be sufficient to determine presence or absence in the project areas. If the focused survey results are negative, a letter report shall be submitted to the County, and no further action shall be required. If legless lizards are found to be present in the proposed work areas the following steps shall be taken:
 - Obtain approval from California Department of Fish and Game for project biologist to relocate of special status species prior to start of construction activities. Prepare and submit a Management Plan pertaining to the capture and relocation of legless lizards, including a map of proposed relocation sites, to CDFG.
 - Legless lizards shall be captured by hand by the project biologist and relocated to an appropriate location well outside the project areas.
 - Construction monitoring shall be required for all new ground-breaking activities located within legless lizard habitat.
- **BR-14.** Perform a focused survey for the presence of Western spadefoot toad beginning in January, during the rainy season. Surveys shall focus on determining presence or absence of adult or juvenile spadefoots on the Property, and on determining if the subject puddle is suitable for breeding.
- **BR-15.** If spadefoot toads are found on the property, a Management Plan shall be developed. This plan shall address monitoring ground disturbance activities near breeding pools to relocate disturbed spadefoot toads, relocation of toads to appropriate habitat outside the Project area or creation of and relocation to on-site habitat.
- **BR-16.** If the focused survey does not identify spadefoot toads on the Property, a biological monitor shall be present during initial site preparation and grubbing. If no spadefoot toads are found, construction activities may continue without daily monitoring. If special status species are found, a qualified biologist shall move them to the nearest safe location. At that time, the Project biologist shall have the authority to recommend additional monitoring if it is determined that spadefoot toads could move onto the Project site during construction, or be forced out of underground burrows during grading.
- **BR-17.** Prior to removal of any trees over 20 inches DBH, a survey shall be conducted by a qualified biologist to determine if any of the trees proposed for removal or trimming harbor sensitive bat species or maternal bat colonies. Maternal bat colonies may not be disturbed.
- **BR-18.** Prior to demolition of existing structures, a survey shall be conducted to determine if roosting bats or maternal bat colonies are present. Roosting bats may be excluded from the structure in consultation with the project biologist. Maternal bat colonies may not be disturbed. If maternal bat colonies are present, demolition shall not commence without consultation with the California Department of Fish and Game.

- **BR-19.** Prior to issuance of grading and/or construction permits, the applicant shall submit evidence to the City of Paso Robles, Department of Community Development, Planning Division (City) that states that one or a combination of the following three San Joaquin kit fox mitigation measures has been implemented:
 - a. Provide for the protection in perpetuity, through acquisition of fee or a conservation easement of **5.8 acres** of suitable habitat in the kit fox corridor area (e.g. within the San Luis Obispo County kit fox habitat area, northwest of Highway 46), either on-site or off-site, and provide for a non-wasting endowment to provide for management and monitoring of the **Error! Reference source not found.** in perpetuity. Lands to be conserved shall be subject to the review and approval of the California Department of Fish and Game (Department) and the City.
 - This mitigation alternative (a.) requires that all aspects of this program must be in place before City permit issuance or initiation of any ground disturbing activities.
 - b. Deposit funds into an approved in-lieu fee program, which would provide for the protection in perpetuity of suitable habitat in the kit fox corridor area within San Luis Obispo County, and provide for a non-wasting endowment for management and monitoring of the **Error! Reference source not found.** in perpetuity.
 - Mitigation alternative (b) above, can be completed by providing funds to The Nature Conservancy (TNC) pursuant to the Voluntary Fee-Based Compensatory Mitigation Program (Program). The Program was established in agreement between the Department and TNC to preserve San Joaquin kit fox habitat, and to provide a voluntary mitigation alternative to project proponents who must mitigate the impacts of projects in accordance with the California Environmental Quality Act (CEQA). The fee, payable to "The Nature Conservancy", would total \$14,500. This fee is calculated based on the current cost-per-unit of \$2500 per acre of mitigation, which is scheduled to be adjusted to address the increasing cost of Error! Reference source not found. in San Luis Obispo County and the City of El Paso de Robles; your actual cost may increase depending on the timing of payment. This fee must be paid after the Department provides written notification about your mitigation options but prior to County permit issuance and initiation of any ground disturbing activities.
 - c. Purchase [Total number of mitigation acres required] credits in a Department-approved conservation bank, which would provide for the protection in perpetuity of suitable habitat within the kit fox corridor area and provide for a non-wasting endowment for management and monitoring of the Error! Reference source not found. in perpetuity.
 - Mitigation alternative (c) above, can be completed by purchasing credits from the Palo Prieto Conservation Bank. The Palo Prieto Conservation Bank was established to preserve San Joaquin kit fox habitat, and to provide a voluntary mitigation alternative to project proponents who must mitigate the impacts of projects in accordance with the California Environmental Quality Act (CEQA). The cost for purchasing credits is payable to the owners of The Palo Prieto Conservation Bank, and would total \$14,500. This fee is calculated based on the current cost-per-credit of \$2500 per acre of mitigation. The fee is established by the conservation bank owner and may change at any time. Your actual cost may increase depending on the timing of payment. Purchase of credits must be completed prior to City permit issuance and initiation of any ground disturbing activities.

- **BR-20.** Prior to issuance of grading and/or construction permits, the applicant shall provide evidence that they have retained a qualified biologist acceptable to the City. The retained biologist shall perform the following monitoring activities:
 - i. Prior to issuance of grading and/or construction permits and within 30 days prior to initiation of site disturbance and/or construction, the biologist shall conduct a pre-activity (i.e. preconstruction) survey for known or potential kit fox dens and submit a letter to the City reporting the date the survey was conducted, the survey protocol, survey results, and what measures were necessary (and completed), as applicable, to address any kit fox activity within the project limits.
 - ii. The qualified biologist shall conduct weekly site visits during site-disturbance activities (i.e. grading, disking, excavation, stock piling of dirt or gravel, etc.) that proceed longer than 14 days, for the purpose of monitoring compliance with required Mitigation Measures BR-19 through BR-29. Site disturbance activities lasting up to 14 days do not require weekly monitoring by the biologist unless observations of kit fox or their dens are made on-site or the qualified biologist recommends monitoring for some other reason (see BR-15iii). When weekly monitoring is required, the biologist shall submit weekly monitoring reports to the City.
 - iii. Prior to or during project activities, if any observations are made of San Joaquin Kit fox, or any known or potential San Joaquin kit fox dens are discovered within the project limits, the qualified biologist shall re-assess the probability of incidental take (e.g. harm or death) to kit fox. At the time a den is discovered, the qualified biologist shall contact USFWS and the CDFG for guidance on possible additional kit fox protection measures to implement and whether or not a Federal and/or State incidental take permit is needed. If a potential den is encountered during construction, work shall stop until such time the USFWS determines it is appropriate to resume work.

If incidental take of kit fox during project activities is possible, before project activities commence, the applicant must consult with the USFWS. The results of this consultation may require the applicant to obtain a Federal and/or State permit for incidental take during project activities. The applicant should be aware that the presence of kit foxes or known or potential kit fox dens at the project site could result in further delays of project activities.

- iv. In addition, the qualified biologist shall implement the following measures:
 - 1. Within 30 days prior to initiation of site disturbance and/or construction, fenced exclusion zones shall be established around all known and potential kit fox dens. Exclusion zone fencing shall consist of either large flagged stakes connected by rope or cord, or survey laths or wooden stakes prominently flagged with survey ribbon. Each exclusion zone shall be roughly circular in configuration with a radius of the following distance measured outward from the den or burrow entrances:

Potential kit fox den: 50 feet

Known or active kit fox den: 100 feet

Kit fox pupping den: 150 feet

 All foot and vehicle traffic, as well as all construction activities, including storage of supplies and equipment, shall remain outside of exclusion zones. Exclusion zones shall be maintained until all project-related disturbances have been terminated, and then shall be removed. 3. If kit foxes or known or potential kit fox dens are found on site, daily monitoring by a qualified biologist shall be required during ground disturbing activities.

Monitoring: Required prior to issuance of a grading and/or construction permit. Compliance will be verified by the City of Paso Robles, Planning Division.

- **BR-21.** Prior to issuance of grading and/or construction permits, the applicant shall clearly delineate the following as a note on the project plans: "Speed signs of 25 mph (or lower) shall be posted for all construction traffic to minimize the probability of road mortality of the San Joaquin kit fox". Speed limit signs shall be installed on the project site within 30 days prior to initiation of site disturbance and/or construction.
- **BR-22.** During the site disturbance and/or construction phase, grading and construction activities after dusk shall be prohibited unless coordinated through the City, during which additional kit fox mitigation measures may be required.
- **BR-23.** Prior to issuance of grading and/or construction permit and within 30 days prior to initiation of site disturbance and/or construction, all personnel associated with the project shall attend a worker education training program, conducted by a qualified biologist, to avoid or reduce impacts on sensitive biological resources (i.e. San Joaquin kit fox). At a minimum, as the program relates to the kit fox, the training shall include the kit fox's life history, all mitigation measures specified by the City, as well as any related biological report(s) prepared for the project. The applicant shall notify the City shortly prior to this meeting. A kit fox fact sheet shall also be developed prior to the training program, and distributed at the training program to all contractors, employers and other personnel involved with the construction of the project.
- **BR-24.** During the site-disturbance and/or construction phase, to prevent entrapment of the San Joaquin kit fox, all excavations, steep-walled holes and trenches in excess of two feet in depth shall be covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks. Trenches shall also be inspected by construction workers for entrapped kit fox each morning prior to onset of field activities and immediately prior to covering with plywood at the end of each working day. Before such holes or trenches are filled, they shall be thoroughly inspected for entrapped kit fox. Any kit fox so discovered shall be allowed to escape before field activities resume, or removed from the trench or hole by a qualified biologist and allowed to escape unimpeded.
- **BR-25.** During the site-disturbance and/or construction phase, any pipes, culverts, or similar structures with a diameter of four inches or greater, stored overnight at the project site shall be thoroughly inspected for trapped San Joaquin kit foxes before the subject pipe is subsequently buried, capped, or otherwise used or moved in any way. If during the construction phase a kit fox is discovered inside a pipe, that section of pipe will not be moved. If necessary, the pipe may be moved only once to remove it from the path of activity, until the kit fox has escaped.
- **BR-26.** During the site-disturbance and/or construction phase, all food-related trash items such as wrappers, cans, bottles, and food scraps shall be disposed of only in closed containers. These containers shall be regularly removed from the site. Food items may attract San Joaquin kit foxes onto the project site, consequently exposing such animals to increased risk of injury or mortality. No deliberate feeding of wildlife shall be allowed.

- **BR-27.** Prior to, during and after the site-disturbance and/or construction phase, use of pesticides or herbicides shall be in compliance with all local, State and Federal regulations. This is necessary to minimize the probability of primary or secondary poisoning of endangered species utilizing adjacent habitats, and the depletion of prey upon which San Joaquin kit foxes depend.
- **BR-28.** During the site-disturbance and/or construction phase, any contractor or employee that inadvertently kills or injures a San Joaquin kit fox or who finds any such animal either dead, injured, or entrapped shall be required to report the incident immediately to the applicant and City. In the event that any observations are made of injured or dead kit fox, the applicant shall immediately notify the USFWS and CDFG by telephone. In addition, formal notification shall be provided in writing within three working days of the finding of any such animal(s). Notification shall include the date, time, location and circumstances of the incident. Any threatened or endangered species found dead or injured shall be turned over immediately to CDFG for care, analysis, or disposition.
- **BR-29.** Prior to final inspection, or occupancy, whichever comes first, should any long internal or perimeter fencing be proposed or installed, the applicant shall do the following to provide for kit fox passage:
 - i. If a wire strand/pole design is used, the lowest strand shall be no closer to the ground than 12 inches.
 - ii. If a more solid wire mesh fence is used, 8" x 12" openings near the ground shall be provided every 100 yards
 - iii. Upon fence installation, the applicant shall notify the City to verify proper installation. Any fencing constructed after issuance of a final permit shall follow the above guidelines

Monitoring (San Joaquin Kit Fox Measures BR-19 to BR-29): Compliance will be verified by the City of Paso Robles Planning Division in consultation with the California Department of Fish and Game. As applicable, each of these measures shall be included on construction plans.

GHG Mitigations

- **GHG-1:** The following mitigation measures are recommended, at a minimum, to reduce operational GHG emissions associated with the proposed project:
 - a. Installation of gas and wood-burning hearth devices shall be prohibited within dwelling units. One gas-fired fireplace may be allowed within the community building.
 - b. Proposed onsite occupied buildings shall exceed baseline Title 24 Building Envelope Energy Efficiency Standards by a minimum of 10 percent. The baseline GHG emissions from electricity and natural gas usage shall reflect 2008 Title 24 standards with no energy-efficient appliances.
 - c. The project shall install energy-efficient appliances, such as "Energy Star" rated appliances, including dish washers, clothes washers, ceiling fans, and refrigerators.
 - d. The project proponent shall demonstrate that the project-wide lighting efficiency shall be improved by at least 16% relative to current conventional lighting methods through the installation of energy-efficient lighting, (e.g., metal halide, high-pressure sodium, LEDs) for interior and exterior lighting areas. Unnecessary exterior lighting should be reduced, to the extent practical and where reductions in lighting would not pose a risk to public safety.
 - e. Incorporate water-reducing features into building and landscape design, including use of drought-tolerant landscaping, minimizing turfed areas, and installation of water-efficient

- irrigation systems in accordance with the City of Paso Robles Zoning Code, Chapter 21.22B, Landscape and Irrigation Ordinance.
- f. Provide a sufficient number of bicycle racks/storage areas to meet resident needs.
- g. The project site shall be designed so as not to impede pedestrian and bicycle access to existing and planned adjacent pedestrian and bicycle corridors.
- h. Buildings shall be designed to take advantage of sunlight to reduce electrical demand for daytime interior lighting and electrical demand (e.g., incorporation of skylights and solar energy systems), where practical.
- i. Low-flow bathroom and kitchen faucets, toilets, and showers shall be installed.
- j. The guest house and pool shall be designed to utilize energy-efficient equipment and, to the extent practical, solar heating and photovoltaic system(s).
- k. The project proponent shall submit proof to the Paso Robles Community Development Department Staff and the APCD that the measures in MM GHG-1 have been met at a time deemed appropriate by Community Development Department Staff.

Oak Trees:

- Oak 1. Protect and monitor oaks on and adjacent to the Project Impact Area. Provide protection during construction for all trees not proposed for removal. Upon completion of grading plans and prior to issuance of permits, prepare a Tree Protection Plan Sheet illustrating locations of tree protection fencing and calling out specific measures for each tree in the Project Impact Area.
 - a. All native trees will be tagged with permanent numbered tags (round aluminum tags, 1.25 inches in diameter). Completed September 2004, checked May 2012.
 - b. Any changes in the project referenced in this report will need Project Arborist review to ensure the report is still valid.
 - c. Tree protection fencing (orange construction fencing) will be installed at the outer limit of the CRZ or, where feasible, the TPZ with t-posts placed in the ground no further apart than six (6) to eight (8) feet. Construction fencing will be firmly affixed with wire or zip ties. Trees that may be impacted shall be protected with construction fencing, depending on the impacts expected within the dripline (see Appendix D).
 - Protective fencing is required between all construction activities and native trees. Fence locations will be established at the direction and approval of the Project Arborist prior to commencing construction.
 - o Protective fencing shall be installed prior to any site disturbance or construction, and shall remain in place until all construction is complete.
 - No grading, trenching, materials storage, soil storage, debris or site disturbance shall occur within the protected area. No concrete, plaster, or paint washout shall be allowed within the protected area. No concrete, plaster, or paint washout shall be allowed within the tree protection zone. Under no circumstance shall lack of space be used as reason to remove protective fencing.
 - Weather-proof signs shall be permanently posted on protection fences every 50 feet (maximum) with the following information:

Tree protection zone

No personnel, equipment, materials, and vehicles are allowed.

Do not remove or replace this fence.

Project Manager [name and phone number].

- d. An environmental monitor or arborist shall conduct a worker education meeting for the contractors and operators prior to ground-breaking activities. The briefing shall include a walk-through to identify each of the trees in the work area: the trees to be protected, and the trees that may be impacted or removed. The project manager shall be responsible for instructing workers about tree protection goals, implementing protection of root zones, dust control, and installing and maintaining protective fencing.
- e. The monitor shall check weekly to determine if the listed trees are being protected.
- **Oak 2.** Monitor all tree impacts and removals. Prepare a monitoring program to implement the required mitigation measures.
 - a. All impacts and disturbance within the root zone shall be documented and reported to the project manager and to the arborist who must treat and/or assess damaged branches and roots.
 - b. Removals will be documented by the monitor who will tabulate mitigation obligations.
 - c. The project will be reviewed by the arborist at various times of the development. Meetings with the arborist shall be arranged at least 48 hours in advance. The arborist shall review the project:
 - i. Prior to issuance of a grading permit to ensure proper installation of protective fencing and signage;
 - ii. At the time there is any work within the CRZ of an oak tree;
 - iii. Prior to certificate of occupancy;
 - iv. Any other critical times the arborist deems necessary (i.e., during installation of tot-lot improvements)
 - v. At the time of each monitoring site visit, a field report form (see example in Appendix D) will be filled out and given to the Project Manager and the City of Paso Robles Planning Department.
- **Oak 3.** Replace oaks that are removed with eight (8) 24-inch boxed oaks.
 - a. The City of Paso Robles Tree Preservation Ordinance¹ requires mitigation for native trees removed. The sizes protected are six inches (6") DBH or greater, for native deciduous trees. Replacement trees shall be locally grown, native stock (if available) of the same species as the removed tree.

1

¹ City of El Paso de Robles - Ordinance No. 835 N.S.

b. Table 4 provides a summary of the mitigation obligation for removal of Trees 49 and 70. Replacement oak caliper diameter must be equivalent to 25% of the diameter of the removed trees².

TABLE 4. Tree replacement calculated to mitigate for proposed removals^{3.} Trees will be replaced with 24-inch box trees with a minimum caliper of 1.5 inches.

Tag #	Common Name	Health/ Aesthetic Rating	DBH (inches)	Mitigation caliper required (inches)	Number of 24" box trees, 1.5" caliper
49	Valley Oak	Fair (63%)	15.5	3.9	3
70	Valley Oak	Poor (38%)	32.0	8.0	5
Totals			47.5	11.94	8 trees

- c. If a senescent or decadent tree rated "Poor" proposed for removal dies of natural causes during the planning process, the tree will be removed from the mitigation calculation.
- d. The environmental monitor will keep a running tally of the total number of trees removed during construction of the project. A final mitigation obligation determination will be provided by the environmental monitor to the project manager and to the City of Paso Robles.

Oak 4. Pruning and wound care shall be done under the supervision of a Certified Arborist or City approved tree care specialist.

- a. All cuts to roots over 1 inch and branches over 3 inches in diameter will be treated, as appropriate, to reduce fungal, bacterial, and insect infections. A Certified Arborist or tree care specialist shall be contracted to care for damaged roots and branches during construction. Appropriate antifungal, antibacterial, and pesticide treatments should be used on cut roots and branches. Black tree paint shall not be used on either roots or branches.
- b. Treat large wounds to roots and branches by cutting perpendicular to the root direction. Cut back to undamaged wood.
- c. Roots exposed during demolition and construction shall be treated, as appropriate, by a tree care specialist and covered by a layer of soil.

Oak 5. Prepare and implement a Mitigation Monitoring and Reporting Plan.

a. The mitigation plan will include tree planting, protection, maintenance, and monitoring for seven (7) years. Success criteria will include tree height and total numbers of live trees at the end of seven years. The final landscape bond amount will not be returned until the success criteria have been met.

² For example, the replacement requirement for removal of two trees of 15 inches DBH (30 inches, total) would be 7.5 inches (caliper, measured at the base of the young tree). This requirement could be satisfied by planting five 1.5-inch trees, or three 2.5-inch trees, or any other combination totaling 7.5 inches. A minimum of two 24-inch box, 1.5-inch trees shall be required for each oak tree removed. (City of El Paso de Robles - Ordinance No. 835 N.S., page 5)

³ Tree 101 is not included in this table because it is dead.

⁴ Calculation: 47.5 inches * 25% = 11.9 inches mitigation ÷ 1.5 inches/mitigation tree = 7.9 mitigation trees

- b. The mitigation plantings will be monitored by a City-qualified tree specialist (biologist or arborist).
- **Oak 6.** Use porous pavers when paving is required within the CRZ.
 - a. Trees 71, 74 and 75 are large oaks located near proposed parking, driveways, and sidewalks. These hardscapes encroach within the CRZ of each tree. Any paving within the CRZ shall be done with porous pavers that will allow oxygen and moisture exchange to occur within the root zone. Porous pavers shall be approved by arborist. The pavers shall cover the CRZ at minimum, and should cover the largest possible portion of the paved area surrounding the tree with a minimum amount of base material.
- **Oak 7**. Show all tree protection requirements on final grading plans.
 - a. All trees to be protected from unauthorized impacts will be clearly shown on grading plans.
 - b. Tree protection recommendations approved by the project arborist will be shown on the grading plans.
- Oak 8. Tot lot construction shall minimize impacts to Tree 89.
 - a. A 6-inch layer of mulch shall be placed in the CRZ of Tree 89.
 - b. Configure the tot lot play equipment such that no foundations or ground-disturbing work is necessary within the CRZ.
 - c. Trenching within the CRZ must be approved by the project arborist, and shall be done by hand. Roots will be treated by the project arborist or approved tree care specialist.

Noise

- N-1 Construction shall be limited to the hours of 7:00am to 7:00pm on Monday throught Saturday, in accordance with the City of Paso Robles Building Code.
- N-2 The following measures can be implemented to reduce potential construction noise impacts on nearby sensitive receptors:
 - During all site excavation and grading, the project contractors shal equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufactures' standards.
 - The project contractor shall place all stationary construction equipment so that the emitted noise is directed away from the sensitive receptors nearest to the project site.
 - The construction contractor shall locate equipment staging in areas that would create the greatest practical distance between the construction related noise sources and the noise-sensitive receptors nearest to the project site during all project construction.
 - Construction contractors shall provide the Building Division with the name and phone number of
 the contact person in the event the noise levels become disruptive. The name and phone number
 shall also be posted on site, informing the public who to contact. The Building Division shall
 monitor compliance.
- N-3 The proposed residences that would be directly exposed to traffic noise from Highway 46 shall be required to implement the following mitigation measures to reduce the on-site traffic noise impacts:
 - Second floor balconies associated with Buildings 16, 18, 21, 22, 23, 25, 27, 28, and 29 that are within 186-feet of Highway 46 centerline that are being used to meet the minimum open space requirement require a 5-foot high perimeter barrier around the perimeter of each balcony directly exposed to traffic noise from Highway 46 (i.e. not shielded by any intervening structures). If required, the sound barrier may be any combination of solid materials such as concrete masonry unit (CMU), glass, and/or acrylic. Balconies beyond those necessary to meet the minimum open space requirement do not need to comply with this mitigation.
 - The proposed multifamily residences located within 634 feet of the Highway 46 center line must be equipped with air conditioning or another form of mechanical ventilation (Buildings 14, 15, 16, 18, 21, 23, 27, 28 and 29).
- N-4 One of the following mitigation measures shall be required for dwelling units within 160-feet of loading/unloading areas adjacent commercial use (San Antonio Winery):
 - A 6 foot high sound barrier shall be constructed adjacent to the loading/unloading area, or
 - Loading/unloading activities shall be restricted to hours of 7:00am through 10:00pm daily.

AIR QUALITY & GREENHOUSE GAS IMPACT ASSESSMENT

FOR THE PROPOSED

BUENA VISTA APARTMENTS PROJECT PASO ROBLES, CA

AUGUST 2012

PREPARED FOR:

DONALD W. BENSON P.O. BOX 608 PASO ROBLES, CA 93447

PREPARED BY:



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Attachment 4
Air Quality Study
Buena Vista Apartments

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APPENDICES

Appendix A: Areas of Known Naturally Occurring Asbestos

Appendix B: Emissions Modeling

LIST OF COMMON TERMS & ACRONYMS

AAM Annual Arithmetic Mean
ADT Average Daily Traffic
APCD Air Pollution Control District
AQAP Air Quality Attainment Plan

CAAQS California Ambient Air Quality Standards
Caltrans California Department of Transportation

CARB California Air Resources Board

CCAA California Clean Air Act

CCAR California Climate Action Registry
CEQA California Environmental Quality Act

CH₄ Methane

CO Carbon Monoxide CO₂ Carbon Dioxide

CO₂e Carbon Dioxide Equivalent

DPM Diesel-Exhaust Particulate Matter or Diesel-Exhaust PM

DRRP Diesel Risk Reduction Plan
FCAA Federal Clean Air Act
GHG Greenhouse Gases
HAP Hazardous Air Pollutant

IPCC Intergovernmental Panel on Climate Change

LOS Level of Service N₂O Nitrous Oxide

NAAQS National Ambient Air Quality Standards or National AAQS

NESHAPs National Emission Standards for HAPs

NO_x Oxides of Nitrogen
OAP Ozone Attainment Plan

O₃ Ozone Pb Lead

PM Particulate Matter

PM $_{10}$ Particulate Matter (less than 10 μ m) PM $_{2.5}$ Particulate Matter (less than 2.5 μ m)

ppb Parts per Billion ppm Parts per Million

ROG Reactive Organic Gases
SIP State Implementation Plan

SLOAPCD San Luis Obispo County Air Pollution Control District

SO₂ Sulfur Dioxide

SCCAB South Central Coast Air Basin

TAC Toxic Air Contaminant

µg/m³ Micrograms per cubic meter

U.S. EPA United State Environmental Protection Agency

VMT Vehicle Miles Traveled

AIR QUALITY

This section describes the existing air quality environment in the project vicinity and identifies potential air quality impacts associated with the proposed project. Project impacts are evaluated relative to applicable ambient air quality standards and thresholds of significance. Mitigation measures have been identified for significant air quality impacts. Emissions modeling assumptions and output files are included in **Appendix B**.

SETTING

Paso Robles is located in San Luis Obispo County, which is part of the South Central Coast Air Basin (SCCAB) and within the jurisdiction of the County of San Luis Obispo Air Pollution Control District (SLOAPCD). Air quality in the SCCAB is influenced by a variety of factors, including topography, local and regional meteorology. Factors affecting regional and local air quality are discussed below.

TOPOGRAPHY, METEOROLOGY & CLIMATE

Topography

The City of Paso Robles is located in the upper Salinas River Valley. The Paso Robles area is bordered on the south and west by the rugged mountainous ridges of the Santa Lucia Coastal Range, to the east by the low hills of the La Panza and Temblor ranges, and to the north by the low hills and flat-topped mesas of the Diablo Range. The highest elevations in the vicinity are located in the Santa Lucia Coastal Range, where many peaks are 2,000 to 3,400 feet above mean sea level. Substantial ridgelines are distributed throughout the western, southern, and eastern portions of the City. The effects of the Pacific Ocean is diminished inland and by these major intervening terrain features.

Local and Regional Meteorology

The climate of the county can be generally characterized as Mediterranean, with warm, dry summers and cooler, relatively damp winters. Along the coast, mild temperatures are the rule throughout the year due to the moderating influence of the Pacific Ocean. This effect is diminished inland in proportion to distance from the ocean or by major intervening terrain features, such as the coastal mountain ranges. As a result, inland areas are characterized by a considerably wider range of temperature conditions. Maximum summer temperatures average about 70 degrees Fahrenheit near the coast, while inland valleys are often in the high 90s. Minimum winter temperatures average from the low 30s along the coast to the low 20s inland (SLOAPCD 2001).

Regional meteorology is largely dominated by a persistent high pressure area which commonly resides over the eastern Pacific Ocean. Seasonal variations in the strength and position of this pressure cell cause seasonal changes in the weather patterns of the area. The Pacific High remains generally fixed several hundred miles offshore from May through September, enhancing onshore winds and opposing offshore winds. During spring and early summer, as the onshore breezes pass over the cool water of the ocean, fog and low clouds often form in the marine air layer along the coast. Surface heating in the interior valleys dissipates the marine layer as it moves inland (SLOAPCD 2001).

From November through April the Pacific High tends to migrate southward, allowing northern storms to move across the county. About 90 percent of the total annual rainfall is received during this period. Winter conditions are usually mild, with intermittent periods of precipitation followed by mostly clear days. Rainfall amounts can vary considerably among different regions in the county. In the Coastal Plain, annual rainfall averages 16 to 28 inches, while the Upper Salinas River Valley generally receives about 12 to 20 inches of rain. The Carrizo Plain is the driest area of the county with less than 12 inches of rain in a typical year (SLOAPCD 2001).

Airflow around the county plays an important role in the movement and dispersion of pollutants. The speed and direction of local winds are controlled by the location and strength of the Pacific High pressure system and other global patterns, by topographical factors, and by circulation patterns resulting from temperature differences between the land and sea. In spring and summer months, when the Pacific High attains its greatest strength, onshore winds from the northwest generally prevail during the day. At night, as the sea breeze dies, weak drainage winds flow down the coastal mountains and valleys to form a light, easterly land breeze (SLOAPCD 2001).

In the Fall, onshore surface winds decline and the marine layer grows shallow, allowing an occasional reversal to a weak offshore flow. This, along with the diurnal alternation of land-sea breeze circulation, can sometimes produce a "sloshing" effect. Under these conditions, pollutants may accumulate over the ocean for a period of one or more days and are subsequently carried back onshore with the return of the sea breeze. Strong inversions can form at this time, "trapping" pollutants near the surface (SLOAPCD 2001).

This effect is intensified when the Pacific High weakens or moves inland to the east. This may produce a "Santa Ana" condition in which air, often pollutant-laden, is transported into the county from the east and southeast. This can occur over a period of several days until the high pressure system returns to its normal location, breaking the pattern. The breakup of a Santa Ana condition may result in relatively stagnant conditions and a buildup of pollutants offshore. The onset of the typical daytime sea breeze can bring these pollutants back onshore, where they combine with local emissions to cause high pollutant concentrations. Not all occurrences of the "post Santa Ana" condition lead to high ambient pollutant levels, but it does play an important role in the air pollution meteorology of the county (SLOAPCD 2001).

Atmospheric Stability and Dispersion

Air pollutant concentrations are primarily determined by the amount of pollutant emissions in an area and the degree to which these pollutants are dispersed into the atmosphere. The stability of the atmosphere is one of the key factors affecting pollutant dispersion. Atmospheric stability regulates the amount of vertical and horizontal air exchange, or mixing, that can occur within a given air basin. Restricted mixing and low wind speeds are generally associated with a high degree of stability in the atmosphere. These conditions are characteristic of temperature inversions (SLOAPCD 2001).

In the atmosphere, air temperatures normally decrease as altitude increases. At varying distances above the earth's surface, however, a reversal of this gradient can occur. This condition, termed an inversion, is simply a warm layer of air above a layer of cooler air, and it has the effect of limiting the vertical dispersion of pollutants. The height of the inversion determines the size of the mixing volume trapped below. Inversion strength or intensity is measured by the thickness of the layer and the difference in temperature between the base

and the top of the inversion. The strength of the inversion determines how easily it can be broken by winds or solar heating (SLOAPCD 2001).

Several types of inversions are common to this area. Weak, surface inversions are caused by radiational cooling of air in contact with the cold surface of the earth at night. In valleys and low lying areas this condition is intensified by the addition of cold air flowing downslope from the hills and pooling on the valley floor. Surface inversions are a common occurrence throughout the county during the winter, particularly on cold mornings when the inversion is strongest. As the morning sun warms the earth and the air near the ground, the inversion lifts, gradually dissipating as the day progresses. During the late spring and early summer months, cool air over the ocean can intrude under the relatively warmer air over land, causing a marine inversion. These inversions can restrict dispersion along the coast, but they are typically shallow and will dissipate with surface heating (SLOAPCD 2001).

In contrast, in the summertime the presence of the Pacific high pressure cell can cause the air mass aloft to sink. As the air descends, compressional heating warms it to a temperature higher than the air below. This highly stable atmospheric condition, termed a subsidence inversion, is common to all of coastal California and can act as a nearly impenetrable lid to the vertical mixing of pollutants. The base of the inversion typically ranges from 1000 to 2500 feet above sea level; however, levels as low as 250 feet, among the lowest anywhere in the state, have been recorded on the coastal plateau in San Luis Obispo county. The strength of these inversions makes them difficult to disrupt. Consequently, they can persist for one or more days, causing air stagnation and the buildup of pollutants. Highest or worst-case ozone levels are often associated with the presence of this type of inversion (SLOAPCD 2001).

CRITERIA AIR POLLUTANTS

For the protection of public health and welfare, the Clean Air Act (CAA) required that the United States Environmental Protection Agency (U.S. EPA) establish National Ambient Air Quality Standards (NAAQS) for various pollutants. These pollutants are referred to as "criteria" pollutants because the US EPA publishes criteria documents to justify the choice of standards. These standards define the maximum amount of an air pollutant that can be present in ambient air without harm to the public's health. An ambient air quality standard is generally specified as a concentration averaged over a specific time period, such as one hour, eight hours, 24 hours, or one year. The different averaging times and concentrations are meant to protect against different exposure effects. The CAA allows states to adopt additional or more health-protective standards. The air quality regulatory framework and ambient air quality standards are discussed in greater detail later in this report.

Human Health & Welfare Effects

Common air pollutants and associated adverse health and welfare effects are summarized in **Table 1**. Within the SCCAB, the air pollutants of primary concern, with regard to human health, include ozone, particulate matter (PM) and carbon monoxide (CO). As depicted in **Table 1**, exposure to increased pollutant concentrations of ozone, PM and CO can result in various heart and lung ailments, cardiovascular and nervous system impairment, and death.

Table 1
Common Pollutants & Adverse Effects

Pollutant	Human Health & Welfare Effects
Particulate Matter (PM ₁₀ & PM _{2.5})	Increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing; aggravated asthma; development of chronic bronchitis; irregular heartbeat; nonfatal heart attacks; and premature death in people with heart or lung disease. Impairs visibility (haze).
Ozone (O ₃)	Irritates and causes inflammation of the mucous membranes and lung airways; causes wheezing, coughing and pain when inhaling deeply; decreases lung capacity; aggravates lung and heart problems. Damages plants; reduces crop yield. Damages rubber, some textiles and dyes.
Sulfur Dioxide (SO ₂)	Respiratory irritant. Aggravates lung and heart problems. In the presence of moisture and oxygen, sulfur dioxide converts to sulfuric acid which can damage marble, iron and steel; damage crops and natural vegetation. Impairs visibility. Precursor to acid rain.
Carbon Monoxide (CO)	Reduces the ability of blood to deliver oxygen to vital tissues, effecting the cardiovascular and nervous system. Impairs vision, causes dizziness, and can lead to unconsciousness or death.
Nitrogen Dioxide (NO ₂)	Respiratory irritant; aggravates lung and heart problems. Precursor to ozone and acid rain. Contributes to global warming, and nutrient overloading which deteriorates water quality. Causes brown discoloration of the atmosphere.
Lead	Anemia, high blood pressure, brain and kidney damage, neurological disorders, cancer, lowered IQ. Affects animals, plants, and aquatic ecosystems.

Source: CAPCOA 2010

ODORS

Typically odors are generally regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from the psychological (i.e. irritation, anger, or anxiety) to the physiological, including circulatory and respiratory effects, nausea, vomiting, and headache.

Neither the state nor the federal governments have adopted rules or regulations for the control of odor sources. The SLOAPCD does not have an individual rule or regulation that specifically addresses odors; however, odors would be applicable to SLOAPCD's *Rule 204*, *Nuisance*. Any actions related to odors would be based on citizen complaints to local governments and the SLOAPCD. The SLOAPCD recommends that odor impacts be addressed in a qualitative manner. Such an analysis shall determine if the Project results in excessive nuisance odors, as defined under the California Code of Regulations, Health & Safety Code Section 41700, air quality public nuisance.

TOXIC AIR CONTAMINANTS

Toxic air contaminants (TACs) are air pollutants that may cause or contribute to an increase in mortality or serious illness, or which may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air, but due to their high toxicity, they may pose a threat to public health even at very low concentrations. Because there is no threshold level below which adverse health impacts are not expected to occur, TACs differ from criteria pollutants for which acceptable levels of exposure can be determined and for which state and federal governments have set ambient air quality standards. TACs, therefore, are not considered

"criteria pollutants" under either the Federal Clean Air Act (FCAA) or the California Clean Air Act (CCAA), and are thus not subject to National or State AAQS. TACs are not considered criteria pollutants in that the federal and California Clean Air Acts do not address them specifically through the setting of National or State AAQS. Instead, the U.S. EPA and CARB regulate Hazardous Air Pollutants (HAPs) and TACs, respectively, through statutes and regulations that generally require the use of the maximum or best available control technology to limit emissions. In conjunction with District rules, these federal and state statutes and regulations establish the regulatory framework for TACs. At the national levels, the U.S. EPA has established National Emission Standards for HAPs (NESHAPs), in accordance with the requirements of the FCAA and subsequent amendments. These are technology-based source-specific regulations that limit allowable emissions of HAPs.

Within California, TACs are regulated primarily through the Tanner Air Toxics Act (AB 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588). The Tanner Act sets forth a formal procedure for CARB to designate substances as TACs. This includes research, public participation, and scientific peer review before CARB designates a substance as a TAC. Existing sources of TACs that are subject to the Air Toxics Hot Spots Information and Assessment Act are required to: (1) prepare a toxic emissions inventory; (2) prepare a risk assessment if emissions are significant; (3) notify the public of significant risk levels; and (4) prepare and implement risk reduction measures.

At the state level, the CARB has authority for the regulation of emissions from motor vehicles, fuels, and consumer products. Most recently, Diesel-exhaust particulate matter (DPM) was added to the CARB list of TACs. DPM is the primary TACs of concern for mobile sources. Of all controlled TACs, emissions of DPM are estimated to be responsible for about 70 percent of the total ambient TAC risk. The CARB has made the reduction of the public's exposure to DPM one of its highest priorities, with an aggressive plan to require cleaner diesel fuel and cleaner diesel engines and vehicles (CARB 2005).

At the local level, air districts have the authority over stationary or industrial sources. All projects that require air quality permits from the SLOAPCD are evaluated for TAC emissions. The SLOAPCD limits emissions and public exposure to TACs through a number of programs. The SLOAPCD prioritizes TAC-emitting stationary sources, based on the quantity and toxicity of the TAC emissions and the proximity of the facilities to sensitive receptors. The SLOAPCD requires a comprehensive health risk assessment for facilities that are classified in the significant-risk category, pursuant to AB 2588. No major existing sources of TACs have been identified in the project area.

Land Use Compatibility with TAC Emission Sources

The CARB published an informational guide entitled: Air Quality and Land Use Handbook: A Community Health Perspective (Handbook) in 2005. The purpose of this guide is to provide information to aid local jurisdictions in addressing issues and concerns related to the placement of sensitive land uses near major sources of air pollution. The CARB's Handbook includes recommended separation distances for various land uses that are based on relatively conservative estimations of emissions based on source-specific information. However, these recommendations are not site specific and should not be interpreted as defined "buffer zones". It is also important to note that the recommendations of the Handbook are advisory and need to be balanced with other State and local policies (CARB 2005). Depending on site and project-specific conditions, an assessment of potential increases in exposure to TACs may be warranted

for proposed development projects located within the distances identified. CARBrecommended separation distances for various sources of emissions are summarized in Table 2.

> Table 2 Recommendations on Siting New Sensitive Land Uses **Near Air Pollutant Sources**

Source Category	Advisory Recommendations
Freeways and High-Traffic Roads	 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.
Distribution Centers	 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). Take into account the configuration of existing distribution centers and avoid locating residences and other new sensitive land uses near entry and exit points.
Rail Yards	 Avoid siting 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	 Avoid siting of new sensitive land uses immediately downwind of ports in the most heavily impacted zones. Consult local air districts or the CARB on the status of pending analyses of health risks.
Refineries	 Avoid siting new sensitive land uses immediately downwind of petroleum refineries. Consult with local air districts and other local agencies to determine an appropriate separation.
Chrome Platers	Avoid siting new sensitive land uses within 1,000 feet of a chrome plater.
Dry Cleaners Using Perchloroethylene	 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. Do not site new sensitive land uses in the same building with perchloroethylene dry cleaning operations.
Gasoline Dispensing Facilities	 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.

Source: CARB 2005

ASBESTOS

Asbestos is the common name for a group of naturally-occurring fibrous silicate minerals that can separate into thin but strong and durable fibers. Naturally-occurring asbestos, which was identified as a TAC in 1986 by CARB, is located in many parts of California and is commonly associated with ultramafic rock. The project site is not located near any areas that are likely to contain ultramafic rock. A map depicting known areas of naturally occurring areas within the County is included in Appendix A.

REGULATORY FRAMEWORK

Air quality within the SCCAB is regulated by several jurisdictions including the U.S. EPA, CARB, and the SLOAPCD. Each of these jurisdictions develops rules, regulations, and policies to attain the goals or directives imposed upon them through legislation. Although U.S. EPA regulations may not be superseded, both state and local regulations may be more stringent.

FEDERAL

U.S. Environmental Protection Agency

At the federal level, the U.S. EPA has been charged with implementing national air quality programs. The U.S. EPA's air quality mandates are drawn primarily from the FCAA, which was signed into law in 1970. Congress substantially amended the FCAA in 1977 and again in 1990.

Federal Clean Air Act

The FCAA required the US EPA to establish National Ambient Air Quality Standards (NAAQS or National AAQS), and also set deadlines for their attainment. Two types of NAAQS have been established: primary standards, which protect public health, and secondary standards, which protect public welfare from non-health-related adverse effects, such as visibility restrictions. NAAQS are summarized in **Table 3**.

The FCAA also required each state to prepare an air quality control plan referred to as a State Implementation Plan (SIP). The FCAA Amendments of 1990 added requirements for states with nonattainment areas to revise their SIPs to incorporate additional control measures to reduce air pollution. The SIP is periodically modified to reflect the latest emissions inventories, planning documents, and rules and regulations of the air basins as reported by their jurisdictional agencies. The U.S. EPA has responsibility to review all state SIPs to determine conformance with the mandates of the FCAA, and the amendments thereof, and determine if implementation will achieve air quality goals. If the U.S. EPA determines a SIP to be inadequate, a Federal Implementation Plan (FIP) may be prepared for the nonattainment area that imposes additional control measures.

STATE

California Air Resources Board

The CARB is the agency responsible for coordination and oversight of state and local air pollution control programs in California and for implementing the California Clean Air Act of 1988. Other CARB duties include monitoring air quality (in conjunction with air monitoring networks maintained by air pollution control districts and air quality management districts, establishing California Ambient Air Quality Standards (CAAQS), which in many cases are more stringent than the NAAQS, and setting emissions standards for new motor vehicles. The CAAQS are summarized in **Table 3**. The emission standards established for motor vehicles differ depending on various factors including the model year, and the type of vehicle, fuel and engine used.

Table 3 Summary of Ambient Air Quality Standards & Attainment Designations

	Avenue	California Standards*		ment Designations National Standards*		
Pollutant	Averaging Time	Concentration*	Attainment Status	Primary ^(a)	Attainment Status	
Ozone	1-hour	0.09 ppm	Non-	H-1	Not	
(O ₃)	8-hour	0.070 ppm	Attainment	0.075 ppm	Designated***	
Particulate Matter	AAM	20 μg/m3	Non-	=:	Unclassified/ Attainment	
(PM ₁₀)	24-hour	50 μg/m3	Attainment	150 µg/m3		
Fine Particulate	AAM	12 µg/m3		15 µg/m3	Unclassified/	
Matter (PM _{2.5})	24-hour	No Standard	Attainment	35 µg/m3	Attainment	
	1-hour	20 ppm		35 ppm		
Carbon Monoxide	8-hour	9 ppm	Attainment	9 ppm	Attainment/ Maintenance	
(CO)	8-hour (Lake Tahoe)	6 ppm		8		
Nitrogen Dioxide	AAM	0.030 ppm	Attainment	0.053 ppm	Unclassified	
(NO ₂)	1-hour	0.18 ppm	Affdinmeni	**		
	AAM	**		0.03 ppm		
Sulfur Dioxide	24-hour	0.04 ppm		0.14 ppm	Unclassified	
(SO ₂)	3-hour	8	Attainment	0.5 ppm (1300 µg/m3)**		
	1-hour	0.25 ppm				
	30-day Average	1.5 µg/m3		Y.=	No Attainment Information	
Lead	Calendar Quarter) H	Attainment	1.5 µg/m3		
	Rolling 3-Month Average	l#		0.15 µg/m3		
Sulfates	24-hour	25 µg/m3	Attainment			
Hydrogen Sulfide	1-hour	0.03 ppm (42 µg/m3)	Attainment	No Federal Standards		
Vinyl Chloride	24-hour	0.01 ppm (26 µg/m3)	No Information Available			
Visibility-Reducing Particle Matter	8-hour	Extinction coefficient: 0.23/kilometer-visibility of 10 miles or more (0.07-30 miles or more for Lake Tahoe) due to particles when the relative humidity is less than 70%	Attainment			

^{*} For more information on standards visit :http://www.arb.ca.gov.research/aaqs/aaqs2.pdf

^{**} Secondary Standard
*** San Luis Obispo County ozone attainment status is pending.

Source: SLOAPCD 2011

California Clean Air Act

The CCAA requires that all air districts in the state endeavor to achieve and maintain CAAQS for Ozone, CO, SO_2 , and NO_2 by the earliest practical date.

The CCAA specifies that districts focus particular attention on reducing the emissions from transportation and area-wide emission sources, and the act provides districts with authority to regulate indirect sources. Each district plan is required to either (1) achieve a five percent annual reduction, averaged over consecutive 3-year periods, in district-wide emissions of each non-attainment pollutant or its precursors, or (2) to provide for implementation of all feasible measures to reduce emissions. Any planning effort for air quality attainment would thus need to consider both state and federal planning requirements.

Assembly Bills 1807 & 2588 - Toxic Air Contaminants

Within California, TACs are regulated primarily through AB 1807 (Tanner Air Toxics Act) and AB 2588 (Air Toxics Hot Spots Information and Assessment Act of 1987). The Tanner Air Toxics Act sets forth a formal procedure for CARB to designate substances as TACs. This includes research, public participation, and scientific peer review before CARB designates a substance as a TAC. Existing sources of TACs that are subject to the Air Toxics Hot Spots Information and Assessment Act are required to: (1) prepare a toxic emissions inventory; (2) prepare a risk assessment if emissions are significant; (3) notify the public of significant risk levels; and (4) prepare and implement risk reduction measures.

LOCAL

County of San Luis Obispo Air Pollution Control District

The SLOAPCD is the agency primarily responsible for ensuring that NAAQS and CAAQS are not exceeded and that air quality conditions within the region are maintained. Responsibilities of the SLOAPCD include, but are not limited to, preparing plans for the attainment of ambient air quality standards, adopting and enforcing rules and regulations concerning sources of air pollution, issuing permits for stationary sources of air pollution, inspecting stationary sources of air pollution and responding to citizen complaints, monitoring ambient air quality and meteorological conditions, and implementing programs and regulations required by the FCAA and the CCAA.

As noted earlier in this report, the SCCAB is currently designated nonattainment for the State ozone and PM₁₀ ambient air quality standards. In accordance with California Clean Air Act requirements, the SLOAPCD is required to develop a plan to achieve and maintain the state ozone standard by the earliest practicable date. The Clean Air Plan (CAP) outlines the SLOAPCD's strategies to reduce ozone precursor emissions from a wide variety of stationary and mobile sources. The 2001 CAP was adopted by the Air Pollution Control Board at their hearing on March 26, 2002.

AMBIENT AIR QUALITY & ATTAINMENT

Most populated areas of San Luis Obispo County enjoyed good air quality, however, ozone levels exceeding both federal and state standards are often measured on numerous days in the rural eastern portion of the county due to transported pollution. A few exceedances also

typically occur in the north county inland and other areas due to locally formed emissions, as well as, transported pollution from wildfires.

SLOAPCD monitors ambient air quality conditions at stations located throughout the County, including a station located on Santa Fe Avenue in Paso Robles. Based on the last three years of available data (2009 to 2011), the federal 8-hour ozone standard has not been exceeded, however, the state 8-hour ozone standard was exceed on three days in 2010. No days exceeding the state one hour ozone standard of 0.09 ppm were recorded. Data for PM concentrations is somewhat limited at this location, though exceedance of the state's PM10 standards were noted in 2011. Countywide, for this same period, exceedances of the state and federal 8-hour ozone standards, the state 1-hour ozone standard, as well as, federal and state PM10 and PM2.5 standards have occurred on multiple occasions. As noted in Table 3, the County is currently designated nonattainment for the state ozone and PM10 standard (SLOAPCD 2010, CARB 2012).

IMPACTS ANALYSIS

Air quality impacts attributable to the proposed project are summarized in Table 4.

Table 4
Summary of Project-Related Air Quality Impacts

Summary of Project-Related All addition impacts				
Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
AIR QUALITY				
A) Conflict with or obstruct implementation of the applicable air quality plan?				
B) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?				
C) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?		•		
D) Expose sensitive receptors to substantial pollutant concentrations?				
E) Create objectionable odors affecting a substantial number of people?				

METHODOLOGY

Short-term Impacts

Short-term construction emissions associated with the proposed project were calculated using the CalEEMod computer program. Detailed construction phasing and equipment requirements

associated with the proposed project were not available at the time this analysis was prepared. Equipment requirements, hours of use, construction employee trips, and emission factors were based on the default parameters contained in the models. Equipment load factors were adjusted to reflect those currently identified in the Carl Moyer Program Guidelines (2011). Asphalt paving emissions were adjusted based on the calculated areas of coating application. Exposure to localized pollutant concentrations were qualitatively assessed. Modeling assumptions and output files are included in **Appendix B** of this report.

Long-term Impacts

Long-term operational emissions of criteria air pollutants associated with the proposed project were calculated using the CalEEMod computer program. Vehicle trip-generation rates and non-employee commute trip distances were adjusted to reflect anticipated project-specific conditions. Exposure to localized pollutant concentrations were qualitatively assessed. Modeling assumptions and output files are included in **Appendix B** of this report. Exposure to TACs and odors were qualitatively assessed.

THRESHOLDS OF SIGNIFICANCE

To assist in the evaluation of air quality impacts, the SLOAPCD has developed recommended significance thresholds, which are contained in the SLOAPCD's CEQA Air Quality Handbook (2012). For the purposes of this analysis, project emissions are considered potentially significant impacts if any of the following SLOAPCD thresholds are exceeded:

Construction Impacts

The threshold criteria established by the SLOAPCD to determine the significance and appropriate mitigation level for a project's short-term construction emissions are presented in **Table 5**.

Table 5
SLOAPCD Thresholds of Significance for Construction Impacts

		Threshold (1)			
Pollutant	Daily (lbs/day)	Quarterly Tier 1 (tons)	Quarterly Tier 2 (tons)		
Ozone Precursors (ROG + NO _X) ⁽²⁾	137	2.5	6.3		
Diesel Particulate Matter (DPM)(2)	7	0.13	0.32		
Fugitive Particulate Matter (PM10), Dust	None	2.5	None		

^{1.} Daily and quarterly emissions thresholds are based on the California Health & Safety Code and the CARB Carl Moyer Guidelines.

ROG and NOx Emissions

- Daily: For construction projects expected to be completed in less than one quarter (90 days), exceedance of the 137 lb/day threshold requires Standard Mitigation Measures;
- Quarterly Tier 1: For construction projects lasting more than one quarter, exceedance
 of the 2.5 ton/qtr threshold requires Standard Mitigation Measures and Best Available
 Control Technology (BACT) for construction equipment. If implementation of the
 Standard Mitigation and BACT measures cannot bring the project below the threshold,
 off-site mitigation may be necessary; and,

^{2.} Any project with a grading area greater than 4.0 acres of worked area can exceed the 2.5 tons PM10 quarterly threshold.

• Quarterly – Tier 2: For construction projects lasting more than one quarter, exceedance of the 6.3 ton/qtr threshold requires Standard Mitigation Measures, BACT, implementation of a Construction Activity Management Plan (CAMP), and off-site mitigation.

Diesel Particulate Matter (DPM) Emissions

- Daily: For construction projects expected to be completed in less than one quarter, exceedance of the 7 lb/day threshold requires Standard Mitigation Measures;
- Quarterly Tier 1: For construction projects lasting more than one quarter, exceedance of the 0.13 tons/quarter threshold requires Standard Mitigation Measures, BACT for construction equipment; and,
- Quarterly Tier 2: For construction projects lasting more than one quarter, exceedance of the 0.32 ton/qtr threshold requires Standard Mitigation Measures, BACT, implementation of a CAMP, and off-site mitigation.

Fugitive Particulate Matter (PM10), Dust Emissions

• Quarterly: Exceedance of the 2.5 ton/qtr threshold requires Fugitive PM₁₀ Mitigation Measures and may require the implementation of a CAMP.

Operational Impacts

Criteria Air Pollutants

The threshold criteria established by the SLOAPCD to determine the significance and appropriate mitigation level for long-term operational emissions from a project are presented in **Table 6**.

Table 6
SLOAPCD Thresholds of Significance for Operational Impacts

	Threshold (1)			
Pollutant	Daily (lbs/day)	Annual (tons/year)		
Ozone Precursors (ROG + NO _X) ⁽²⁾	25	25		
Diesel Particulate Matter (DPM)(2)	1.25	None		
Fugitive Particulate Matter (PM10), Dust	25	25		
CO	550	None		
		-f-t- CI- Division O/ Do		

^{1.} Daily and annual emissions thresholds are based on the California Health & Safety Code Division 26, Part 3, Chapter 10, Section 40918 and the CARB Carl Moyer Guidelines for DPM.

Toxic Air Contaminants

If a project has the potential to emit toxic or hazardous air pollutants, or is located in close proximity to sensitive receptors, impacts may be considered significant due to increased cancer risk for the affected population, even at a very low level of emissions. For the evaluation of such projects, the SLOAPCD recommends the use of the following thresholds:

Type A Projects: new proposed land use projects that generate toxic air contaminants (such as gasoline stations, distribution facilities or asphalt batch plants) that impact sensitive receptors. Air districts across California are uniform in their recommendation to use the significance thresholds that have been established under each district's "Hot Spots" and permitting programs. The SLOAPCD has defined the excess cancer risk significance threshold at 10 in a million for Type A projects in SLO County; and,

^{2.} URBEMIS – use winter operational emission data to compare to operational thresholds.

• Type B Projects: new land use projects that will place sensitive receptors (e.g., residential units) in close proximity to existing toxics sources (e.g., freeway). The APCD has established a CEQA health risk threshold of 89 in-a-million for the analysis of projects proposed in close proximity to toxic sources. This value represents the population weighted average health risk caused by ambient background concentrations of toxic air contaminants in San Luis Obispo County. The SLOAPCD recommends Health Risk screening and, if necessary, Health Risk Assessment (HRA) for any residential or sensitive receptor development proposed in proximity to toxic sources.

Localized CO concentrations

Localized CO concentrations associated with the proposed project would be considered less-than-significant impact if: (1) Traffic generated by the proposed project would not result in deterioration of intersection level of service (LOS) to LOS E or F; or (2) the project would not contribute additional traffic to an intersection that already operates at LOS of E or F (Caltrans 1996).

Odors

Screening of potential odor impacts is typically recommended for the following two situations:

- Projects that would potentially generate odorous emissions proposed to locate near existing sensitive receptors or other land uses where people may congregate; and
- Residential or other sensitive receptor projects or other projects that may attract people locating near existing odor sources.

If the proposed project would locate receptors and known odor sources within one mile of each other, a full analysis of odor impacts is recommended. Known odor sources of primary concern, as identified by the SLOAPCD, include: landfills, transfer stations, asphalt batch plants, rendering plants, petroleum refineries, and painting/coating operations, as well as, composting, food processing, wastewater treatment, chemical manufacturing, and feedlot/dairy facilities (SLOAPCD 2009).

PROJECT IMPACTS AND MITIGATION MEASURES

A. Would the project conflict with or obstruct implementation of the applicable air quality plan?

According to the SLOAPCD's CEQA Air Quality Handbook (2012), a consistency analysis with the Clean Air Plan is required for a Program Level environmental review, and may be necessary for a Project Level environmental review, depending on the project being considered. Project-Level environmental reviews which may require consistency analysis with the Clean Air Plan (CAP) and Smart/Strategic Growth Principles adopted by lead agencies include: subdivisions, large residential developments and large commercial/industrial developments. For such projects, evaluation of consistency is based on a comparison of the proposed project with the land use and transportation control measures and strategies outlined in the CAP. If the project is consistent with these measures, the project is considered consistent with the CAP (SLOAPCD 2009).

The CAP includes a variety of policies and strategies, including land use policies intended to result in reductions in overall vehicle miles traveled, as well as, various transportation control measures. The CAP would reduce emissions through implementation of the following adopted control measures:

- Campus-Based Trip Reduction
- Voluntary Trip Reduction Program
- Local Transit System Improvements
- Regional Transit Improvements
- Bicycling and Bikeway Enhancements
- Park and Ride Lots
- Motor Vehicle Inspection and Control Program
- Traffic Flow Improvements
- Telecommuting, Teleconferencing, and Telelearning

The CAP also includes various land use policies to encourage the use of alternative forms of transportation, increase pedestrian access and accessibility to community services and local destinations, reduce vehicle miles traveled within the County, and promote congestion management efforts.

The current zoning for the project site is R1, single-family residential. The proposed project would rezone the site to R-3, multi-family residential, with a proposed density of 11.6 units/acre. The proposed project would provide for the development of 142 residential dwellings within the urban core of the city with access to nearby commercial and transit services.

Existing transit service is located approximately 0.1 mile of the project site, along River Oaks Drive. A planned future "Class III" bikeway is located along Experimental Station Road, which extends along the northern boundary of the project site. "Class II" bikeways are also planned along the nearby segments of River Oaks Drive and Buena Vista Road. In addition, a "Class I" bike path is planned adjacent to the eastern boundary of the project site, extending southward, south of Highway 46. The specific location of this planned bike path has not yet been determined. The proposed site plan prepared for the project includes a "natural terrain" area within the eastern portion of the project site, which would accommodate the planned bike path. As such, the proposed project has been designed to provide ease of access to all existing and future planned transit, bicycle and pedestrian routes.

The above discussed project features would be anticipated to result in overall reductions in vehicle miles traveled (VMT) and associated mobile-source emissions. In addition, as discussed in Impact C below, the proposed project would not result in operational emissions that would exceed applicable SLOCAPCD-recommended significance thresholds. For these reasons, the proposed project would not conflict with or obstruct continued implementation of the CAP. This impact is considered **less than significant**.

B. Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

As noted in Impact C, below, short-term construction activities may result in localized concentrations of pollutants that could adversely affect nearby sensitive receptors. As a result, this impact is considered **potentially significant**. Refer to "Impact C" of this report for more detailed discussions of air quality impacts attributable to the proposed project and recommended mitigation measures.

Mitigation Measures

Implementation of Mitigation Measure AQ-1, as identified in "Impact C" below, would reduce this impact to a *less-than-significant* level.

C. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?

Short-term Construction Emissions

Construction-generated emissions are of temporary duration, lasting only as long as construction activities occur, but have the potential to represent a significant air quality impact. The construction of the proposed project would result in the temporary generation of emissions associated with site grading and excavation, paving, motor vehicle exhaust associated with construction equipment and worker trips, as well as the movement of construction equipment on unpaved surfaces. Short-term construction emissions would result in increased emissions of ozone-precursor pollutants (i.e., ROG and NOx) and emissions of PM. Emissions of ozone-precursors would result from the operation of on- and off-road motorized vehicles and equipment. Emissions of airborne PM are largely dependent on the amount of ground disturbance associated with site preparation activities and can result in increased concentrations of PM that can adversely affect nearby sensitive land uses.

Construction of the proposed project would likely occur in two phases with initial development occurring within the western, approximately one-half, of the project site. Detailed construction information (i.e., equipment requirements and construction schedules) associated with each phase of development have not yet been identified. To be conservative, construction-generated emissions were quantified assuming that the entire project would be developed over an approximate 1.5 year period, based on the default modeling assumptions and construction phase durations identified in the CalEEMod computer program. This assumption assumes that project phases I and II would occur consecutively with total project buildout occurring prior to year 2014. Demolition, site preparation, grading and asphalt paving were assumed to occur during Phase I. Building construction for phases I and II were distributed over an estimated 300-day construction period, based on the default construction schedule assumptions contained in the model. Equipment load factors were revised to match those identified in the Carl Moyer Program Guidelines (2011), per SLOAPCD recommendations. Asphalt paving emissions were quantified based on the area of asphalt paving and coating applications for parking stalls and handicap markers. No offsite hauling of fill material is anticipated to be required.

Estimated daily construction emissions of ROG, NO_x, PM₁₀ and PM_{2.5} associated with individual construction activities is presented in **Table 7**. Estimated maximum daily emissions in comparison to SLOAPCD significance thresholds, taking into account the potential overlapping of some construction activities, is summarized in **Table 8**. As indicated in **Table 8**, projected maximum daily emissions of ROG+NO_x would total approximately 88.79 lbs/day and emissions of DPM would total approximately 4.21 lbs/day. Daily construction-generated emissions would not exceed the SLOCAPCD's corresponding daily significance thresholds of 137 and 7 lbs/day, respectively.

Estimated quarterly construction-generated emissions are summarized in **Table 9** and compared to SLOAPCD's significance thresholds in **Table 10**. As indicated in **Table 10**, projected maximum quarterly emissions of ROG+NOx would total approximately 2.13 tons/quarter, which would not exceed SLOAPCD's significance threshold of 2.5 tons/quarter. Emissions of DPM would total 0.09 tons/quarter and emissions of fugitive dust would total 0.2 tons/quarter. Quarterly construction-generated emissions of DPM and fugitive dust would not exceed the SLOCAPCD's corresponding quarterly significance thresholds of 0.13 and 2.5 tons/quarter, respectively.

Table 7
Estimated Daily Construction Emissions Without Mitigation

	Daily Emissions (lbs)					
	200	110	PM ₁₀			Total
Construction Activity	ROG	NOx	Dust	Exhaust	Total	PM _{2.5}
Summer Conditions		X 7 5	99 m. A.			
Demolition (Phase I)	6.86	54.0	1.73	2.77	4.48	2.78
Site Preparation (Phase I)	7.24	57.57	18.35	2.90	21.25	12.84
Grading (Phase I)	7.84	63.18	8.98	3.10	12.08	6.42
Building Construction (Phase I & II)	6.06	34.65	1.69	2.25	3.96	2.32
Architectural Coatings (Phase I & II)	23.84	2.81	0.31	0.25	0.56	0.26
Asphalt Paving (Phase I)	3.37	17.76	=	1.74	1.51	1.51
Asphalt Paving (Phase II)	3.75	17.76	9	1.74	1.51	1.51
Winter Conditions						
Demolition (Phase I)	6.87	54.04	1.73	2.77	4.48	2.78
Site Preparation (Phase I)	7.26	57.59	18.35	2.90	21.25	12.84
Grading (Phase I)	7.86	63.21	8.98	3.10	12.08	6.42
Building Construction (Phase I & II)	6.19	34.78	1.69	2.25	3.96	2.32
Architectural Coatings (Phase I & II)	23.86	2.83	0.31	0.25	0.56	0.26
Asphalt Paving (Phase I)	3.37	17.76	#5	1.74	1.51	1.51
Asphalt Paving (Phase II)	3.75	17.76	31	1.74	1.51	1.51

Note: Detailed construction phasing information is not yet available. To be conservative, assumes that development of proposed project phases would occur consecutively with complete buildout occurring prior to year 2014. Emissions were quantified based on default construction schedule durations contained in the CalEEMod computer model. Emissions associated with the application of architectural coatings were assumed to begin approximately 5 months after start of building construction through the end of building construction. Asphalt paving emissions are based on the estimated exterior parking spaces and driveway area for each phase. Refer to Table 8 and Table 10 for a comparison of maximum daily emissions in comparison to SLOAPCD significance thresholds.

Refer to **Appendix B** for modeling output files and assumptions.

As noted above, daily and quarterly construction-generated emissions would not exceed applicable SLOAPCD's significance thresholds. However, the proposed project is located near existing sensitive receptors, the nearest of which include residential dwellings located north of the project site, across Experimental Station Road. The SLOAPCD has determined that

construction activities located within 1,000 feet of sensitive receptors may result in localized pollutant concentrations that could adversely affect nearby receptors. As a result, this impact is considered **potentially significant**.

Complete David diDhaga	Maximum Daily E	missions (lbs)
Construction Period/Phase	ROG+NO _X	DPM
Summer Conditions – Phase I		
Demolition	60.86	2.77
Site Preparation	64.81	2.90
Grading	71.02	3.10
Building Construction, Paving, Coating	88.49	4.21
Maximum Daily Emissions:	88.49	4.21
SLOAPCD Significance Thresholds:	137	7
Exceed SLOAPCD Thesholds?:	No	No
Summer Conditions – Phase II		
Building Construction, Paving, Coating	85.78	3.99
SLOAPCD Significance Thresholds:	137	7
Exceed SLOAPCD Thesholds?:	No	No
Winter Conditions – Phase I		
Demolition	60.91	2.77
Site Preparation	64.85	2.90
Grading	71.07	3.10
Building Construction, Paving, Coating	88.79	4.21
Maximum Daily Emissions:	88.79	4.21
SLOAPCD Significance Thresholds:	137	7
Exceed SLOAPCD Thesholds?:	No	No
Winter Conditions – Phase II		
Building Construction, Paving, Coating	86.04	3.99
SLOAPCD Significance Thresholds:	137	7
	No	No

Note: Detailed construction phasing information is not yet available. To be conservative, assumes that development of proposed project phases would occur consecutively with complete buildout occurring prior to year 2014. Emissions were quantified based on default construction schedule durations contained in the CalEEMod computer model. Emissions associated with the application of architectural coatings were assumed to begin approximately 5 months after start of building construction through the end of building construction. Asphalt paving emissions are based on the estimated open space and driveway area for each phase. Construction activities occurring in future years would result in lower emissions.

Refer to **Appendix B** for modeling output files and assumptions.

Table 9
Estimated Quarterly Construction Emissions Without Mitigation

	Quarterly Emissions (tons)						
			PM ₁₀				
Quarter	ROG+NO _x	Dust	Exhaust	Total	PM _{2.5}		
Year 2012, Quarter 3	2.10	0.20	0.09	0.29	0.16		
Year 2012, Quarter 4	1.35	0.06	0.07	0.13	0.08		
Year 2013, Quarter 1	1.70	0.06	0.08	0.14	0.08		
Year 2013, Quarter 2	2.13	0.07	0.08	0.14	0.08		
Year 2013, Quarter 3	2.13	0.07	0.08	0.14	0.08		
Year 2013, Quarter 4	1.11	0.03	0.04	0.07	0.04		

Note: Detailed construction phasing information is not yet available. Conservatively assumes that development of proposed project phases would occur consecutively with complete buildout occurring prior to year 2014. Emissions were quantified based on default construction schedule durations contained in the CalEEMod computer model. Emissions associated with the application of architectural coatings were assumed to begin approximately 5 months after start of building construction through the end of building construction. Asphalt paving emissions are based on the estimated open space and driveway area for each phase.

Refer to **Table 10** for a comparison of quarterly emissions in comparison to SLOAPCD significance thresholds. Refer to **Appendix B** for modeling output files and assumptions.

Table 10
Summary of Estimated Construction Emissions Without Mitigation in Comparison to SLOAPCD Significance Thresholds

Criteria	Emissions	SLOAPCD Significance Threshold	Exceed Significance Threshold?
Maximum Daily Emissions (ROG+NOx):	88.79 lbs/day	137 lbs/day	No
Maximum Quarterly Emissions (ROG+NOx):	2.13 tons/qtr	2.5 tons/qtr	No
Maximum Daily Emissions (DPM):	4.21 lbs/day	7.0 lbs/day	No
Maximum Quarterly Emissions (DPM):	0.09 tons/qtr	0.13 tons/qtr	No
Maximum Quarterly Emissions (Fugitive PM):	0.2 tons/qtr	2.5 tons/qtr	No

Mitigation Measures

MM AQ-1: In accordance with SLOAPCD-recommendations, projects with grading areas that are greater than 4 acres or are within 1,000 feet of any sensitive receptor shall implement the following mitigation measures to manage fugitive dust emissions such that they do not exceed the APCD 20-percent opacity limit (APCD Rule 401) and do not impact offsite areas prompting nuisance violations (APCD Rule 402) (Mutziger 2012):

Fugitive Dust:

- a. Reduce the amount of the disturbed area where possible;
- b. Use of water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site. Increased watering frequency would be required whenever wind speeds exceed 15 mph. Reclaimed (non-potable) water should be used whenever possible;
- c. All dirt stock pile areas should be sprayed daily as needed;
- d. Permanent dust control measures identified in the approved project revegetation and landscape plans should be implemented as soon as possible, following completion of any soil disturbing activities;
- e. Exposed ground areas that are planned to be reworked at dates greater than one month after initial grading should be sown with a fast germinating, non-invasive, grass seed and watered until vegetation is established;
- f. All disturbed soil areas not subject to revegetation should be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the APCD;
- g. All roadways, driveways, sidewalks, etc. to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used;
- h. Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site;
- i. All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (minimum vertical distance between top of load and top of trailer) in accordance with CVC Section 23114:
- j. Install wheel washers where vehicles enter and exit unpaved roads onto streets, or wash off trucks and equipment leaving the site;
- k. Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers with reclaimed water should be used where feasible;
- I. All PM₁₀ mitigation measures required shall be shown on grading and building plans; and,
- m. The contractor or builder shall designate a person or persons to monitor the fugitive dust emissions and enhance the implementation of the measures as necessary to minimize dust complaints, reduce visible emissions below 20-percent opacity, and to prevent transport of dust offsite. Their duties shall include holidays and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the APCD Compliance Division prior to the start of any grading, earthwork or demolition.

<u>Diesel-Exhaust Particulate Matter</u>: To help reduce sensitive receptor emissions impact of diesel vehicles and equipment used to construct the project, the applicant shall implement the following idling control techniques:

California Diesel Idling Regulations

- n. On-road diesel vehicles shall comply with Section 2485 of Title 13 of the California Code of Regulations. This regulation limits idling from diesel-fueled commercial motor vehicles with gross vehicular weight ratings of more than 10,000 pounds and licensed for operation on highways. It applies to California and non-California based vehicles. In general, the regulation specifies that drivers of said vehicles:
 - 1. Shall not idle the vehicle's primary diesel engine for greater than 5 minutes at any location, except as noted in Subsection (d) of the regulation; and,
 - 2. Shall not operate a diesel-fueled auxiliary power system (APS) to power a heater, air conditioner, or any ancillary equipment on that vehicle during sleeping or resting in a sleeper berth for greater than 5.0 minutes at any location when within

1,000 feet of a restricted area, except as noted in Subsection (d) of the

o. Off-rood diesel equipment shall comply with the 5-minute idling restriction identified in Section 2449(d)(2) of the California Air Resources Board's In-Use off-Road Diesel regulation.

p. Signs must be posted in the designated queuing areas and job sites to remind drivers and

operators of the state's 5-minute idling limit.

q. The specific requirements and exceptions in the regulations can be reviewed at the following websites: www.arb.ca.gov/msprogltruck-idlingl2485.pdf and www.arb.ca.gov/regact/2007/ordiesl07/frooal.pdf;

r. In addition to the State required diesel idling requirements, the project applicant shall comply with these more restrictive requirements to minimize impacts to nearby sensitive receptors:

1. Staging and queuing areas shall not be located within 1,000 feet of sensitive receptors:

2. Diesel idling within 1,000 feet of sensitive receptors shall not be permitted;

3. Use of alternative fueled/electrically-powered equipment is recommended; and

4. Signs that specify the no idling areas must be posted and enforced at the site.

5. Any proposed construction truck routes should be evaluated and selected to ensure routing patterns have the least impact to residential dwellings and other sensitive receptors, such as schools, parks, day care centers, nursing homes, and hospitals.

6. Fuel all off-road and portable diesel powered equipment with CARB-certified

motor vehicle diesel fuel (non-taxed version suitable for use off-road);

7. Use diesel construction equipment meeting CARB's Tier 2 certified engines or cleaner off-road heavy-duty diesel engines, and comply with the State off-Road Regulation (CCR Title 13, Article 4.8, Chapter 9, Section 2449);

Additional Measures: The following additional mitigation measures shall also be implemented:

To the extent practical, reuse and recycle construction waste (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard.

t. Prior to the issuance of grading permits, the applicant shall demonstrate through updated modeling that the actual construction fleet that is secured will not exceed the construction phase thresholds when the construction mitigation is implemented. Should the actual fleet exceed any threshold, then phasing changes or other mitigation shall be proposed and approved by the APCD such that the project will be below the construction phase air quality thresholds of significance of 2.5 tons/quarter ROG+NOx.

u. Demolition of existing structures shall comply with applicable requirements, as stipulated in the National Emission Standard for Hazardous Air Pollutants (40CFR61, Subpart M-Asbestos NESHAP). These requirements include, but are not limited to: 1) notification requirements to the APCD, 2) asbestos survey conducted by a Certified Asbestos Inspector, and 3) applicable removal and disposal requirements of identified ACM.

v. The contractor or builder shall use paints/coatings that comply with or that have a lower VOC content than specified in APCD Rule 433. APCD Rule 433 is available at website url: http://www.arb.ca.gov/drdb/slo/cur.htm.

Significance After Mitigation

The above SLOAPCD-recommended mitigation measures have been incorporated to ensure compliance with SLOAPCD's 20-percent opacity limit (APCD Rule 401) nuisance rule (APCD Rule 402) for the purpose of minimizing impacts to nearby sensitive receptors. Additional mitigation measures have also been included to encourage the reuse and recycling of construction materials to use of heavy-duty construction equipment meeting CARB's Tier 2 engine emission standards, and to minimize emissions of TACs during demolition. As noted earlier in this report, uncontrolled maximum daily and quarterly construction-generated emissions would not exceed SLOAPCD's significance thresholds. Implementation of the proposed mitigation measures would result in further reductions of construction-generated PM, including an estimated 60-percent reduction in fugitive PM. With mitigation, fugitive PM emissions would be reduced to approximately 7.3 lbs/day and approximately 0.8 tons/quarter. With mitigation, this impact would be considered **less than significant**.

Long-term Operational Emissions

Long-term operational emissions associated with the proposed project would be predominantly associated with mobile sources. To a lesser extent, emissions associated with area sources, such as landscape maintenance activities, as well as, use of electricity and natural gas would also contribute to increased emissions.

As previously discussed, it is anticipated that development of the proposed project would occur in two phases. However, detailed construction schedules for development of the proposed project have not yet been identified. As a result, this analysis assumed that construction of the two phases could potentially occur consecutively with total project buildout occurring in Year 2014. Given that a project-specific traffic analysis has not been prepared for this project and to ensure a conservative analysis, the trip-generation rates for the proposed project were based on default rates identified in the CalEEMod computer program for weekday, Saturday, and Sunday conditions. However, it is important to note that based on data obtained from the City of Paso Robles Circulation Element Update (2011), the average daily trip-generation rate for multi-family land uses located within the city is approximately 20 percent lower than the rates identified in the CalEEMod computer program. As a result, actual project-generated mobile-source emissions would likely be lower than indicated in this report. However, to ensure a conservative analysis, this analysis relies on the default trip-generation rates contained in the CalEEMod computer program. Vehicle trips lengths were based on the default assumptions contained in the model for urban conditions. According to the project applicant, the proposed project would not include woodburning hearth devices. Emissions were quantified for both existing and proposed land uses. Emissions modeling assumptions and results are included in Appendix B.

Daily unmitigated operational emissions for existing and proposed land uses are summarized in **Table 11**. Annual unmitigated operational emissions are summarized in **Table 12**. Daily and annual unmitigated operational emissions in comparison to SLOAPCD significance thresholds are summarized in **Table 13**. It is important to note, however, that mitigation measures being incorporated to reduce GHG emissions, as discussed later in this report, would also result in reductions in operational emissions of criteria air pollutants. As indicated in **Table 13**, implementation of the GHG mitigation measures, as well as, anticipated reductions in mobile-source emissions due to the project's proximity to existing local transit, would result in further reductions in operational emissions. As noted in **Table 13**, operational emissions of criteria air pollutants would not exceed SLOAPCD's corresponding daily or annual significance thresholds. As a result, this impact is considered **less than significant**.

Table 11
Estimated Operational Daily Emissions Without Mitigation

			Daily	y Emissions	(lbs/day)		
					PM ₁₀		Total
Source	ROG	NOx	со	Fugitive	Exhaust	Total(1)	PM _{2.5}
Phase I ⁽²⁾ – Summer Conditions			, April			· 7 - 7 - 8	in with
Existing Land Uses ⁽³⁾	0.66	0.43	4.1	0.26	0.01	0.57	0.32
Proposed Project – Phase I ⁽⁴⁾	2.94	2.96	18.46	1.85	0.08	1.96	0.17
Net Increase:	2.28	2.53	14.36	1.59	0.07	1.39	-0.15
Phase I ⁽²⁾ – Winter Conditions			Min a				
Existing Land Uses ⁽³⁾	0.68	0.45	4.18	0.26	0.01	0.57	0.32
Proposed Project – Phase I (4)	3.07	3.11	19.07	1.85	0.08	1.96	0.17
Net Increase:	2.39	2.66	14.89	1.59	0.07	1.39	-0.15
Buildout (Phase I & II)(2) – Summer (Condition	s					
Existing Land Uses ⁽³⁾	0.66	0.43	4.1	0.26	0.01	0.57	0.32
Proposed Project – Phase I & II ⁽⁴⁾	10.93	11.81	71.76	8.55	0.34	9.00	0.74
Net Increase:	10.27	11.38	67.66	8.29	0.33	8.43	0.42
Buildout (Phase I & II)(2) – Winter Co	nditions				7 1-3		7.
Existing Land Uses ⁽³⁾	0.68	0.45	4.18	0.26	0.01	0.57	0.32
Proposed Project – Phase I & II (4)	11.42	12.48	72.99	8.55	0.34	9.00	0.74
Net Increase:	10.74	12.03	68.81	8.29	0.33	8.43	0.42

1. May include indirect emissions from energy use not reflected in exhaust and fugitive categories.

3. Includes potential use of wood-burning hearth devices and reductions associated with proximity to existing

Refer to **Appendix B** for modeling output files and assumptions.

^{2.} Detailed construction phase schedules are not yet available. To be conservative, this analysis assumes that development of project phases I & Il could occur consecutively with total project buildout occurring in year 2014. Operational emissions for Phase I are based on year 2013 emissions, assuming an estimated total of 40 units. Operational emissions would be lower for future years.

^{4.} Based on the default trip-generation rates identified in the CalEEMod computer program. Based on trip-generation rates identified in the City of Paso Robles Circulation Element Update (2011) average-daily trip-generation rates may be approximately 20% lower, which would result in lower operational emissions. Does not reflect anticipated reductions with implementation of GHG-reduction measures/proximity to transit. Winter emissions include one gas-fired fireplace to be located in the community building.

Table 12 **Estimated Operational Annual Emissions Without Mitigation**

			Annu	al Emission	s (tons/year)		
	ROG NOx			PM ₁₀			Total
Source		NOx	со	Fugitive	Exhaust	Total(1)	PM _{2.5}
Phase I - Year 2013 (2)							
Existing Land Uses ⁽³⁾	0.09	0.07	0.48	0.04	0.00	0.05	0.01
Proposed Project – Phase I ⁽⁴⁾	0.64	0.64	4.49	0.35	0.02	0.48	0.15
Net Increase:	0.55	0.57	4.01	0.31	0.02	0.43	0.14
Buildout (Phase I & II) - Year 2014	1	- 19 to a			WE HE		7.5
Existing Land Uses ⁽³⁾	0.09	0.07	0.48	0.04	0.00	0.05	0.01
Proposed Project – Phase I & II(4)	1.88	2.01	12.25	1.23	0.06	1.31	0.13
Net Increase:	1.79	1.94	11.77	1.19	0.06	1.26	0.12

- 1. May include indirect emissions from energy use not reflected in exhaust and fugitive categories.
- 2. Detailed construction phase schedules are not yet available. To be conservative, this analysis assumes that development of project phases I & II could occur consecutively with total project buildout occurring in year 2014. Operational emissions would be lower for future years.
- Includes wood-burning hearth devices and reductions associated with proximity to existing transit.
 Based on the default trip-generation rates identified in the CalEEMod computer program. Based on tripgeneration rates identified in the City of Paso Robles Circulation Element Update (2011) average-daily tripgeneration rates may be approximately 20% lower, which would result in lower operational emissions. Assumes no wood-burning hearth devices would be installed. Does not reflect anticipated reductions with implementation of GHG-reduction measures/proximity to transit. Includes one gas-fired fireplace to be located in the community building.

Refer to Appendix B for modeling output files and assumptions.

Table 13
Estimated Operational Emissions
in Comparison to SLOAPCD Significance Thresholds

Criteria	Emissions	SLOAPCD Significance Threshold	Exceed Significance Threshold?
Buildout (Phase I & II) - Without Mitigation			
Maximum Daily ROG+NO _x Emissions (Winter):	22.77 lbs/day	25 lbs/day	No
Maximum Annual ROG+NO _x Emissions:	3.73 tons/year	25 tons/year	No
Maximum Daily DPM Emissions:	0.01 lbs/day	1.25 lbs/day	No
Maximum Daily Fugitive PM Emissions:	8.29 lbs/day	25 lbs/day	No
Maximum Annual Fugitive PM Emissions:	1.19 tons/year	25 tons/year	No
Maximum Daily CO Emissions:	68.81 lbs/day	550 lbs/day	No
Buildout (Phase I & II) - With Access to Local Tra	nsit and GHG-Reduct	ion Measures ⁽¹⁾	
Maximum Daily ROG+NO _x Emissions (Winter):	19.39 lbs/day	25 lbs/day	No
Maximum Annual ROG+NO _x Emissions:	3.20 tons/year	25 tons/year	No
Maximum Daily DPM Emissions:	0.01 lbs/day	1.25 lbs/day	No
Maximum Daily Fugitive PM Emissions:	6.32 lbs/day	25 lbs/day	No
Maximum Annual Fugitive PM Emissions:	0.91 tons/year	25 tons/year	No
Maximum Daily CO Emissions:	58.42 lbs/day	550 s/day	No

Note: Detailed construction phase schedules are not yet available. To be conservative, this analysis assumes that development of project phases I & II could occur consecutively with total project buildout occurring in year 2014.

Refer to **Appendix B** for modeling output files and assumptions.

D. Would the project expose sensitive receptors to substantial pollutant concentrations?

The exposure of sensitive receptors to substantial pollutant concentrations may potentially occur during construction and long-term operation of the proposed project. Short-term exposure to TACs during the construction phase would be primarily associated with emissions from diesel-fueled off-road equipment. Long-term exposure to pollutant concentrations are typically associated with potential increases in localized concentrations of mobile-source CO at nearby congested roadway intersections and TACs associated with increased exposure to motor vehicle traffic, particularly among roadways that experience high volumes of diesel-fueled trucks. Potential increases in localized concentrations of pollutants associated with short-term construction and long-term operation of the proposed project are discussed separately, as follows:

^{1.} Includes reductions associated with proximity to existing transit and implementation of GHG-reductions measures.

Short-term Air Quality Impacts

Naturally-Occurring Asbestos

Naturally-occurring asbestos, which was identified as a TAC in 1986 by CARB, is located in many parts of California and is commonly associated with ultramafic rock. The project site is not located near any areas that are likely to contain ultramafic rock. As a result, risk of exposure to asbestos during the construction process would be considered less than significant. A map depicting the project site location in relation to areas likely to contain ultramafic rock is included in **Appendix A** of this report.

Asbestos Material in Demolition

Demolition activities can have potential negative air quality impacts, including issues surrounding proper handling, demolition, and disposal of asbestos containing material (ACM). Asbestos containing materials could be encountered during demolition or remodeling of existing buildings. Asbestos can also be found in utility pipes/pipelines (transite pipes or insulation on pipes). Various regulatory requirements may apply, including the requirements stipulated in the National Emission Standard for Hazardous Air Pollutants (40CFR61, Subpart M - asbestos NESHAP). These requirements include but are not limited to: 1) notification to the APCD, 2) an asbestos survey conducted by a Certified Asbestos Inspector, and, 3) applicable removal and disposal requirements of identified ACM (SLOAPCD 2012).

Asbestos containing materials could be encountered during demolition of the existing structures, which could adversely impact nearby sensitive land uses. As a result, this impact is considered **potentially significant**.

Construction-Generated PM

Implementation of the proposed project would result in the generation of fugitive PM and diesel particulate matter (DPM) emitted during construction. Fugitive PM emissions are primarily associated with earth-moving and material handling activities, as well as, vehicle travel on unpaved and paved surfaces. Fugitive PM emissions can result in localized concentrations of PM that could adversely impact nearby sensitive receptors.

DPM emissions are largely associated with the use of off-road diesel equipment during site grading and excavation, paving and other construction activities, as well as, onroad vehicles traveling to and from the project site. Health-related risks associated with diesel-exhaust emissions are primarily associated with long-term exposure and associated risk of contracting cancer. For residential land uses, the calculation of cancer risk associated with exposure of to TACs are typically calculated based on a 70-year period of exposure. The use of diesel-powered construction equipment, however, would be temporary and episodic and would occur over a relatively large area.

As noted in Impact C, localized uncontrolled concentrations of fugitive PM and DPM could adversely affect nearby sensitive receptors. As a result, uncontrolled emissions of fugitive dust and DPM would be considered **potentially significant**.

Mitigation Measure:

Implement MM AQ-1, as identified in "Impact C" above.

Significance After Mitigation

Mitigation Measure AQ-1 includes measures for the control of localized pollutant concentrations, including emissions of fugitive PM, DPM, and asbestos containing materials during demolition. With implementation of **Mitigation Measure AQ-1**, this impact would be considered less than significant.

Long-term Air Quality Impacts

Toxic Air Contaminants

Implementation of the proposed project would not result in the long-term operation of any major onsite stationary sources of TACs, nor would project implementation result in a significant increase in diesel-fueled vehicles traveling along area roadways.

As noted earlier in this report (refer to **Table 2**), the ARB recommends that sensitive land uses not be located within 500 feet of a major roadway. A major roadway is defined as a roadway designated as a "freeway", urban roadways with volumes of 100,000 vehicles/day, or greater, or rural roadways with volumes of 50,000 vehicles/day, or greater. "Freeways" are generally defined as high-capacity facilities that primarily serve long-distance travel with access limited to interchanges that are typically spaced at least one mile apart. For proposed sensitive land uses located within 500 feet of a major roadway, a more detailed assessment of potential mobile-source health risks is recommended.

The nearest roadways within 500 feet of the project site include Highway 46, Experimental Station Road, and River Oaks Drive. No roadways designated as "freeway" are located within 500 feet of the project boundary (City of Paso Robles 2011). The nearest designated freeway is US 101 located approximately 1,700 feet west of the project site. The highest volume roadway in the project vicinity, Highway 46, averages approximately 26,000 vehicles/day (City of Paso Robles 2011). No roadways are located within 500 feet that would exceed the ARB's definition of a "major roadway." As a result, additional analysis of potential mobile-source health risks is not required. For these reasons, long-term exposure to TACs would be considered **less than significant**.

Mobile-Source Carbon Monoxide

Carbon monoxide is the primary criteria air pollutant of local concern associated with the proposed project. Under specific meteorological and operational conditions, such as near areas of heavily congested vehicle traffic, CO concentrations may reach unhealthy levels. If inhaled, CO can be adsorbed easily by the blood stream and can inhibit oxygen delivery to the body, which can cause significant health effects ranging from slight headaches to death. The most serious effects are felt by individuals susceptible to oxygen deficiencies, including people with anemia and those suffering from chronic lung or heart disease.

Mobile-source emissions of CO are a direct function of traffic volume, speed, and delay. Transport of CO is extremely limited because it disperses rapidly with distance from the source

under normal meteorological conditions. For this reason, modeling of mobile-source CO concentrations is typically recommended for sensitive land uses located near signalized roadway intersections that are projected to operate at unacceptable levels of service (i.e., LOS E or F).

The nearest signalized intersection in relation to the project site is the intersection of Highway 46 and Buena Vista Road. This intersection was recently evaluated in the traffic analysis prepared by Penfield & Smith for the proposed Ayres Paso Robles, LTD. project Initial Study/Mitigated Negative Declaration (2012). Based on this analysis, the intersection of Highway 46 and Buena Vista Road currently operates at LOS B/C during pm/am peak hours, respectively. Implementation of the proposed project would not be anticipated to result in or contribute to unacceptable levels of service (i.e., LOS E, or worse) at this intersection. In addition, implementation of the proposed project would not result in localized emissions of CO that would exceed SLOAPCD's localized CO significance threshold of 550 lbs/day. For the reasons discussed above and given the relatively low background CO concentrations in the project area, this impact would be considered *less than significant*.

E. Would the project create objectionable odors affecting a substantial number of people?

The occurrence and severity of odor impacts depends on numerous factors, including: the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of the receptors. While offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress among the public and often generating citizen complaints to local governments and regulatory agencies. Projects with the potential to frequently expose members of the public to objectionable odors would be deemed to have a significant impact.

The proposed project would not result in the installation of any equipment or processes that would be considered major odor-emission sources. However, construction of the proposed project would involve the use of a variety of gasoline or diesel-powered equipment that would emit exhaust fumes. Exhaust fumes, particularly diesel-exhaust, may be considered objectionable by some people. In addition pavement coatings and architectural coatings used during project construction would also emit temporary odors. However, construction-generated emissions would occur intermittently throughout the workday and would dissipate rapidly within increasing distance from the source. As a result, short-term construction activities would not expose a substantial number of people to frequent odorous emissions. For these reasons, potential exposure of sensitive receptors to odorous emissions would be considered **less than significant**.

GREENHOUSE GASES AND CLIMATE CHANGE

This section describes the existing setting related to climate change, including a summary of the regulatory framework and the local greenhouse gas (GHG) emissions inventory. Potential GHG impacts associated with the proposed project are evaluated and mitigation measures have been identified for significant impacts. Emissions modeling assumptions and output files are included in **Appendix B**.

SETTING

The earth's climate has been warming for the past century. It is believed that this warming trend is related to the release of certain gases into the atmosphere. Greenhouse gases (GHG) absorb infrared energy that would otherwise escape from the earth. As the infrared energy is absorbed, the air surrounding the earth is heated. An overall warming trend has been recorded since the late 19th century, with the most rapid warming occurring over the past two decades. The 10 warmest years of the last century all occurred within the last 15 years. It appears that the decade of the 1990s was the warmest in human history [NOAA 2010]. Human activities have been attributed to an increase in the atmospheric abundance of greenhouse gases. The following is a brief description of the most commonly recognized GHGs.

GREENHOUSE GASES

- Carbon dioxide (CO₂) is an odorless, colorless natural greenhouse gas. CO₂ is emitted from natural and anthropogenic sources. Natural sources include the following: decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic out gassing. Anthropogenic sources are from burning coal, oil, natural gas, and wood.
- Methane (CH₄) is a flammable greenhouse gas. A natural source of methane is from the anaerobic decay of organic matter. Geological deposits, known as natural gas fields, also contain methane, which is extracted for fuel. Other sources are from landfills, fermentation of manure, and ruminants such as cattle.
- Nitrous oxide (N_20) , also known as laughing gas, is a colorless greenhouse gas. Nitrous oxide is produced by microbial processes in soil and water, including those reactions that occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load.
- Water vapor is the most abundant, important, and variable greenhouse gas. It is not
 considered a pollutant; in the atmosphere, it maintains a climate necessary for life.
- Ozone is known as a photochemical pollutant and is a greenhouse gas; however, unlike
 other greenhouse gases, ozone in the troposphere is relatively short-lived and, therefore,
 is not global in nature. Ozone is not emitted directly into the atmosphere but is formed by
 a complex series of chemical reactions between volatile organic compounds, nitrogen
 oxides, and sunlight.
- Aerosols are suspensions of particulate matter in a gas emitted into the air through burning biomass (plant material) and fossil fuels. Aerosols can warm the atmosphere by absorbing and emitting heat and can cool the atmosphere by reflecting light.

- Hydrofluorocarbons (HFCs) are synthetic chemicals that are used as a substitute for CFCs.
 Of all the greenhouse gases, HFCs are one of three groups (the other two are
 perfluorocarbons and sulfur hexafluoride) with the highest global warming potential. The
 global warming potential is the potential of a gas to contribute to global warming; it is
 based on a reference scale with carbon dioxide at one. HFCs are human-made for
 applications such as air conditioners and refrigerants.
- Chlorofluorocarbons (CFCs) are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the earth's surface). CFCs were first synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. CFCs destroy stratospheric ozone; therefore, their production was stopped as required by the Montreal Protocol in 1987. The project would not emit CFCs.
- Perfluorocarbons (PFCs) have stable molecular structures and do not break down through the chemical processes in the lower atmosphere; therefore, PFCs have long atmospheric lifetimes, between 10,000 and 50,000 years. The two main sources of PFCs are primary aluminum production and semiconductor manufacture. The project would not emit PFCs.
- Sulfur hexafluoride (SF6) is an inorganic, odorless, colorless, nontoxic, nonflammable gas.
 It has the highest global warming potential of any gas evaluated. Sulfur hexafluoride is
 used for insulation in electric power transmission and distribution equipment, in the
 magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak
 detection. The project would not emit SF6.

FFFFCTS OF CLIMATE CHANGE

There are uncertainties as to exactly what the climate changes will be in various local areas of the earth, and what the effects of clouds will be in determining the rate at which the mean temperature will increase. There are also uncertainties associated with the magnitude and timing of other consequences of a warmer planet: sea level rise, spread of certain diseases out of their usual geographic range, the effect on agricultural production, water supply, sustainability of ecosystems, increased strength and frequency of storms, extreme heat events, air pollution episodes, and the consequence of these effects on the economy.

Emissions of GHGs contributing to global climate change are largely attributable to human activities associated with industrial/manufacturing, utility, transportation, residential, and agricultural sectors. About three-quarters of human emissions of CO₂ to the global atmosphere during the past 20 years are due to fossil fuel burning. Atmospheric concentrations of CO₂, CH₄, and N₂O have increased 31 percent, 151 percent, and 17 percent respectively since the year 1750 (CEC 2008). GHG emissions are typically expressed in carbon dioxide-equivalents (CO₂e), based on the GHG's Global Warming Potential (GWP). The GWP is dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. For example, one ton of CH₄ has the same contribution to the greenhouse effect as approximately 21 tons of CO₂. Therefore, CH₄ is a much more potent GHG than CO₂.

Worldwide, California is ranked as the 12th largest emitter of GHGs (CEC 2008). Based on the most recent GHG emissions inventory, California's gross annual emissions of GHGs in 2004 totaled approximately 500 million metric tons (MMT) of CO₂e. Most of California's emissions, approximately 81 percent, consist of carbon dioxide produced from fossil fuel combustion (CEC 2006, 2007). The transportation sector is the single largest category of California's GHG emissions,

accounting for approximately 39 percent of the state's total GHG emissions, followed by electricity consumption (from both in-state and out-of-state providers), which accounts for a total of roughly 28 percent of the state's total GHG emissions. The contribution from each of the various other use sectors contribute roughly 6 to 10 percent each to the total GHG emissions inventory (CEC 2008).

According to the Intergovernmental Panel on Climate Change's Working Group II report: Climate Change 2007: Impacts, Adaptation and Vulnerability (2007), climate change impacts to North America may include (IPCC 2007):

- Diminishing snowpack
- Increasing evaporation
- Exacerbate shoreline erosion
- Exacerbate inundation from sea level rising
- Increased risk and frequency of wildfire
- Increased risk of insect outbreaks
- Increased experiences of heat waves
- Rearrangement of ecosystems as species and ecosystems shift northward and to higher elevations

For California, climate change has the potential to incur/exacerbate the following environmental impacts:

Air Pollution

• Increased frequency, duration, and intensity of conditions conducive to air pollution formation (particularly ozone)

Water Resources

- Reduced precipitation
- Changes to precipitation and runoff patterns
- Reduced snowfall (precipitation occurring as rain instead of snow)
- Earlier snowmelt
- Decreased snowpack
- Increased agricultural demand for water

Agricultural Impacts

- Increased growing season.
- Increased growth rates of weeds, insect pests and pathogens

Coastal Impacts

Inundation by sea level rise

Forests and Natural Landscapes Impacts

- Increased incidents and severity of wildfire events
- Expansion of the range and increased frequency of pest outbreaks

LOCAL GHG EMISSIONS

In May 2008, the City Council of the City of Paso Robles passed and adopted a resolution to join the ICLEI and participate in the Cities for Climate Protection (CCP) Campaign and promote public awareness about climate change. The CCP Campaign is a program under the ICLEI that assists cities to adopt policies and implement quantifiable measures to reduce local GHG emissions, improve air quality, and enhance urban livability and sustainability.

In April 2010, a greenhouse gas emissions Inventory for the City of Paso Robles was completed to establish baseline conditions in the city. This inventory estimates the quantity of GHGs in 2005 in

order to establish a baseline against which to measure future emissions and in order to understand where the highest percentages of emission are being generated. According to the GHG inventory, the community emitted approximately 155,106 metric tons of CO₂e in calendar year 2005. The largest emitter was the transportation sector. The majority of emissions from the transportation sector were the result of gasoline consumption in private vehicles traveling on local roads, and state highways, including U.S. Highway 101 (US 101) and State Routes 46 East and 46 West.

As with the majority of California municipalities, travel by on-road motorized vehicle constitutes the greatest percentage of greenhouse gas emissions in Paso Robles (44.6 percent). Approximately 62 percent of the emissions (42,945 metric tons CO_2e) in the transportation sector came from travel on local roads (City of Paso Robles 2010).

REGULATORY FRAMEWORK

FEDERAL

International and federal legislation has been enacted to deal with global climate change issues. The Montreal Protocol was originally signed in 1987 and substantially amended in 1990 and 1992. The Montreal Protocol governs compounds that deplete ozone in the stratosphere, chlorofluorocarbons, halons, carbon tetrachloride, and methyl chloroform. The Protocol provided that these compounds were to be phased out by 2000 (2005 for methyl chloroform).

In 1988, the United Nations and the World Meteorological Organization established the Intergovernmental Panel on Climate Change to assess "the scientific, technical and socioeconomic information relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts, and options for adaptation and mitigation."

On March 21, 1994, the United States joined a number of countries around the world in signing the United Nations Framework Convention on Climate Change. Under the Convention, governments do the following: gather and share information on greenhouse gas emissions, national policies, and best practices; launch national strategies for addressing greenhouse gas emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries; and cooperate in preparing for adaptation to the impacts of climate change.

A particularly notable result of the United Nations Framework Convention on Climate Change efforts was a treaty known as the Kyoto Protocol. When countries sign the treaty, they demonstrate their commitment to reduce their emissions of greenhouse gases or engage in emissions trading. More than 160 countries, representing 55 percent of global emissions—are currently participating in the protocol. In 1998, United States Vice President Al Gore symbolically signed the Protocol; however, in order for the Protocol to be formally ratified, it must be ratified by the United States Senate. The Senate has not ratified the Protocol and, furthermore, in anticipation of the Protocol, approved a nonbonding "Sense of the Senate" resolution in July 1997 by a margin of 95-0 that expressed opposition to the treaty's provisions, most notably the disparity in greenhouse gas emissions reduction obligations between industrialized nations and developing nations. In 2001, President George W. Bush indicated that he would not submit the treaty for ratification, which effectively tabled the Protocol indefinitely.

In October 1993, President Bill Clinton announced his Climate Change Action Plan, which had a goal to return greenhouse gas emissions to 1990 levels by the year 2000. This was to be accomplished through 50 initiatives that relied on innovative voluntary partnerships between the private sector and government aimed at producing cost-effective reductions in greenhouse gas emissions.

Massachusetts v. EPA (Supreme Court Case 05-1120) was argued before the United States Supreme Court on November 29, 2006, in which it was petitioned that the EPA regulate four greenhouse gases, including carbon dioxide, under Section 202(a)(1) of the Clean Air Act. A decision was made on April 2, 2007, in which the Court held that petitioners have a standing to challenge the EPA and that the EPA has statutory authority to regulate emissions of greenhouse gases from new motor vehicles.

STATE

Senate Bill 1771 - Greenhouse Gas Emission Reductions: Climate Change

Senate Bill 1771, chaptered in September of 2000, specified the creation of the non-profit organization, the California Climate Action Registry. The Registry helps various California entities establish greenhouse gas (GHG) emissions baselines. Also, the Registry enables participating entities to voluntarily record their annual GHG emissions inventories.

A.B. 1493 – Reduction of GHGs from Passenger Vehicles/Light Duty Trucks

California Assembly Bill 1493 (Pavley), enacted on July 22, 2002, required the CARB to develop and adopt regulations that reduce greenhouse gases emitted by passenger vehicles and light-duty trucks. Regulations adopted by the CARB would apply to 2009 and later model year vehicles. The CARB estimates that the regulation would reduce climate change emissions from the light-duty passenger vehicle fleet by an estimated 18 percent in 2020 and by 27 percent in 2030.

Executive Order No. S-3-05

California Governor Arnold Schwarzenegger announced on June 1, 2005, through Executive Order S-3-05, the following greenhouse gas emission reduction targets:

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

Climate Action Team

To meet these targets, the Governor directed the Secretary of the California Environmental Protection Agency (CalEPA) to lead a Climate Action Team made up of representatives from the Business, Transportation and Housing Agency; the Department of Food and Agriculture; the Resources Agency; the Air Resources Board; the Energy Commission; and the Public Utilities Commission. The Climate Action Team's Report to the Governor in 2006 contains recommendations and strategies to help ensure the targets in Executive Order S-3-05 are met.

Assembly Bill 32 - California Global Warming Solutions Act of 2006

In 2006, the California State Legislature adopted AB 32, the California Global Warming Solutions Act of 2006. AB 32 establishes a cap on statewide greenhouse gas emissions and sets forth the

regulatory framework to achieve the corresponding reduction in statewide emissions levels. AB 32 charges the CARB, the state agency charged with regulating statewide air quality, with implementation of the act. The regulatory steps laid out in AB 32 require CARB to begin developing discrete early actions to reduce greenhouse gases while also preparing a scoping plan to identify how best to reach the 2020 limit. The reduction measures to meet the 2020 target are to be adopted by the start of 2011.

The Board identified nine discrete early action measures including regulations affecting landfills, motor vehicle fuels, refrigerants in cars, tire pressure, port operations and other sources in 2007 that included ship electrification at ports and reduction of high global warming potential (GWP) gases in consumer products. Regulatory development for the remaining measures is ongoing. In December 2007, the Board adopted a regulation requiring the largest industrial sources to report and verify their greenhouse gas emissions. The reporting regulation serves as a solid foundation to determine greenhouse gas emissions and track future changes in emission levels. In February 2008, the Board approved a policy statement encouraging voluntary early actions and establishing a procedure for project proponents to submit quantification methods to be evaluated by CARB. CARB, along with California's local air districts and the California Climate Action Registry (CCAR), is working to implement this program. In December 2008, a Scoping Plan was approved by CARB, which provides the outline for actions to reduce greenhouse gases in California (CARB 2008).

Senate Bill 97 - CEQA: Greenhouse Gas Emissions

Senate Bill 97, signed in August 2007, acknowledges that climate change is an important environmental issue that requires analysis under CEQA. This bill directs the Governor's Office of Planning and Research (OPR) to prepare, develop, and transmit to the Resources Agency guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions, by July 1, 2009. The Resources Agency is required to certify or adopt those guidelines by January 1, 2010. This bill also protected projects until January 1, 2010 that were funded by the Highway Safety, Traffic Reduction, Air Quality and Port Security Bond Act of 2006, or the Disaster Preparedness and Flood Protection Bond Act of 2006 (Proposition 1B or 1E) from claims of inadequate analysis of GHG as a legitimate cause of action. Thus, this "protection" is highly limited to a handful of projects and for a short time period (CAPCOA 2008).

Governor's Office of Planning and Research

The Governor's Office of Planning and Research published a technical advisory on CEQA and Climate Change, as required under SB 97, on June 19, 2008. The guidance did not include a suggested threshold, but stated that the OPR has asked CARB to "...recommend a method for setting thresholds which will encourage consistency and uniformity in the CEQA analysis of greenhouse gas emissions throughout the state." The OPR does recommend that CEQA analyses include the following components:

- Identify GHG emissions
- Determine significance
- Mitigate impacts

Executive Order S-01-07

Executive Order S-01-07 was enacted by the Governor on January 18, 2007. The order mandates that a statewide goal shall be established to reduce the carbon intensity of California's

transportation fuels by at least 10 percent by 2020. It also requires that a Low Carbon Fuel Standard for transportation fuels be established for California.

Western Climate Initiative

The Western Climate Initiative was signed on February 26, 2007 by five states: Washington, Oregon, Arizona, New Mexico, and California. British Columbia, Canada joined on April 20, 2007. Members of the Initiative plan on collaborating to identify, evaluate, and implement ways to reduce greenhouse gas emissions in the states collectively and to achieve related co-benefits. Members also plan to design a regional market-based multi-sector mechanism, such as a load-based cap and trade program, by August 2008. In addition, a multi-state registry will track, manage, and credit entities that reduce greenhouse gas emissions. The Initiative published its regional greenhouse gas reduction goals on August 22, 2007, which include a reduction of 15 percent below 2005 levels by 2020.

Senate Bill 375

SB 375 became effective January 1, 2009. SB 375 requires CARB to develop regional reduction targets for GHG emissions, and prompts the creation of regional plans to reduce emissions from vehicle use throughout the state. California's Metropolitan Planning Organizations (MPOs) have been tasked with creating "Sustainable Community Strategies" (SCS). The MPOs are required to develop the SCS through integrated land use and transportation planning and demonstrate an ability to attain the proposed reduction targets by 2020 and 2035.

CALIFORNIA BUILDING CODE

The California Building Code contains standards that regulate the method of use, properties, performance, or types of materials used in the construction, alteration, improvement, repair, or rehabilitation of a building or other improvement to real property. The California Building Code is adopted every three years by the Building Standards Commission (BSC). In the interim, the BSC also adopts annual updates to make necessary mid-term corrections. The CBC standards apply statewide; however, a local jurisdiction may amend a CBC standard if it makes a finding that the amendment is reasonably necessary due to local climatic, geological, or topographical conditions.

Green Building Standards

In essence, green buildings standards are indistinguishable from any other building standards. Both are contained in the California Building Code and regulate the construction of new buildings and improvements. The only practical distinction between the two is that whereas the focus of traditional building standards has been protecting public health and safety, the focus of green building standards is to improve environmental performance.

AB 32, which mandates the reduction in greenhouse gas emissions in California to 1990 levels by 2020, increased the urgency around the adoption of green building standards. In its scoping plan for the implementation of AB 32, the CARB identified energy use as the second largest contributor to California's GHG emissions, constituting roughly 25 percent of all such emissions. In recommending a green building strategy as one element of the scoping plan, the CARB estimated that green building standards would reduce GHG emissions by approximately 26 million metric tons of CO₂e (MMTCO₂e) by 2020 (BSC 2011).

2010 Green Building Code

On January 12, 2010, the Building Standards Commission adopted the 2010 California Green Building Standards Code, also known as the 2010 CALGreen Code. In addition to the new statewide mandates, CALGreen encourages local governments to adopt more stringent voluntary provisions, know as Tier 1 and Tier 2 provisions, to further reduce greenhouse gas emissions, improve energy efficiency, and conserve natural resources. If a local government adopts one of the tiers, the provisions become mandates for all new construction within that jurisdiction. The most significant features of the 2010 CALGreen Code include the following (BSC 2011):

- 20 percent mandatory reduction in indoor water use, with voluntary goal standards for 30, 35 and 40 percent reductions;
- Separate indoor and outdoor water meters to measure nonresidential buildings' indoor and outdoor water use with a requirement for moisture-sensing irrigation systems for larger landscape projects;
- Diversion of 50 percent of construction waste from landfills, increasing voluntarily to 65 and 75 percent for new homes and 80 percent for commercial projects;
- Mandatory periodic inspections of energy systems (i.e., heat furnace, air conditioner, mechanical equipment) for nonresidential buildings over 10,000 square feet to ensure that all are working at their maximum capacity according to their design efficiencies;
- Mandatory use of low-pollutant emitting interior finish materials such as paints, carpet, vinyl flooring, and particle board.

SAN LUIS OBISPO COUNTY AIR POLLUTION CONTROL DISTRICT

The San Luis Obispo County Air Pollution Control District (SLOAPCD) is a local public agency with the primary mission of realizing and preserving clean air for all county residents and businesses. Responsibilities of the SLOAPCD include, but are not limited to, preparing plans for the attainment of ambient air quality standards, adopting and enforcing rules and regulations concerning sources of air pollution, issuing permits for stationary sources of air pollution, inspecting stationary sources of air pollution and responding to citizen complaints, monitoring ambient air quality and meteorological conditions, and implementing programs and regulations required by federal and state regulatory requirements.

GHG Significance Thresholds

The SLOAPCD recently adopted recommended GHG significance thresholds. These thresholds are based on AB 32 GHG emission reduction goals, which take into consideration the emission reduction strategies outlined in ARB's Scoping Plan. The GHG significance thresholds include one qualitative threshold and two quantitative thresholds options for evaluation of operational GHG emissions. The qualitative threshold option is based on a consistency analysis in comparison to a Qualified Greenhouse Gas Reduction Strategy, or equitably similar adopted policies, ordinances and programs. If a project complies with a Qualified Greenhouse Gas Reduction Strategy that is specifically applicable to the project, then the project would be considered less than significant. The two quantitative threshold options include: 1) a bright-line threshold of 1,150 MTCO2e/year; and 2) an efficiency threshold of 4.9 MTCO2e/service population (residents+employees)/year. An additional GHG significance threshold of 10,000 MTCO2e/year is proposed for industrial stationary sources. The applicable GHG significance threshold to be used would depend on the type of project being proposed. Projects with GHG emissions that do not exceed the selected

threshold would be considered to have a less-than-significant impact. The APCD's GHG emission thresholds are summarized in **Table 14**.

Table 14
SLOAPCD Greenhouse Gas Thresholds of Significance

Project	Draft Threshold		
Projects other than Stationary Sources	 Compliance with Qualified GHG Reduction Strategy; or 1,150 MT CO2e/year; or 4.9 MT CO2e/SP/year (residents+employees) 		
Stationary Sources (Industrial)	10,000 MT CO2e/year		
Construction	Amortized over the life of the project and added to operation GHG emissions		

IMPACTS ANALYSIS

GHG impacts attributable to the proposed project are summarized in Table 15.

Table 15
Summary of Project-Related Greenhouse Gas Emissions Impacts

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
A) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?		-		
B) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			П	

METHODOLOGY

GHG emissions associated with the proposed project were calculated using the CalEEMod computer program. Construction equipment load factors were adjusted to reflect those currently identified in the Carl Moyer Program Guidelines (2011). Equipment requirements, hours of use, construction employee trips, and equipment emission factors were based on the default parameters contained in the models. Operational emissions were based on the default parameters contained in the CalEEMod computer program. Modeling assumptions and output files are included in **Appendix B** of this report.

THRESHOLDS OF SIGNIFICANCE

Project-generated emissions exceeding the SLOAPCD recommended significance thresholds for GHG emissions, as summarized in **Table 14**, would be considered to have a potentially significant impact on the environment, which could conflict with implementation of applicable plans, policies and regulations pertaining to the reduction of GHG emissions, including AB32.

PROJECT IMPACTS AND MITIGATION MEASURES

- A. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? and
- B. Would the project conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?

Estimated GHG emissions attributable to future development would be primarily associated with increases of CO_2 from mobile sources. To a lesser extent, other GHG pollutants, such as CH_4 and N_2O , would also be generated. Short-term and long-term GHG emissions associated with the development of the proposed project are discussed in greater detail, as follows:

Short-term Greenhouse Gas Emissions

Estimated increases in GHG emissions associated with construction of the proposed project are summarized in **Table 16**. Based on the modeling conducted, annual emissions of greenhouse gases associated with construction of the proposed project would range from approximately 323 to 535 MTCO₂e/year. In total, construction of the proposed project would generate approximately 859 MTCO₂e, which averages approximately 17 MTCO₂e/year when amortized over the assumed 50-year life of the project. There would also be a small amount of GHG emissions from waste generated during construction; however, this amount is speculative. Actual emissions may vary, depending on the final construction schedules, equipment required, and activities conducted.

Table 16
Annual Construction-Generated GHG Emissions

Construction Year	GHG Emissions/Construction Year (MTCO2e/Year)
Year 2012	323
Year 2013	535
Total:	859
Amortized Annual Emissions (1);	17

Long-term Greenhouse Gas Emissions

Estimated long-term increases in GHG emissions associated with the proposed project are summarized in **Table 17**. Based on the modeling conducted, operational GHG emissions would

be predominantly associated with mobile sources, which would constitute roughly 75 percent of total project-generated GHG emissions. To a lesser extent, GHG emissions would also be associated with energy use, solid waste generation, as well as, water use and conveyance.

Table 17
Operational Greenhouse Gas Emissions
Without Mitigation

Without Mitigation				
Source	Net Change in Emissions (MTCO ₂ e/Year)			
Project Phase I – Year 2013				
Construction (Amortized)	17			
Area Source(1)	3.24			
Energy Use	76.00			
Motor Vehicles	292.47			
Waste Generation	8.37			
Water Use and Conveyance	11.09			
Total:	408			
Project Phases I & II – Year 2014				
Construction (Amortized)	17			
Area Source	5.58			
Energy Use	269.82			
Motor Vehicles	1,016.43			
Waste Generation	27.69			
Water Use and Conveyance	37.06			
Total:	1,356			
SLOAPCD Significance Threshold:	1,150			
Exceeds Significance Threshold?:	Yes			
 Includes one gas-fired fireplace located in the community Refer to Appendix B for modeling assumptions and results. 	building.			

As noted in **Table 17**, the proposed project would generate a total of approximately 1,354 MTCO₂e/year at buildout. Project-generated GHG emissions would exceed the SLOAPCD's significance threshold of 1,150 MTCO₂e/year. Project-generated GHG emissions would be considered to have a potentially significant impact on the environment, which could conflict with implementation of applicable plans, policies and regulations pertaining to the reduction of GHG emissions, including AB32.

Mitigation Measure

MM GHG-1: The following mitigation measures are recommended, at a minimum, to reduce operational GHG emissions associated with the proposed project:

- a. Installation of gas and wood-burning hearth devices shall be prohibited within dwelling units. One gas-fired fireplace may be allowed within the community building.
- b. Proposed onsite occupied buildings shall exceed baseline Title 24 Building Envelope Energy Efficiency Standards by a minimum of 10 percent. The baseline GHG emissions from electricity and natural gas usage shall reflect 2008 Title 24 standards with no energy-efficient appliances.

- c. The project shall install energy-efficient appliances, such as "Energy Star" rated appliances, including dish washers, clothes washers, ceiling fans, and refrigerators.
- d. The project proponent shall demonstrate that the project-wide lighting efficiency shall be improved by at least 16% relative to current conventional lighting methods through the installation of energy-efficient lighting, (e.g., metal halide, high-pressure sodium, LEDs) for interior and exterior lighting areas. Unnecessary exterior lighting should be reduced, to the extent practical and where reductions in lighting would not pose a risk to public safety.
- e. Incorporate water-reducing features into building and landscape design, including use of drought-tolerant landscaping, minimizing turfed areas, and installation of water-efficient irrigation systems in accordance with the City of Paso Robles Zoning Code, Chapter 21.22B, Landscape and Irrigation Ordinance.
- f. Provide a sufficient number of bicycle racks/storage areas to meet resident needs.
- g. The project site shall be designed so as not to impede pedestrian and bicycle access to existing and planned adjacent pedestrian and bicycle corridors.
- h. Buildings shall be designed to take advantage of sunlight to reduce electrical demand for daytime interior lighting and electrical demand (e.g., incorporation of skylights and solar energy systems), where practical.
- i. Low-flow bathroom and kitchen faucets, toilets, and showers shall be installed.
- j. The guest house and pool shall be designed to utilize energy-efficient equipment and, to the extent practical, solar heating and photovoltaic system(s).
- k. The project proponent shall submit proof to the Paso Robles Community Development Department Staff and the APCD that the measures in MM GHG-1 have been met at a time deemed appropriate by Community Development Department Staff.

Significance After Mitigation

Estimated GHG emissions, with implementation of the above measures, are summarized in **Table 18**. It is important to note that the proposed project has been designed to incorporate many of the features that have been identified as mitigation, such as the prohibited use of wood-burning hearth devices and incorporation of features to enhance pedestrian and bicycle use. It is also important to note that the proposed pool and clubhouse have been designed to utilize energy to be obtained from a solar photovoltaic (PV) system. However, the size of the PV system has not yet been identified and, therefore, was not included in this analysis. These features have been included as mitigation to ensure implementation during project construction. As noted, implementation of the proposed mitigation measures would reduce buildout operational GHG emissions to approximately 1,043 MTCO₂e/year; an estimated reduction of approximately 311 MTCO₂e/year. With implementation of the proposed mitigation measures, this impact would be considered less than significant.

Table 18
Operational Greenhouse Gas Emissions (Buildout)
With Mitigation

With intigate	
Source	Net Change in Emissions (MTCO ₂ e/Year)
Project Phases I & II – Year 2014	
Construction (Amortized)(1)	17
Area Source ⁽⁶⁾	5.58
Energy Use ⁽²⁾	247.52
Motor Vehicles ⁽³⁾	789.29
Waste Generation	27.69
Water Use and Conveyance(4)	30.48
Carbon Sequestration ⁽⁵⁾	-2.5
Total:	1,098
Existing Land Uses:	-53
Project-Generated Net Increase:	1,045
SLOAPCD Significance Threshold:	1,150
Exceeds Significance Threshold?:	No

- 1. Based on a combined total of approximately 859 MTCO₂e amortized over an average project life of 50 years.
- 2. Assumes an estimated 10% above Title 24 energy-efficiency standards and a minimum 16% reduction associated with the installation of exterior high-efficiency lighting, and energy-efficient appliances. The size of the photovoltaic solar system has not yet been determined and is not included in this analysis.
- 3. Includes proximity to local transit and facilities to promote bicycle use.
- 4. Includes installation of low-flow bathroom and kitchen faucets, low-flow toilets, low-flow showers, and installation of water efficient irrigation systems.
- 5. Carbon sequestration includes changes in onsite vegetative cover and planting of an estimated 241 trees. Carbon sequestration is based on an average annual reduction calculated over 20 years.
- 6. Includes one gas-fired fireplace located in the community building.

Refer to Appendix B for modeling assumptions and results.

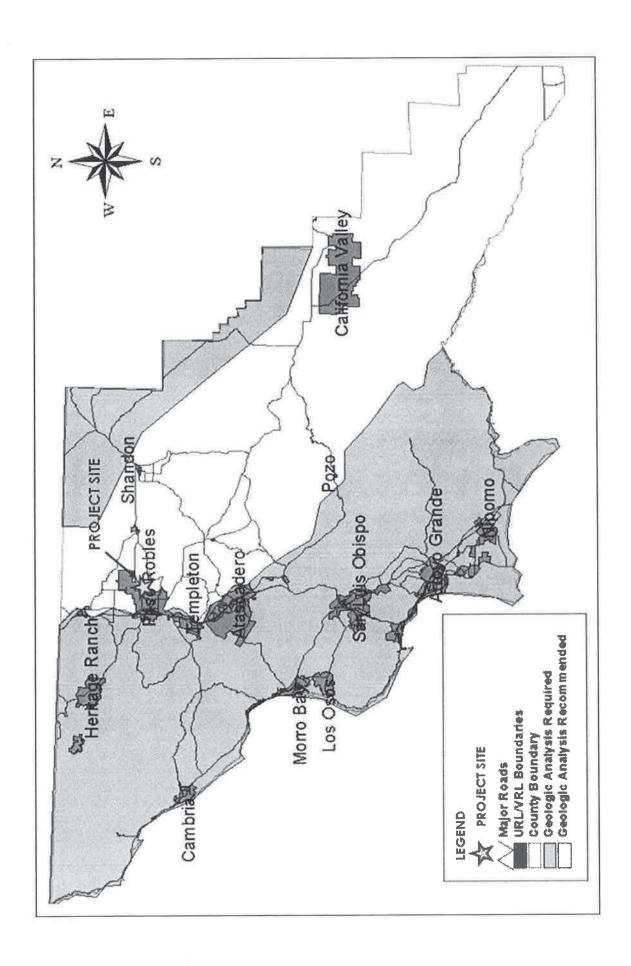
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APPENDIX A

AREAS OF KNOWN NATURALLY OCCURRING ASBESTOS



APPENDIX B EMISSIONS MODELING

(Under Separate Cover)

Biological Report

for

Buena Vista Apartments

City of El Paso de Robles San Luis Obispo County, California



Prepared for

Donald W. Benson P.O. Box 608 Paso Robles, CA 93447

by

ALTHOUSE AND MEADE, INC. BIOLOGICAL AND ENVIRONMENTAL SERVICES

1602 Spring Street Paso Robles, CA 93446 (805) 237-9626

July 2012

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Synopsis

- This biological report examines a 12.2-acre Property situated north of Highway 46 on Experimental Station Road in Paso Robles, San Luis Obispo County, California. A previous biological report was prepared for the Property (Althouse and Meade, Inc., 2006). This report updates current condition of the Property and impact assessment based on the currently proposed preliminary plans (Arris Studio 2012).
- The Applicant proposes an 11.2-acre residential development. Existing homes will be demolished and 141 units will be built on the project site. Approximately one acre would be retained as open space along the east edge of the Project.
- Six habitat types occur on the project site: anthropogenic, California annual grassland, livestock pens, wetland, abandoned orchard, and blue oak woodland. Site surveys found no sensitive natural communities on the Property.
- Floristic surveys conducted from April through June 2012 identified 105 species, subspecies, and varieties of vascular plants on the Property (Table 6). Previous biological investigations on the Property identified 61 species, subspecies, and varieties of vascular plants. A complete inventory of landscape plants was not made. No special status plant species occurs on the Property. No state or federally listed plants are present.
- Native oak trees occur on the site. A preliminary oak tree report and protection plan has been prepared for the Property (Althouse and Meade, Inc. and Davey Resource Group, 2012). This report is an updated to a previously issued Tree Report (Althouse and Meade, 2006), and addresses the number and types of native oak trees on the Property, recommends tree protection measures to be implemented during construction, and suggests permanent design features that will ensure future tree health. The reports also make recommendations regarding mitigation measures for impacted and removed trees.
- Wildlife species detected on the Property includes 1 amphibian, 19 birds, 3 mammals, and 1 reptile (Table 8). Suitable habitat was identified on the Property for eight special status animal species. No special status animal was detected on the Property. No state or federally listed animals are present.
- The proposed project would affect 2.9 acres of potential habitat for San Joaquin kit fox that include grassland (2.36 acres), oak woodland (0.09 acres), and abandoned orchard (0.45 acres). The San Joaquin kit fox habitat evaluation score is 61, typically mitigated at a 2:1 ratio.

1.0 Introduction

This report provides information regarding biological resources associated with an approximately 12.2-acre property (Property) in the City of El Paso de Robles, San Luis Obispo County, California. The Property consists of five Assessor's parcels (refer to Section 1.1 for parcel information). Results are reported for floristic and wildlife surveys of the Property conducted from April through June 2012Pevious biological investigations conducted in 2005 and 2006 are summarized. A habitat inventory, and results of database and literature searches of special status species reports within five miles of the Property are also included. Special status species that could occur on the Property or be affected by the proposed project are discussed, and lists of plant and animal species that were identified or are expected on the Property are provided.

This report provides agencies and stakeholders with information regarding biological resources on the Property. An evaluation of the effect of the proposed project on biological resources is included, and mitigation measures are provided.

1.1 Project Location and Description

The Property is located at 802 Experimental Station Road, east of River Road, and bounded by Highway 46 East and Experimental Station Road. The Property is within the boundary of the Paso Robles city limit, in San Luis Obispo County, California (Section 11.0, Figure 1). Approximate coordinates for the center of the Property are latitude 35.64535 °N and longitude 120.67731 °W (WGS 84). The Property consists of five Assessor's Parcels, APNs 025-541-021, and 025-391-006, -007, -080 and -081. These parcels are within the Paso Robles United States Geological Survey (USGS) 7.5 minute quadrangle. Elevation varies from approximately 740 to 790 feet above mean sea level.

The applicant proposes construction of a residential development consisting of 141 apartment units. A swimming pool, spa, tot lots, basketball court, picnic tables, landscaping, walking trails, and open space would be incorporated into the development. Parking would consist of garage and surface spaces, totaling 288 parking slots. Stormwater basins would be constructed as part of the Project to attenuate storm flows from increased impervious surfaces post-construction. See attached conceptual Architectural Site Plan (Arris 2012), and Preliminary Grading and Drainage Plans (Ashley and Vance 2012) in Section 11. The previously proposed project, Paso de Vino Development, proposed a slightly higher density 146 units and less open space.

1.2 Responsible Parties

TABLE 1. RESPONSIBLE PARTIES. Applicant, biological consultant, project planner, and lead agency are provided.

Applicant	Biological Consultant
Arjun Buena Vista Properties, LLC 1005 Avenida Presidio San Clemente, CA 92672 (949) 633-5675	Althouse and Meade, Inc. 1602 Spring Street Paso Robles, CA 93446 (805) 237-9626 Contact: LynneDee Althouse, M.S. LD@althouseandmeade.com
Project Manager	Lead Agency
Donald W. Benson P.O. Box 608 Paso Robles, CA 93447 (805) 237-6212 dollarbill93447@yahoo.com	City of Paso Robles 1000 Spring Street Paso Robles, CA 93446 (805) 227-7276 Contact: Darren Nash, Lead Planner
Architect	Engineer
Arris Studio Architects 1540 Marsh Street San Luis Obispo, CA 93401 (805) 547-2240 Contact: Thom Jess TJess@arrisstudioarch.com	Ashley and Vance Engineering, Inc. 860 Walnut Street San Luis Obispo, CA 93401 (805) 545-0010 Contact: Monte Soto monte@ashleyvance.com

2.0 Methods

The Property was surveyed for biological resources on April 20, May 18, June 14, and July 3, 2012 (Table 2). Meg Perry, Cassie Murphy, and Audrey Weichert, biologists, conducted the surveys. Previous biological investigations were conducted on the Property on February 28 and August 10, 2005, and April 12, 2006 by LynneDee Althouse and Jason Dart, biologists. Results of previous biological investigations were reported in a previous report, *Biological Report for the Paso de Vino Residential Developments, Tract 2696* (Althouse and Meade, Inc. 2006) and are also summarized in this document. Biological surveys were conducted on foot in order to compile species lists, to search for special status plants and animals, to map habitats, and to photograph the Property. The entire Property was surveyed.

Each habitat type occurring on the Property was inspected, described, and catalogued (Section 5.0). All plant and animal species observed on the Property were identified and recorded (Sections 6.0 and 7.0). Vegetation transects conducted for general vegetation surveys were meandering with an emphasis on locating niches with appropriate habitat to support special

status plants. Transects were utilized to map boundaries of different vegetation types, describe general conditions and dominant species, compile species lists, and evaluate potential habitat for special status species.

Identification of botanical resources included field observations and laboratory analysis of collected material (Table 6). Floristic surveys were conducted in April, May, and June of 2012, and were timed to coincide with the typical blooming period for special status plant species with the potential to occur on the Property (refer to Section 4.1, and Table 3). Floristic surveys were conducted according to agency guidelines (United States Fish and Wildlife 2000, California Department of Fish and Game 2009, and California Native Plant Society 2001). Botanical nomenclature used in this document follows the Jepson Manual, 2nd Edition (Baldwin et. al 2012). Where more recent nomenclature is used, the Jepson Manual name is provided in brackets.

Wildlife documentation included observations of animal presence, nests, tracks, and other wildlife sign. Observations of wildlife were recorded during field surveys in all areas of the Property (Table 8). Birds were identified by sight, using 10 power binoculars, or by vocalizations. Reptiles and amphibians were identified by sight, often using binoculars, and by hand-captures; traps were not used. Mammals recorded at the site were identified by sight and tracks.

Our site visit on July 3, 2012 was to perform a raking survey for silvery legless lizard (*Anniella pulchra*) in response to new information on the species from other projects in the vicinity. Areas under trees with loamy soils were surveyed using a raking method to search for legless lizards.

Maps were created using aerial photo interpretation, field notation, and GPS data imported to ArcGIS 10, a Geographic Information System (GIS) software program. Biological resource constraints were mapped in the field on site maps. Hand notation on field maps was incorporated into point and polygon layers and overlaid on high resolution aerial photographs GPS data was overlaid on a 2010 aerial photomosaic of San Luis Obispo County (USDA 2010).

We conducted a search of the California Natural Diversity Database (CNDDB 2012) and the California Native Plant Society (CNPS) On-line Inventory of Rare and Endangered Plants of California for special status species known to occur in six USGS 7.5-minute quadrangles that are within five miles of the Property: Adelaida, Creston, Estrella, Paso Robles, Templeton, and York Mountain.

Additional special status species research consisted of reviewing previous biological reports for the area and searching on-line museum and herbarium specimen records for locality data within San Luis Obispo County. We reviewed online databases of specimen records maintained by the Museum of Vertebrate Zoology at the University of California, Berkeley, the California Academy of Sciences, and the Consortium of California Herbaria. Additional special status species with potential to occur on or near the Property were added to our special status species list (refer to Table 3 and Table 4).

Special status species lists produced by database and literature searches were cross-referenced with the described habitat types on the Property to identify all potential special status species that could occur on or near the Property. Each special status species that could occur on or near the Property is individually discussed (refer to Sections 3.6.4 and 3.6.5).

TABLE 2. BIOLOGICAL SURVEYS. Biological survey dates (2012 surveys only), times, weather observations, and biologist(s) are provided.

Survey Date	Start Time Stop Time	Temp.	Wind	Weather Observations	Biologist(s)
4/20/2012	2:40 to 3:40 p.m.	90 °F	3-5 mph	Hot, with occasional breezes	M. Perry
5/22/2012	2 p.m. to 4 p.m.	85 °F	3-5 mph	Warm and breezy	M. Perry C. Murphy
6/14/2012	10 a.m. to 1:45 p.m.	75 °F	0-3 mph	Warm and still	M. Perry
7/3/2012	9:30-10 a.m.	75 °F	0-3 mph	Warm and partly cloudy	M. Perry A. Weichert
7/10/2012	3:30-4:15 p.m.	106 °F	0-2 mph	Hot and still	L.D. Althouse
7/11/2012	11:30 -12:15	99 °F	0-5 mph	Hot and breezy	D. Meade L.D. Althouse

3.0 Existing Conditions and Land Use History

3.1 Existing Conditions

The Property is situated on Experimental Station Road, between existing State Highway 46 East, and an existing residential development (Figures 1 and 2, Section 11.0). The existing residential development contributes water to a stormwater basin immediately west of the Property. Condominiums, a wine tasting room and hotel are located just east of the Property.

The Property currently consists of five parcels, each with existing residences and out-buildings. Structures on these parcels include existing single family homes or trailers, barns, garages, sheds, and fences. buildingswould be removed for the proposed project. These parcels also have existing landscaping, driveways, materials and equipment storage, and debris. Portions of these parcels are currently used for pasture by horses, goats, and chickens. Fencing typically includes livestock panels with two to four inch openings, generally four to five feet high. Barbed wire fences are also present in some areas. Areas that are not currently grazed are typically mowed for fire safety. Portions of the Property have been plowed historically. All areas of the proposed project have been substantially disturbed for human use.

Most of the Property is a gently sloping ancient river terrace, with a ravine near the east edge of the site, and a gully near the center. Historically the terrace extended to the south, across what is now Highway 46 East, to the edge of an un-named tributary draining west to the Salinas River (see aerial photo). The Salinas River is approximately one-quarter mile west of the Property.

Soils are sandy loams typical of the area, supporting annual grasses, forbs, and oaks on the terrace, and blue oak woodland on the drainage slopes. Scattered native valley oaks (*Quercus lobata*) and blue oaks (*Q. douglasii*) are present as individuals and in small groups, particularly along the eastern hillsides and ravine bottom. The eastern property line extends into blue oak woodland habitat on an east facing slope above a deep swale. Woodland habitat would remain as open space.

A small swale bisects the western end of the Property, draining storm and nuisance run-off from a residential development to the north, across the Property toward a v-ditch on Caltrans property that leads to a culvert under Highway 46. During the storms of January 2005 the swale filled with ponded water in low gradient areas and down-cut more than a foot in steeper areas toward the southern property end. Surface water was present adjacent to Experimental Station Road in April 2006 and in April 2012. A small amount of standing water was present in the middle of summer (July 2012) in the concrete stormwater inlet facility under Experimental Station Road and on the City's right-of-way at the culvert outfall. The swale feature contains dirt mounds used by recreational cyclists. See photographs in Section 12.

3.2 Soils

The United States Department of Agriculture SSURGO data (2007) and Soil Survey of San Luis Obispo County, California, Paso Robles Part (USDA 1983) show two soil map units that intersect Property boundaries: Arbuckle-Positas complex, 30 to 50 percent slopes (104); and Arbuckle-San Ysidro complex, 2 to 9 percent slopes (106).

Soil map units typically encompass one or two dominant soils that cover more than 50 percent of the mapped area, and one to several soils that occur in small patches not differentiated in mapping at the 1 to 24,000 scale used for NRCS soil maps. Due to the procedures followed in making a soil survey, users of soil survey data are cautioned that not all areas included within a soil survey are closely sampled using soil pits and site descriptions, and a specific site may not have been sampled at all. Therefore, care must be taken in drawing conclusions regarding site-specific soil resources based solely on NRCS soil survey work. Digitized spatial data from the Paso Robles Part Soil Survey are shown as an overlay of soil map units on an aerial photo of the region with the following caution from NRCS regarding maps: "Enlargement of these maps...could cause misunderstanding of the detail of mapping. If enlarged, maps do not show the small areas of contrasting soils that could have been shown at a larger scale." (Section 11.0, Figure 3).

Arbuckle-Positas complex, 30 to 50 percent slopes (104) occurs over a small portion of the Property located on the southeast section of the Property boundary. This area contains a portion of a blue oak woodland that continues onto adjacent properties. The complex includes very deep soils and consists of approximately 40 percent Arbuckle fine sandy loam, 30 percent Positas coarse sandy loam, both of which are Alfisols, moderately fertile soils that have been partially leached, and typically have subsoils in which clay minerals have accumulated. Also included with Positas and Arbuckle soils in this soil map unit are approximately 15 percent Shimmon loam on north slopes, 10 percent is a soil similar to Positas coarse sandy loam except that is has a very gravelly sandy clay subsoil, and 5 percent is small areas of Ayar silty clay, Balcom loam, Greenfield fine sandy loam, Linne shaly clay loam, Nacimiento silty clay loam, and Badland. The complex is very deep and well drained, with a moderate to high available water capacity. The Arbuckle soil has moderately slow permeability and moderate to high available water capacity. A typical Arbuckle soil profile consists of fine sandy loam for the upper 29 inches, underlain by sandy clay loam to 53 inches depth. The Positas soil has very slow permeability and moderate to high available water capacity. A typical Positas soil profile consists of coarse sandy loam 10 inches deep, underlain by clay to 28 inches depth. The Arbuckle-Positas complex with 30 to 50 percent slopes is in land capability class 7e regardless of irrigation status.

Arbuckle-San Ysidro complex, 2 to 9 percent slopes (106) is the dominant soil type on the Property comprising the entire terrace outside of the blue oak woodland that is located on the southeast corner of the Property. This complex consists of approximately 40 percent Arbuckle fine sandy loam and 20 percent San Ysidro loam, both Alfisols. Also included in this map unit are areas of Greenfield fine sandy loam, Hanford fine sandy loam, Cropley clay, Rincon clay loam, and Ryer clay loam. The Arbuckle soil is a very deep, well-drained soil formed in alluvium from mixed rocks. It has a moderately slow permeability and a moderate to high available water capacity. The San Ysidro soil is a very deep soil often located in low areas associated with old drainageways. It is moderately well drained, with a very slow permeability and a moderate to high available water capacity. This complex is in land capability class 3e irrigated, and 4e non-irrigated. This classification means that the soils have moderate to severe limitations for agriculture that reduce choices of plants or require special management considerations because of the risk of erosion (e). The risk of erosion is caused by slope or by the actual or potential erosion hazard of the soil itself. This soil map unit is listed as Farmland of Statewide Importance by the California Department of Conservation.

4.0 Special Status Plants and Animals

The CNDDB and the CNPS On-line Inventory of Rare and Endangered Plants of California contain records for 40 special status species within the designated search area. The search area included all USGS 7.5 minute quadrangles within five miles of the Property: Adelaida, Creston, Estrella, Paso Robles, Templeton, and York Mountain quadrangles. Six additional special status species were added to the list from our knowledge of the area. These species are marked with an asterisk (*). No rare plants are expected to occur on the Property. Appropriate habitat for eight special status animals was identified on the Property. Figure 4 in Section 11 depicts current GIS data for special status species and critical habitat mapped in the vicinity of the Property by the CNDDB and the U.S. Fish and Wildlife Service (USFWS). A map indicating locations of habitat types on the Property in 2012 is provided as Figure 5 in Section 11.

4.1 Introduction to CNPS lists

Plant species are considered rare when their distribution is confined to localized areas, when there is a threat to their habitat, when they are declining in abundance, or are threatened in a portion of their range. The listing categories range from species with a low threat (List 4) to species that are presumed extinct (List 1A). The plants of List 1B are rare throughout their range. All but a few species are endemic to California. All of them are judged to be vulnerable under present circumstances, or to have a high potential for becoming vulnerable.

4.2 Introduction to CNDDB definitions

"Special Plants" is a broad term used to refer to all the plant taxa inventoried by the CNDDB, regardless of their legal or protection status (CDFG May 2012). Special plants include vascular plants and high priority bryophytes (mosses, liverworts, and hornworts).

"Special Animals" is a general term that refers to all of the animal taxa inventoried by the CNDDB, regardless of their legal or protection status (CDFG January 2011). The Special Animals list is also referred to by the CDFG as the list of "species at risk" or "special status species". These taxa may be listed or proposed for listing under the California and/or Federal

Endangered Species Acts, but they may also be species deemed biologically rare, restricted in range, declining in abundance, or otherwise vulnerable.

Each species included on the Special Animals list has a corresponding Global and State Rank (refer to Table 4). This ranking system utilizes a numbered hierarchy from one to five following the Global (G-rank) or State (S-rank) category. The threat level of the organism decreases with an increase in the rank number (1=Critically Imperiled, 5=Secure). In some cases where an uncertainty exists in the designation, a question mark (?) is placed after the rank. More information is available at www.natureserve.org.

Animals listed as California Species of Special Concern (SSC) may or may not be listed under California or Federal Endangered Species Acts. They are considered rare or declining in abundance in California. The Special Concern designation is intended to provide the Department of Fish and Game, biologists, land planners and managers with lists of species that require special consideration during the planning process in order to avert continued population declines and potential costly listing under federal and state endangered species laws. For many species of birds, the primary emphasis is on the breeding population in California. For some species that do not breed in California but winter here, emphasis is on wintering range. The SSC designation thus may include a comment regarding the specific protection provided such as nesting or wintering.

Animals listed as Fully Protected are those species considered by CDFG as rare or faced with possible extinction. Most, but not all, have subsequently been listed under the California Endangered Species Act (CESA) or the Federal Endangered Species Act (FESA). Fully Protected species may not be taken or possessed at any time and no provision of the CDFG code authorizes the issuance of permits or licenses to take any Fully Protected species.

4.3 Potential special status plant list

Table 3 lists 26 special status plant species known to occur in 7.5-minute quadrangles within five miles of the project site. Federal and California State status, global and State rank, and CNPS listing status for each species are given. Typical blooming period, habitat preference, potential habitat on site, and whether or not the species was observed on the Property are also provided.

TABLE 3. SPECIAL STATUS PLANT LIST. Twenty-six special status plants reported from the region are listed. Potentially suitable habitat is not present on the Property for any special status plant species.

	Common and Scientific Names	Fed/State Status Global/State Rank CNPS List	Blooming	Habitat Preference	Potential Habitat?	Detected on Property?	Effect of Activity
Ą.	Douglas's fiddleneck Amsinckia douglasiana	None/none G3/S3.2 List 4.2	Mar – Jun	Unstable shaly sedimentary slopes; (100) 150–1600 m. SCoR, w WTR	No Suitable soils are not present on the Property.	No	No Effect
ю	Oval-leaved Snapdragon Antirrhinum ovatum	None/none G3/S3.2 List 4.2	May – November	Heavy, adobe-clay soils on gentle, open slopes, also disturbed areas; 200–1000 m. s SnJV, s SCORI	No. Suitable soils are not present on the Property.	No	No Effect
ن	Bishop Manzanita Arctostaphylos obispoensis	None/none G3/S3.3? List 4.3	Feb – Mar	Rocky, gen serpentine soils, chaparral, open close-cone forest near coast; 60–950 m; SCoRO	No. Suitable soils are not present on the Property.	No	No Effect
D.	Salinas Milk-vetch Astragalus macrodon	None/none G3/S3.3 List 4.3	April–July	Eroded pale shales or sandstone, or serpentine alluvium; 300–950 m. SCoR	No. Suitable soils are not present on the Property.	No	No Effect
и́	Round-leaved filaree California macrophylla	None/none G2/S2 List 1B.1	March – May	Clay soils in cismontane woodland, valley and foothill grassland; 15– 1200 m. ScV, n SnJV, CW, SCO, n ChI	No. Suitable soils are not present on the Property.	No	No Effect
ᅜ	Dwarf Calycadenia Calycadenia villosa	None/none G2/S2.1 List 1B.1	May – October	Dry, rocky hills, ridges, in chaparral, woodland, meadows and seeps; <1100 m. c&s SCoRO	No. Suitable habitat and soil conditions are not present on the Property.	No	No Effect
Ğ.	Santa Cruz Mountains Pussypaws Calyptridium parryi var. hesseae	None/none G3G4T2/S2 List 1B.1	May – August	Sandy or gravelly openings in chaparral and cismontane woodland. 700-1100 m. n SCoRI, s SnFrB	No. Suitable habitat and soil conditions are not present on the Property.	No	No Effect

Com	Common and Scientific Names	Fed/State Status Global/State Rank CNPS List	Blooming Period	Habitat Preference	Potential Habitat?	Detected on Property?	Effect of Activity	
Large-flowered Nemacladus Nemacladus secundiflorus var.	s s var. s	None/None G3/S3 List 4.3	April – June	Gravelly openings in chaparral, valley and foothill grassland. 200– 2000m. s SNH, SCOR	No. Appropriate habitat is not present on the Property.	°N O	No Effect	
San Gabriel Ragwort Senecio astephanus		None/none G3?/S1.2 List 2.2	January – April	Drying alkaline flats, chaparral, cismontane woodland, coastal scrub; <400 m. CW, SCo, ChI	No. Suitable soil and habitat type not found on site.	No	No Effect	
Cook's Triteleia Triteleia ixioides ssp. cookii	a vides	None/none G5G2/S2.3 List 1B.3	May – June	Streamsides, ravines on serpentine near cypresses; <500 m. SCoRO	No. Suitable soil type is not present on site.	No	No Effect	

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CCo: Central Coast
SCo: South Coast
SCoR: South Coast Ranges
SCoRO: Outer South Coast Ranges
SCORO: Outer South Coast Ranges
SCORI: Inner South Coast Ranges
SCORI: Inner South Coast Ranges
SCORI: Sacramento Valley

CW: Central West SW: South West DMoj: Mojave Desert PR: Peninsular Range

> SnBr: San Bernardino Teh: Tehachapi Mtn Area

SLO: San Luis Obispo

SN: Sierra Nevada SnJt: San Jacinto Mtns

4.3.1 Special status plants discussion

Special status plants were not found on the property during appropriately timed surveys in 2005, 2006, and 2012. No rare plants are expected to occur on the Property due to absence of appropriate soils and suitable habitat.

4.4 Potential special status animals list

Table 4 lists 20 special status animal species reported from the region. Federal and California State status, global and State rank, and CDFG listing status for each species are given. Typical nesting or breeding period, habitat preference, potential habitat on site, and whether or not the species was observed on the Property are also provided.

TABLE 4. SPECIAL STATUS ANIMAL LIST. Twenty special status animals known or reported from the region are listed. Ten special status animals could potentially occur on the Property or warrant more detailed discussion (See Section 4.4.1) based on review of preferred habitat

Common and Clobal State Breeding Rady State Status Red State Status Common and Clobal State Breeding Rady or loose loamy New Month Period Carlos State Period Carlos State Period Carlos State Period Carlos State C								
Silvery Legles Lizard None/none May- Solls Sandy or loose loamy soils under coastal soils beneath as soils beneath in loamy scrub or oak trees. Yes. Moderately appropriate soils beneath oak trees at the soils beneath oak trees at the hollows, mines, old Yes. Appropriate roosting Pallid Bat* Antrozous pallidus None/none G5/S33 Spring- Summer Rock crevices, caves, tree hollows, mines, old Yes. Appropriate roosting areas may be present in the pullidings, and bridges Golden Eagle Aquila chrysaetos None/none G5/S33 March 15 through Rest in large, prominent footbill woodland, source No. Property contains footbill woodland, source None property contains footbill woodland, source None property contains footbill woodland, source No. Property contains footbill woodland, source No. Appropriate roosting areas in valley and source No. Appropriate vernal pool habitat is present on site. Burrowing Owl** None/none Branchinectu lynchi Rainy Spring- depression pools, season Burrows in squirrel holes squires adjacent food habitat is not present on the depression pools, habitat is not present on the depression pools. No. Appropriate permanent habitat is not present on the depression pools. Western Pond Turtle Clemmys marmorata pullida Spring- day toosts. On coast roosts Appropriate conting areas may be present on the property. Read of 4 bit** Appropriate sands to may be present on the pools. Proper		Common and Scientific Names	Fed/State Status Global/State Rank CNPS List	Nesting/ Breeding Period	Habitat Preference	Potential Habitat?	Detected on Property?	Effect of Activity
Pallid Bat* None/none G5/S3 Spring - Aquild recovers. caves, tree as an any be present in the buildings, and bridges are sixting residences. Yes. Appropriate roosting areas may be present in the existing residences. Golden Eagle Aquila chrysaetos None/none G5/S3 March 15 trees in valley and foothill woodland. Aquila chrysaetos None/none G4/S2 March 15 trees in valley and foothill woodland. Aquila chrysaetos No. The Property contains marginally appropriate footh nesting buildings, and bridges are siting residences. Burrowing Owl* Adulta chrysaetos Pully Protected G4/S2 August 15 and through and property and arginally appropriate to program arginal and	<u> </u>	Silvery Legless Lizard Anniella pulchra (pulchra)	None/none G3G4T3T4Q/S3 SSC	May - September	Sandy or loose loamy soils under coastal scrub or oak trees. Soil moisture essential.	Yes. Moderately appropriate habitat is present in loamy soils beneath oak trees at the corner of the Property.	No	Not Significant With Mitigation
Golden Eagle None/none G5/S3 March 15 Aquila chrysaelos Nests in large, prominent Lochill woodland. Aquila chrysaelos None/none G4/S2 March 15 Aquila chrysaelos None/none G4/S2 March 1 Aquila chrysaelos None/none G4/S2 March 1 Aquila chrysaelos None/none G4/S2 March 1 Aquila chrysaelos Requires adjacent food nesting grounds but not not leverable and coraging grounds but not not not leverable and chromatic and coraging grounds but not not not not not not not not not no	4	Pallid Bat* Antrozous pallidus	None/none G5/S3 CSC	Spring – Summer	Rock crevices, caves, tree hollows, mines, old buildings, and bridges	Yes. Appropriate roosting areas may be present in the existing residences.	No	Not Significant With Mitigation
Burrowing Owl** None/none G4/S2 March 1 hrough at through and the cunicularia Burrows in squirrel holes at through at through and through at through and through are cunicularia March 1 care and through at through and through and through and through are cared bat a townsendiii March 1 care and through and through and through and through and through are not suitable and solution and through are not suitable and solution and through through through the pool. None/none cared bat* April - portangent are not present on the permanent or semi- ponds, lakes. Property. Appropriate vernal pool habitat is not present on the poperator. Western Pond Turtle pallida Special Animal Special Animal and Branchinecta lynchia April - portangenession pools. Permanent or semi- ponds, lakes. No. Appropriate permanent care not present on the property. Townsend's big- corynorhinus None/none cared bat* Spring - cared bat* Caves, buildings, and mine residences. Yes. Appropriate roosting areas are normally within 100 residences. Corynorhinus CSC m. of creeks. m. of creeks.	ĸ	Golden Eagle Aquila chrysaetos	None/none G5/S3 SSC Fully Protected	March 15 through August 15	Nests in large, prominent trees in valley and foothill woodland. Requires adjacent food source.	No. The Property contains marginally appropriate foraging grounds but not nesting habitat.	o N	Not Significant
Vernal Pool FairyThreatened/none G3/S2S3Rainy Special Animal Branchinecta lynchiRainy G3/S2S3Clear water sandstone depression pools, slump, or basalt flow depression pools.No. Appropriate vernal pool habitat is not present on the Property. Standing water in nuisance water wetland and puddle are not suitable because during storms they may flow through the pool.Western Pond Turtle Clemmys marmorata pallidaNone/none SSCApril - AugustPermanent or semi- ponds, lakes.No. Appropriate permanent ponds, lakes.No. Appropriate roosting areas tunnels. Cave like attics as are normally within 100Yes. Appropriate roosting areas funnels. Cave like attics as may be present in the existing residences.	4	Burrowing Owl* Athene cunicularia	None/none G4/S2 CSC	March 1 through August 31	Burrows in squirrel holes in open habitats with low vegetation.	Yes. Moderately appropriate habitat is present on site.	No	Not Significant With Mitigation
Western Pond TurtleNone/noneApril - Clemmys marmorataPermanent or semi- permanent or semi- portanta clemmys marmorataNone/noneApril - permanent or semi- permanent streams, pallidaNo. Appropriate permanent permanent or semi- ponds, lakes.Townsend's big-eared bat*None/noneSpring - CorynorhinusSpring - CorynorhinusCaves, buildings, and mine tumels. Cave like attics as day roosts. On coast roostsYes. Appropriate roosting areas may be present in the existing residences.	ν.	Vernal Pool Fairy Shrimp Branchinecta lynchi	Threatened/none G3/S2S3 Special Animal	Rainy Season	Clear water sandstone depression pools, grassed swale, earth slump, or basalt flow depression pools.	No. Appropriate vernal pool habitat is not present on the Property. Standing water in nuisance water wetland and puddle are not suitable because during storms they may flow through the pool.	No	Not Significant
Townsend's big-eared bat*None/noneCaves, buildings, and mine tunnels. Cave like attics as corynorhinusCaves, buildings, and mine tunnels. Cave like attics as corynorhinusYes. Appropriate roosting areas may be present in the existing residences.Corynorhinus townsendiiCSCSummer are normally within 100residences.	9	Western Pond Turtle Clemmys marmorata pallida	None/none G3G4T2T3Q/S2 SSC	April - August	Permanent or semipermanent streams, ponds, lakes.	No. Appropriate permanent waters are not present on the Property.	No	Not Significant
	7.		None/none G4T3T4/S2S3 CSC		Caves, buildings, and mine tunnels. Cave like attics as day roosts. On coast roosts are normally within 100 m. of creeks.	Yes. Appropriate roosting areas may be present in the existing residences.	No	Not Significant with Mitigation

	Common and Scientific Names	Fed/State Status Global/State Rank CNPS List	Nesting/ Breeding Period	Habitat Preference	Potential Habitat?	Detected on Property?	Effect of Activity
∞ i	Loggerhead Shrike* Lanius ludovicianus	None/none G4/S4 SSC (Nesting)	March 15 through August 15	Open areas with appropriate perches, near shrubby vegetation for nesting.	Yes. Appropriate habitat is present for nesting and foraging in blue oak woodland on the Property.	No	Not Significant with mitigation
6	Hoary Bat* Lasiurus cinereus	None/none G5/S4? SSC	Spring- Fall	Forages in open habitats or habitat mosaics with trees. Roosts in dense foliage of medium to large trees. Feeds on moths. Requires water.	Yes. Appropriate foraging and roosting habitat is present on the Property.	No	Not Significant with mitigation
10	10. Fringed Myotis* Myotis thysanodes	None/none G4G5/S4 Special Animal	Spring - Summer	Variety of habitats, uses caves, mines, buildings, or crevices for maternity colonies and roosts.	Yes. Appropriate roosting habitat is present on the Property. Could forage on site.	No	Not Significant with mitigation
11.	Monterey Dusky-footed Woodrat Neotoma macrotis luciana	None/none G5T3?/S3? CSC	n/a	Variety of habitats with moderate to dense understory vegetation	No. Appropriate dense understory vegetation is not present on the Property.	No	Not Significant
12.	San Joaquin Pocket Mouse Perognathus inornatus inornatus	None/none G4T2T3/S2S3 Special Animal	n/a	Grasslands and blue oak savannahs with friable soil and occasional shrubs. Also chaparral.	No. Appropriate habitat is not currently present on site.	No	Not Significant
13.	Salinas Pocket Mouse Perognathus inornatus psammophilus	None/none G4T2?/S2? CSC	n/a	Annual grassland and desert shrub in Salinas Valley, with friable soils	No. Appropriate soil and habitat conditions are not present on site.	No	Not Significant
41	Atascadero June Beetle Polyphylla nubila	None/none G1/S1 Special Animal	n/a	Known only from sand dunes in Atascadero and San Luis Obispo, San Luis Obispo County.	No. Appropriate soil and habitat type not present on the Property.	No	Not Significant

	Common and Scientific Names	Fed/State Status Global/State Rank CNPS List	Nesting/ Breeding Period	Habitat Preference	Potential Habitat?	Detected on Property?	Effect of Activity
15.	California Red-legged Frog Rana draytonii	Threatened/none G4T2T3/S2S3 SSC	January - September	Lowlands and foothills in or near sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks for larval development.	No. Appropriate seasonal pool habitat is not present.	No	Not Significant
16.	Western Spadefoot Toad Spea hammondii	None/none G3?/S3? SSC	January – August	Ephemeral pools in grassland and woodland habitats	Yes. A large puddle formed from nuisance water and broken pipes had sufficient water for spadefoots in 2012.	No	Not Significant with Mitigation
17.	American Badger Taxidea taxus	None/none G5/S4 SSC	February – May	Needs friable soils in open ground with abundant food source such as California ground squirrels.	No. Moderately appropriate grassland habitat with friable soil is present. However, site is isolated and species is unlikely to occur. See discussion below.	No	Not Significant
18.	Lompoc Grasshopper Trimerotropis occulens	None/none G1G2/S1S2 Special Animal	n/a	Unknown. Known only from Santa Barbara and San Luis Obispo Counties	Unlikely. Thought to be extirpated from the area. Only source of info is a 1909 collection.	No	Not Significant
19.	Least Bell's Vireo Vireo bellii pusillus	Endangered/ Endangered G5T2/S2 Special Animal	March 15 through August 15	Riparian habitat, near water or dry streambed, <2000 ft. Nests in willows, mesquite, Baccharis.	No. Appropriate nesting habitat is not present on the Property.	No	Not Significant
20.	San Joaquin Kit Fox Vulpes macrotis Mutica Endangered/ Threatened G4T2T3/S2S3 - Juli Special Animal	Endangered/ Threatened G4T2T3/S2S3 Special Animal	December – July	Annual grasslands or grassy open stages with scattered shrubby vegetation. Needs loose textured sandy soil and prey base.	Unlikely. Property is within the known range of this species, however, the site is relatively isolated from appropriate habitat. See discussion below.	No	Not Significant with mitigation

Habitat characteristics are from the Jepson Manual and the CDNNB. *not listed in the CNDDB or CNPS for the search area, but possibly for the location.

4.4.1 Special status animals discussion

Ten special status animal species could potentially occur on the Property, or warrant further discussion here due to historic records from the area. Eight of these species could occur on the Property in its current condition. We discuss each species and describe habitat, range restrictions, known occurrences, and survey results. No rare animals were observed during our site surveys in 2005, 2006, and 2012.

- A. Silvery Legless Lizard (Anniella pulchra pulchra) is a California Species of Special Concern that inhabits friable soils in a variety of habitats from coastal dunes to oak woodlands and chaparral. The closest reported occurrence is from eastern Paso Robles, approximately 2.6 miles east of the Property (Althouse and Meade, Inc., unpublished field notes, 2012). Legless lizards are also reported from the Salinas River at Paso Robles (California Academy of Sciences 196258), Atascadero (CNDDB 49), and from the vicinity of Lake Nacimiento (CNDDB 43). The loamy soils in blue oak woodlands on the Property have more clay and are harder to penetrate than other soils in the vicinity that have harbored legless lizard, but may be adequate. A raking survey conducted under oak trees in July 2012 did not locate silvery legless lizard on the Property. Silvery legless lizard would be very unlikely to occur in the open areas due to compacted soil conditions, lack of adequate vegetative cover, and a history of heavy disturbance.
- **B. Burrowing Owl** (*Athene cunicularia*) is a California Species of Special Concern owl that nests in abandoned holes in the ground in open habitats, most notably dens from the California ground squirrel. It is a common resident in local areas of the interior, from Bitterwater Valley to the Carrizo Plain. Less frequent reports are from coastal grasslands. There are no reports in the CNDDB for burrowing owls in the immediate vicinity of the subject Property, however appropriate habitat is present, and transient owls could use the Property on occasion. A single burrowing owl was observed by Althouse and Meade, Inc. biologists in December 2004 approximately 2.5 miles southeast of the project site. Burrowing owls were not observed during our site visits, and are not expected to breed on site.
- C. Loggerhead Shrike (*Lanius ludovicianus*) is a California Species of Special Concern and resident in arid regions of San Luis Obispo County and elsewhere in California. It requires open areas with appropriate perches for hunting, and shrubby trees or bushes for nesting. Appropriate nesting habitat for loggerhead shrikes on the Property consists of brushy blue oak trees near open grasslands for hunting. Loggerhead Shrike was not observed on the Property.
- **D.** Western spadefoot toad (*Spea hammondii*) is a California Special Concern species known from ephemeral pools in open grassland habitats across the interior region of San Luis Obispo County. Spadefoot toads remain underground for most of the year, emerging to breed in seasonal wetland puddles during the rainy season. Development of the larvae from egg to metamorphosis can be very quick, depending upon water temperature. Spadefoot toads are known to breed in seasonal pools in the vicinity Highway 46, east of Paso Robles, and have been observed in roadside puddles along Buena Vista Road (Dart, unpublished field notes). Nuisance water from an adjacent

residential development is conducted onto the Property through a culvert, and a large puddle forms in a swale nearby. A broken water pipe is likely contributing water to this pool. The puddle was sufficiently sized for spadefoot use during wet years. No tadpoles or adults were observed during site visits, but spadefoot toad could occur on the Property.

- **E.** American Badger (*Taxidea taxus*) is a California Species of Special Concern known from open grassland habitats throughout San Luis Obispo County and elsewhere in California. They are generally uncommon in the Paso Robles region. Badgers are typically residents of grassland areas, but also forage in croplands on occasion in areas where California ground squirrels have become established. Moderately appropriate grassland with friable soil is present on the Property, and ground squirrels were observed. However, the Property is surrounded on all sides by intensively used lands with frequent human presence, and limited connectivity to more extensive badger habitat. Development on lands surrounding the Property, and current land uses on site have effectively removed potential badger habitat from the subject Property. Although the site still retains some grassland appropriate for badgers, appropriate access corridors no longer exist to allow a badger to easily move onto this site. Badger sign was not observed during 2012 site surveys, and badgers are not expected to occur on the Property in its current condition.
- **F. San Joaquin Kit Fox** (*Vulpes macrotis mutica*) is a federally listed endangered species and a state listed threatened species. They are known from the Carrizo Plains to the southeast, and from Fort Hunter Liggett (Monterey County) to the northwest, and were reported from Camp Roberts in the 1990s, with the last report from that location in 2003. Transient individuals are thought to move between the Carrizo Plains and Camp Roberts populations. The Property is within a movement corridor between Camp Roberts and Carrizo Plains as defined by CDFG. The closest reported occurrence of San Joaquin Kit Fox is from 1.42 miles south of the Property in 1991 (CNDDB 941). The Property is considered within the three to one mitigation ratio area, as per the San Luis Obispo County Standard Kit Fox Mitigation Ratios map (2007). Although the site still retains some grassland, appropriate access corridors no longer exist to allow a kit fox to readily move onto this site, and existing pasture fence would further hamper movement by San Joaquin kit fox. As noted above, the Property is now surrounded by residential developments, heavily traveled roads, and commercial properties. Existing fences and pastures on the Property would interfere with SJKF foraging and passage through the Property.
- **G. Bats:** Large decadent oaks and existing structures on the Property could provide appropriate roosts for several species of bats. Many species of bats in California are Special Animals and/or Special Concern species. Three special status bats could occur in structures or trees on the Property:
 - **i. Pallid bat** (*Antrozous pallidus*) is a California Special Concern species. This is a large, long-eared bat occurring throughout the state from deserts to moist forests. *Antrozous pallidus* is primarily a crevice roosting species and selects roosts where they can retreat from view. They frequently occur in oak woodlands where they roost in tree cavities. These roosts are generally day or night roosts for one or a few bats. Attics may be used as

- roosts and during hot days they may emerge from crevices and roost on open rafters. Communal wintering or maternity colonies are more common in rock crevices and caves. This species has been recorded at 22 localities in San Luis Obispo County (Pierson, 2002). Pallid bat could occur in oak trees cavities and existing structures on the subject Property.
- **ii.** Townsend's big-eared bat (*Corynorhinus townsendii*) is a California Special Concern species. Townsend's big-eared bat is medium sized with large rabbit-like ears. Subspecies are not distinguishable in the field. In our area *C. townsendii* is found consistently in the vicinity of creek beds where they use the riparian corridor for foraging. Typical roost sites are in caves or buildings with cave-like features. Townsend's big-eared bat is sedentary and is presumed to spend the winter within 25 miles of its summer roosts. This bat has been recorded in at least six localities within San Luis Obispo County (Pierson 2002). Townsend's big-eared bat could possibly occur in the structures on the subject Property, but would be unlikely.
- iii. Fringed Myotis (Myotis thysanodes) is considered to be a Special Animal in California. The range occurs throughout much of the western U.S., south from British Columbia to California and East to Montana, Colorado, and parts of Texas. Two reports in the CNDDB for San Luis Obispo County are from San Simeon. This colonial bat is most active from April through September with mating occurring in Fall. Fringed Myotis prefer to roost in caves, mines, building, and other protected locations among oak, pinon, and juniper forests where they feed on a diet of moths and other insects.
- **iv. Hoary Bat** (*Lasiurus cinereus*) is a California Species of Special Concern. Hoary bats are found year-round in California with the highest occurrences in winter, the season in which breeding occurs. Although not detected on the Property, Hoary bats prefer to roost in the dense foliage of medium to large trees, which are located on the Property. These areas generally have a water source in the vicinity. Hoary bats emerge in the late evening to feed, on moths. The nearest reported occurrence is located 10.8 miles northwest of the Project (CNDDB #111).

4.4.2 Special status species not expected to occur on the Property

The remaining 36 special status species reported to occur in the Adelaida, Creston, Estrella, Paso Robles, Templeton, and York Mountain quadrangles are not expected to occur on the Property due to the absence of required soil type, lack of appropriate habitat, or because the Property is substantially outside the known range of the species.

4.5 Potential sensitive natural communities

The CNDDB reports one sensitive natural community from the Adelaida, Creston, Estrella, Paso Robles, Templeton, and York Mountain quadrangles. No sensitive natural communities were found on the Property.

TABLE 5. SENSITIVE NATURAL COMMUNITIES. The approximate acreage and location are provided for all habitat types occurring on the Property.

	Common Name	Federal/State Status Global/State Rank	Potential Habitat?	Effect of Proposed Activity
		Sensitive Natural	Communities	
1.	Valley Oak Woodland	None/none G3/S2.1	No. Valley oak trees do not form a contiguous woodland canopy.	No Effect

5.0 Habitat Types

We describe five habitat types on the Property and provide acreages for each habitat type present during the 2010 spring season (Table 6): California annual grassland, and blue oak woodland. The Biological Resource Map provided in Section 11 indicates the locations of each habitat type on the Property as of 2011. Sensitive natural communities do not occur on the Property.

TABLE 6. HABITAT DATA. The approximate acreage and location are provided for all habitat types occurring on the Property.

Habitat Type	Approx. Acreage	Location
Anthropogenic	4.72	Concentrated around existing structures, close to Experimental Station Road
Annual Grassland	2.36	Western portion of property.
Livestock Pens	3.60	Associated with three of the parcels where large animals are confined to small corrals for extended periods.
Abandoned Orchard	0.77	Eastern side of the property, between oak woodland and existing residence.
Nuisance Water Wetland	0.006	Immediately adjacent to Experimental Station Road at a culvert outlet from River Oaks Development.
Blue Oak Woodland	0.75	Eastern edge of the Property.
Total	12.206	

5.1 Anthropogenic

We describe areas in which habitat is substantially altered from its natural state, and continues to be heavily influenced by human activity and daily presence as anthropogenic. These areas include single-family residences, a trailer, garages, storage sheds, equipment storage, driveways, and landscaped areas (Photos 2, 5). Habitat for native vegetation has generally been eliminated from these areas, although a few native oak trees persist, now incorporated into yards. Areas appropriate for wildlife use are generally limited to small wildlife species. Presence of pet cats and dogs further reduces habitat suitability for many wildlife species. Tree habitat is appropriate for birds, and landscaped areas moderately appropriate for small mammals, reptiles, and amphibians. Additionally, existing structures can provide habitat for bats.

5.2 Disturbed California annual grassland

The grassland community on the Property is disturbed and fragmented, dominated by Mediterranean annual species (Photos 3, 5, 7 and 9). Areas that are fenced and used as holding pens for stock animals, are described separately as livestock pens. Remaining grassland habitat on the Property is dominated by soft chess brome (*Bromus hordeaceus*), red top brome (*Bromus madritensis* ssp. *rubens*), wild oats (*Avena fatua*, *A. barbata*), and patches of native forbs that include popcorn flower (*Plagiobothrys* sp.), lupines (*Lupinus bicolor*, *L. nanus*), and common four spot (*Clarkia purpurea*).

We consider the grassland habitat on the Property to be a poor quality habitat due to the low species diversity, dominance of exotic species such as ripgut brome, and high disturbance regime (grazing, mowing). However, the scattered oaks within this habitat type are a valuable resource providing shelter and breeding habitat for songbirds and other animals. Ground nesting birds may utilize the grassland for nesting habitat, and numerous birds will forage in the grasslands throughout the seasons.

5.3 Livestock pens

Long-term intensive grazing regime imposed by stock animals is limited to small holding pens (Photos 4, 5, 9 and 11). Livestock pens are dominated by exotic, weedy species such as ripgut brome (*Bromus diandrus*), foxtail barley (*Hordeum murinum*), cheat grass (*Bromus tectorum*), and fescue (*Vulpia myuros*), with very few to no native forbs present. Livestock pens are considered to be of very little value as wildlife habitat.

Fencesinclude livestock panels with narrow mesh spacing, in some cases only 2 inches tall (sometimes referred to as "no-climb wire"). This fencing is not hospitable to wildlife movement, lessening probability that small to medium predators (coyote, fox, badger, etc.) would move through the site.

5.4 Abandoned Orchard

Remnants of an abandoned stonecrop orchard (e.g. plums and almonds) are maintained east and south of the easternmost residence on the Property. The orchard is currently maintained by routine mowing.

5.5 Wetland

A small wetland has formed from nuisance water discharged from a residential development north of Experimental Station Road (Photo 10). Approximately 250 square feet of wetland habitat is dominated by cattails (*Typha angustifolia*), rabbits-foot grass (*Polypogon monspeliensis*), mulefat (*Baccharis salicifolia*), nutsedge (*Cyperus eragrostis*) and a facultative species of foxtail barley (*Hordeum marinum* ssp. *gussoneanum*). The dominant species are wetland indicator plants. Wetland habitat begins at a culvert under Experimental Station Road and ends at an existing driveway. Wetland vegetation does not extend down the swale towards Highway 46. The wetland is isolated from waters regulated by the U.S. Army Corps of Engineers under section 404 of the Clean Water Act. It is however, it may be considered a "water of the state" by the Regional Water Quality Control Board and the California Department of Fish and Game.

This puddle of nuisance water that forms at the culvert outfall on the City's right-of-way may be sufficient for spadefoot toads to breed in wet years. Use by invertebrates such as fairy shrimp is very unlikely because during storm events, water is likely to flow through the swale, washing out the puddle.

5.6 Blue oak woodland

Blue oak woodland occurs in a deep swale on the east side of the Property (Photos 6 and 12). The slopes do not appear to have been recently grazed. Some native wildflowers and perennial grasses are present, including popcorn flower, lupines, biscuit root (*Lomatium utriculatum*), purple needlegrass (*Nassella pulchra*), and one-sided blue grass (*Poa secunda*). The woodland canopy is intermittent and a few honeysuckle shrubs add occasional understory structure. Generally, understory of blue oak woodland on this Property consists of non-native herbaceous plants and grasses, particularly ripgut brome (*Bromus diandrus*), Italian thistle (*Carduus pycnocephalus*) and milk thistle (*Silybum marianum*). The swale carries storm run-off from urban areas upstream through a culvert under Highway 46 to an un-named tributary to the Salinas River. No raptor nests were observed, but songbirds will use the oaks and tall grasses for nesting.

6.0 Floristic Inventory

6.1 Botanical Survey Results

Botanical surveys conducted from February through June 2011 identified 105 species, subspecies, varieties, and hybrids of vascular plant taxa on the Property (Table 7). The list includes 36 species native to California and 69 introduced (naturalized or planted) species.

Native plant species account for approximately 34 percent of the flora within the Property; introduced species account for approximately 66 percent. In comparison, approximately 83 percent of the flora in the State of California is native, while 17 percent is introduced (Hickman 1993). The significantly lower than the state-wide average percent of native species and higher than average percent of introduced species is indicative of the land use history on the Property, including agricultural uses such as plowed fields and pasture, and current rural residential uses.

6.1.1 Plant list

TABLE 7. VASCULAR PLANT LIST. The 105 species of vascular plants identified on the Property consist of 36 native species and 69 introduced species. The vascular plant list is separated into general life form categories, within which the taxa are listed alphabetically by scientific name.

Scientific Name	Status	Origin	Common Name
	Trees –	16 Species	
Acer negundo	None	Native	Box-elder
Cupressus x leylandii	None	Planted	Leland cypress
Eucalyptus citriodora	None	Planted	Lemon-scented gum
Eucalyptus globulus	None	Planted	Blue-gum
Fraxinus sp.	None	Planted	Ash
Juglans californica	None	Native	California black walnut
Liquidambar styraciflua	None	Planted	Sweetgum
Morus alba	None	Planted	Mulberry
Populus fremontii	None	Planted	Fremont cottonwood
Prunus spp.	None	Planted	Fruit trees
Prunus cerasifera	None	Planted	Purple-leaf plum
Pyrus sp.	None	Planted	Pear
Quercus douglasii	None	Native	Blue oak
Quercus lobata	None	Native	Valley oak
Olea europaea	None	Planted	Olive
Ulmus sp.	None	Planted	Elm
	Shrubs	– 9 Species	
Atriplex semibaccata	None	Introduced	Australian saltbush
Baccharis pilularis	None	Native	Coyote brush
Baccharis salicifolia	None	Native	Mule fat
Lonicera subspicata	None	Native	Honeysuckle
Pyracantha sp.	None	Introduced	Firethorn
Rhamnus ilicifolia	None	Native	Holly-leaf redberry
Rosa sp.	None	Planted	Cultivated rose
Salix lasiolepis	None	Native	Arroyo willow
Vitis vinifera	None	Introduced	Cultivated grape
	Herbs –	61 Species	
Agoseris heterophylla	None	Native	Annual mountain dandelic
Amsinckia intermedia	None	Native	Common fiddleneck

Scientific Name	Status	Origin	Common Name
Ambrosia psilostachya	None	Native	Western ragweed
Anagallis arvensis	None	Introduced	Scarlet pimpernel
Arctotheca calendula	None	Introduced	Capeweed
Bloomeria crocea	None	Native	Common goldenstar
Brassica nigra	None	Introduced	Black mustard
Capsella bursa-pastoris	None	Introduced	Shepard's purse
Carduus pycnocephalus	None	Introduced	Italian thistle
Centaurea solstitialis	None	Introduced	Yellow star thistle
Cerastium glomeratum	None	Introduced	Mouse-eared chickweed
Chenopodium album	None	Introduced	Lamb's-quarters
Cirsium vulgare	None	Introduced	Bull thistle
Clarkia purpurea	None	Native	Common Four spot
Clarkia unguiculata	None	Native	Elegant clarkia
Convolvulus arvensis	None	Introduced	Bindweed
Corethrogyne [=Lessingia] filaginifolia	None	Native	California aster
Cyperus eragrostis	None	Native	Umbrella sedge
Dichelostemma capitatum	None	Native	Blue dicks
Epilobium brachycarpum	None	Native	Annual willow-herb
Epilobium ciliatum	None	Native	Willow herb
Erigeron [=Conyza] canadensis	None	Introduced	Common horseweed
Erodium botrys	None	Introduced	Filaree
Erodium cicutarium	None	Introduced	Redstem filaree
Erodium moschatum	None	Introduced	Filaree
Galium aparine	None	Native	Goose grass
Hirschfeldia incana	None	Introduced	Mustard
Hypochaeris glabra	None	Introduced	Smooth cat's ear
Iris germanica	None	Planted	Bearded iris
Juncus bufonius	None	Native	Toadrush
Lactuca serriola	None	Introduced	Prickly lettuce
Lomatium utriculatum	None	Native	Biscuit root
Lupinus bicolor	None	Native	Miniature lupine
Lupinus nanus	None	Native	Sky blue lupine
Lythrum hyssopifolia	None	Introduced	Loosestrife
Malva nicaeensis	None	Introduced	Bull mallow

Scientific Name	Status	Origin	Common Name	
Matricaria disoidea [=Chamomilla suaveolens]	None	Introduced	Pineapple weed	
Medicago polymorpha	None	Introduced	California burclover	
Melilotus indicus	None	Introduced	Annual sweetclover	
Phoradendron serotinum ssp. tomentosum [=P. villosum]	None	Native	Oak mistletoe	
Plagiobothrys canescens	None	Native	Popcorn flower	
Plagiobothrys sp.	None	Native	Popcorn flower	
Plantago lanceolata	None	Introduced	English plantain	
Polygonum aviculare ssp. depressum [=P. arenastrum]	None	Introduced	Common knotweed	
Rumex crispus	None	Introduced	Curly dock	
Salsola tragus	None	Introduced	Russian thistle	
Sanicula bipinnata	None	Native	California plantain	
Senecio vulgaris	None	Introduced	Common groundsel	
Silybum marianum	None	Introduced	Milk thistle	
Sisymbrium orientale	None	Introduced	Oriental rocket	
Sonchus asper	None	Introduced	Prickly sow thistle	
Sonchus oleraceus	None	Introduced	Common sow thistle	
Spergularia rubra	None	Introduced	Red sand spurrey	
Stellaria media	None	Introduced	Chickweed	
Trichostema lanceolatum	None	Native	Vinegar weed	
Trifolium albopurpureum	None	Native	Dove clover	
Trifolium hirtum	None	Introduced	Rose clover	
Typha angustifolia	None	Native	Cat-tail	
Uropappus lindleyi	None	Native	Silver puffs	
Vicia sativa	None	Introduced	Common vetch	
Vicia villosa	None	Introduced	Winter vetch	
	Grasses –	19 Species		
Avena barbata	None	Introduced	Slender wild oat	
Avena fatua	None	Introduced	Wild oat	
Brachypodium distachyon	None	Introduced	False brome	
Bromus carinatus	None	Native	California brome	
Bromus catharticus	None	Introduced	Rescue grass	
Bromus diandrus	None	Introduced	Ripgut brome	
Bromus hordeaceus	None	Introduced	Soft chess brome	

Scientific Name	Status	Origin	Common Name
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Bromus madritensis ssp. rubens	None	Introduced	Red top brome
Bromus tectorum	None	Introduced	Cheat grass
Cynodon dactylon	None	Introduced	Bermuda grass
Festuca rubra	None	Native (Naturalized)	Red fescue
Festuca [=Vulpia] myuros	None	Introduced	Rat-tail fescue
Hordeum marinum ssp. gussoneanum	None	Introduced	Foxtail barley
Hordeum murinum	None	Introduced	Foxtail barley
Stipa pulchra [=Nassella pulchra]	None	Native	Purple needlegrass
Poa annua	None	Introduced	Annual blue grass
Poa secunda	None	Native	One-sided bluegrass
Polypogon monspeliensis	None	Introduced	Rabbits-foot grass
Stipa tenuissima [=Nasella tenuissima]	None	Introduced	Mexican feather grass

6.2 Oak Trees

Two types of oak trees occur on the Property: blue oak (*Quercus douglasii*) and valley oak (*Q. lobata*). Oak trees on the Property occur as solitary trees in annual grasslands, as well as forming continuous-canopy oak woodland that extends into adjacent properties. Blue oak is a small-statured, deciduous, long-lived tree common in the Paso Robles area and valley oak is a large, fast-growing, soft-wooded oak. These two species, along with coast live oak (*Q. agrifolia*) are responsible for the City's Spanish name, El Paso de Robles (The Pass of Oaks).

Blue oak trees are slow growing and take decades to form mature woodland. Mature blue oak trees can be less than 30 feet tall, and may require 50 to 100 years to attain a diameter at breast height (DBH) of four inches (Swiecki 1998). A 14-inch DBH blue oak tree averages 131 years in age (McDonald 1990). Because of their slow growth, regeneration of blue oak woodlands takes decades. Oaks are also discussed in Section 5, Habitat Types, above.

7.0 Wildlife Inventory

7.1 Wildlife Survey Results

At least eighty (80) animal species are listed that could potentially occur on the Property (Table 8). These include at least 4 amphibians, 48 birds, 14 mammals, and 4 reptiles. Small mammal trapping studies were beyond the scope of this report, although several species are likely to occur. We provide this list as a guide to the wildlife observed on the Property and to the species that could potentially be present at least seasonally. Other species could occur as transients, particularly avian fauna. Wildlife species detected on the Property includes 1 amphibian, 19 birds, 3 mammals, and 1 reptile.

TABLE 8. FINAL WILDLIFE LIST At least 80 animal species have the potential to occur on the Property. The Special Status column indicates listing status of the organism under the Federal Endangered Species Act, the California Endangered Species Act, or by CDFG. Species observed at the site during our surveys are designated by the check symbol () in the fourth column.

Common name	Scientific name	Special status	Found on property	Habitat type			
Amphibians – 3 Species							
Western Toad	Anaxyrus boreas [=Bufo boreas halophilus]	None		Grassland, woodland			
Black-bellied Slender Salamander	Batrachoseps nigriventris	None		Oak woodlands, moist areas			
Pacific Chorus Frog, Pacific Tree Frog	Pseudacris regilla	None	✓	Many habitats near water			
Spadefoot Toad	Spea hammondii	SSC ¹		Grassland habitat with seasonal pools			
	Reptiles	s – 4 Specie	es				
Southern Alligator Lizard	Elgaria multicarinata	None		Open grassland, woodland, chaparral			
Common Kingsnake	Lampropeltis getulus	None		Woodland, grassland, streams			
Gopher Snake	Pituophis melanoleucus	None		Woodland, grassland			
Western Fence Lizard	Sceloporus occidentalis	None	✓	Wide range			
	Birds – 48 Species						
Western Scrub Jay	Aphelocoma californica	None	✓	Oak and riparian woodlands			
Oak Titmouse	Baeolophus inornatus	Special Animal (Nesting)	✓	Oak woodland			
Great Horned Owl	Bubo virginianus	None		Varied habitats			
Red-tailed Hawk	Buteo jamaicensis	None		Open, semi-open country			
Red-shouldered Hawk	Buteo lineatus	None		Oak and riparian woodlands			
California Quail	Callipepla californica	None		Oak, riparian woodlands			
Anna's Hummingbird	Calypte anna	None	✓	Oak, riparian woodland, scrub			
Lesser Goldfinch	Carduelis psaltria	None	✓	Riparian, oak woodlands			
American Goldfinch	Carduelis tristis	None		Weedy fields, woodlands			
House Finch	Carpodacus mexicanus	None	✓	Wide habitat range			
Turkey Vulture	Cathartes aura	None	✓	Open country, oak woodlands			
Northern Flicker	Colaptes auratus	None		Coniferous, oak, riparian woodland			
American Crow	Corvus brachyrhynchos	None		Open oak, riparian woodland,			
Yellow-rumped Warbler	Dendroica coronata	None	✓	Riparian, oak woodlands			

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¹ California Species of Special Concern

Common name	Scientific name	Special status	Found on property	Habitat type
Townsend's Warbler	Dendroica townsendii	None		Riparian, oak woodlands
Brewer's Blackbird	Euphagus cyanocephalus	None	✓	Open habitats
American Kestrel	Falco sparverius	None		Open, semi-open country
Barn Swallow	Hirundo rustica	None		Open country, farmyards
Bullock's Oriole	Icterus bullockii	None		Oak, riparian woodlands
Dark-eyed Junco	Junco hyemalis	None	✓	Oak woodland
Loggerhead Shrike	Lanias ludovicianus	SSC		Grasslands, fields, chaparral
Acorn Woodpecker	Melanerpes formicivorus	None		Oak woodlands
Northern Mockingbird	Mimus polyglottos	None	✓	Riparian, chaparral, woodlands, and urban areas
Ash-throated Flycatcher	Myiarchus cinerascens	None		Open areas near oaks
Western Screech-owl	Otus kennicottii	None		Oak woodlands
Savannah Sparrow	Passerculus sandwichensis	None		Open habitats, marshes, grasslands
House Sparrow	Passer domesticus	None		Urban
Cliff Swallow	Petrochelidon pyrrhonota	None		Urban; open areas near water
Yellow-billed Magpie	Pica nuttalli	None		Oak savannah
Nuttall's Woodpecker	Picoides nuttallii	None		Oak woodland, savanna
California Towhee	Pipilo crissalis	None		Brushy habitats
Bushtit	Psaltriparus minimus	None	✓	Oak, riparian, chaparral, scrub
Ruby-crowned Kinglet	Regulus calundula	None	✓	Oak and riparian woodlands
Black Phoebe	Sayornis nigricans	None	✓	Near water
Say's Phoebe	Sayornis saya	None	✓	Open country, grassland
Western Bluebird	Sialia mexicana	None		Riparian woodland, ranch land
White-breasted Nuthatch	Sitta carolinensis	None		Oak savannah, woodland
European Starling	Sturnus vulgaris	None	✓	Agricultural, urban
Tree Swallow	Tachycineta bicolor	None	✓	Wooded habitats, water
Violet-green Swallow	Tachycineta thalassina	None		Woodland habitats
Bewick's Wren	Thryomanes bewickii	None		Shrubby areas
House Wren	Troglodytes aedon	None		Shrubby areas
American Robin	Turdus migratorius	None	✓	Streamsides, woodlands
Western Kingbird	Tyrannus verticalis	None		Open country with scattered trees, farms, roadsides
Orange-crowned Warbler	Vermivora celata	None		Oak, riparian woodlands
Mourning Dove	Zenaida macroura	None	✓	Open and semi-open area

Common name	Scientific name	Special status	Found on property	Habitat type
Golden-crowned Sparrow	Zonotrichia atricapilla	None		Shrubby, weedy areas
White-crowned Sparrow	Zonotrichia leucophrys	None	✓	Shrubby, weedy areas
	Mammal	s – 14 Spec	cies	
Coyote	Canis latrans	None		Open woodlands, brushy areas, wide ranging
Opossum	Didelphis marsupialis	None		Woodlands, streams
Feral Cat	Felis catus	None		Varied
Striped Skunk	Mephitis mephitis	None		Mixed woods, chaparral
California Vole	Microtus californicus	None	✓	Grassland meadows
Mule Deer	Odocoileus hemionus	None		Many habitats
Deer Mouse	Peromyscus maniculatus	None		All dry land habitats
Raccoon	Procyon lotor	None		Streams, lakes, rock cliffs,
Western Harvest Mouse	Reithodontomys megalotis	None		Grassland, dense vegetation near water
California Ground Squirrel	Otospermophilus beecheyi	None	✓	Grasslands
Desert Cottontail	Sylvilagus audubonii	None		Brushy areas
American Badger	Taxidea taxus	SSC		Open grasslands
Valley Pocket Gopher	Thomomys bottae	None	✓	Variety of habitats
Red Fox	Vulpes fulva	None		Forest and open country

8.0 Project Overview

8.1 General Discussion of Property Site Conditions

The 12.2-acre Property consists of five habitat types in which 104 species of plants were identified during floristic surveys of the proposed development area in 2005, 2006, and 2012. Additional plant species added to the list in 2012 are primarily weeds and landscape plants; no special status plants were identified on the Property, and none are expected to occur. Appropriate habitat for six special status animals was identified on the Property. Two additional special status animals are known from the area but are unlikely to occur on site in its current condition.

The current land uses on the Property and on surrounding lands have degraded and fragmented grassland habitat. The proposed project will permanently convert most of the non-native grassland and pastures to residential housing. Surrounding areas have been converted to other uses, primarily suburban residential, transportation, and commercial/tourism. A drainage swale bisects the west end of the Property. Flows carry storm water and nuisance runoff from residential areas to the north, across the Property toward a culvert under Highway 46 East. The

swale eroded during large storms in January 2005. Standing water was present in February 2005, April 2006 and during site visits in April 2012. No hydrophytic vegetation was noted during our site surveys except in the immediate vicinity of a culvert outfall at Experimental Station Road. This vicinity of the culvert outfall is mapped as nuisance water wetland. The drainage swale feature at the west end of the Property does not appear to be a jurisdictional water of the state or U.S. It appears to have formed during storms due to concentration of stormflow from the residential development north of the Property.

8.2 Proposed Project

The Proposed Project would result in construction of 141 residential units with roads and parking; a free-standing home; a swimming pool, spa, tot lots, picnic tables, and landscaping. A stormwater basin and stormwater overflow basin would be constructed to mitigate stormwater runoff from the increased impervious surface. Approximately one acre would be retained as open space at the east edge of the Project.

8.3 Regulatory Framework

8.3.1 CEQA guidance

The California Environmental Quality Act (CEQA) requires the lead agency to evaluate potential environmental effects of the project. The lead agency must also identify other State and local agencies (known as responsible agencies) that will be issuing a discretionary approval subject to CEQA for an activity that is part of the project. The following section of the State CEQA Guidelines provides general direction for the evaluation of biological resource impacts as a part of the environmental review of proposed projects.

CEQA Guidelines Section 15070 states that a Lead Agency (in this case, the City of Paso Robles) shall prepare or have prepared a mitigated negative declaration for a project subject to CEQA when the initial study shows that "there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, or the initial study identifies potentially significant effects but revisions in the project plans or proposals made by, or agreed to by the applicant before a proposed mitigated negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and there is no substantial evidence in light of the whole record before the agency, that the project as revised may have a significant effect on the environment."

The following definition of a significant effect is defined in Section 15382 of the CEQA Guidelines, "Significant effect on the environment" means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance."

8.3.2 Federal and state resource protections

The agencies that administer the Federal Endangered Species Act (FESA) and California Endangered Species Act (CESA) formally list plant and animal species determined to be Threatened or Endangered, and they have adopted regulations to implement these laws to protect such species.

Other federal statutes that provide protection for species and/or their habitats include, but are not limited to, the National Environmental Policy Act (NEPA), the Clean Water Act (for protection of federal wetlands), Migratory Bird Treaty Act (MBTA), Executive Order 11990 (wetlands protection), and California Fish and Game Code sections 1600 (Streambed Alteration Agreements).

Flora and fauna:

All of the plants constituting CNPS List 1B meet the definitions of Section 1901, Chapter 10 of the California Native Plant Protection Act (CNPPA) in the California Fish and Game Code or Secs. 2062 and 2067 (California Endangered Species Act) of the California Fish and Game Code, and are eligible for State listing. It is mandatory that they be fully considered during preparation of environmental documents relating to the CEQA (CEQA section 15065).

Certain species of nesting birds are protected from disturbance by The Migratory Bird Treaty Act of 1918, (as regulated by the United States Fish and Wildlife Service) and by sections 3503, 3503.5, and 3800 of the California Department of Fish and Game Code.

"Special Animals" is a general term that refers to all of the taxa the California Natural Diversity Database (CNDDB) is interested in tracking, regardless of their legal or protection status. These taxa may be listed or proposed for listing under the State and/or Federal Endangered Species Acts, but they may also be species deemed biologically rare, restricted in range, declining in abundance, or otherwise vulnerable.

Animals listed as California Special Concern (CSC) species are not listed under State or Federal Endangered Species Acts, but are considered rare or declining in abundance. The Special Concern designation is intended to provide the Department of Fish and Game, consulting biologists, land planners and managers with lists of species that require special consideration during the planning process in order to avert continued population declines and potential costly listing under federal and state endangered species laws.

9.0 Potential Impacts to Biological Resources

Construction of the proposed Project could affect common and special status species, nesting birds, disturbed California annual grassland, an abandoned orchard, a nuisance water wetland, and oak trees. The Oak trees could be impacted or removed from the site during the construction process. Grading for structures, parking, and landscapes, would occur within an approximately 11-acre footprint. Except for oak woodland on the east side of the Property, existing habitats will be removed or substantially altered within the Project footprint.

9.1 Potential Habitat Impacts

The proposed Project would affect California annual grassland. Habitat types mapped within the Project area and discussed in this Section are overlaid on a high-resolution aerial photograph provided as a Biological Resource Map in Section 11.0. The Property is within an area designated by the California Department of Fish and Game as SJKF habitat, delineated as north of Highway 46 and east of Highway 101. The Property is isolated on four sides from functional kit fox habitat, thereby greatly reducing potential mitigation obligations. Current land use on 9.03 acres is either anthropogenic or animal pens that are not kit fox habitat. The remaining 2.9 acres is usable by kit fox, although not good quality habitat. The kit fox habitat evaluation

completed for the project (Althouse and Meade, 6-8-12) determined three habitat types, grassland, oak woodland, and abandoned orchard, totaling 2.9 acres, could provide habitat for kit fox.

9.1.1 Anthropogenic

The existing 4.7 acres of anthropogenic habitat would be altered for other human uses. Alterations to existing anthropogenic habitats are generally not significant except where protected species, such as bats, may be adversely affected. Potential for adverse effects to bats are discussed in Section 9.4. This habitat type is not usable by kit fox.

9.1.2 Disturbed California annual grassland

The 2.36 acres of disturbed California annual grassland on the Property would be permanently removed for construction of residential units, paved roads, parking, stormwater basins, and amenities such as recreational areas. Impacts to annual grassland habitat that do not affect rare species are typically not considered significant by the City of Paso Robles.

Annual grasslands in the Paso Robles region have been reduced by building and agriculture. Other valuable habitat types such as oak woodlands, scrub, chaparral, and perennial grasslands have a higher percentage of native species. While annual grasslands can have lower native species cover and less plant diversity, they can provide some habitat for special status native plants and wildlife. The removal of annual grasslands in the Paso Robles region has reduced available habitat for wide-ranging species that forage in annual grassland, such as badger and kit fox, however it is not a sensitive habitat type and usually does not require mitigation. This habitat type could be used by San Joaquin kit fox.

9.1.3 Livestock Pens

The proposed residential development will permanently remove 3.60 acres (100%) of livestock pens on the Property. Livestock pens on the property are completely disturbed by intensive use and are not wildlife habitat. These pens are not badger or kit fox habitat. Impacts and mitigations to livestock pens that may affect rare species is covered in Section 10.4.

9.1.4 Abandoned Orchard

Approximately 0.45 acre of abandoned orchard would be removed that may have limited potential habitat for San Joaquin Kit Fox. Approximately 0.32 acres of the abandoned orchard would not be removed.

9.1.5 Wetland

A wetland formed from nuisance water would be removed, and nuisance water from the existing residential development to the north re-routed into proposed stormwater detention basins. Approximately 250 square feet of wetland habitat would be removed. The wetland is isolated from waters regulated by the U.S. Army Corps of Engineers under section 404 of the Clean Water Act. It may be considered a "water of the state" and removal may require permits from CDFG and RWQCB. Wetlands are not a kit fox habitat type.

9.1.6 Blue oak woodland

The proposed Project would be adjacent to 0.75 acres of oak woodland habitat on the Property. The blue oak woodland on the Property is a remnant stand of oaks, already surrounded on four

sides by intensive human activity. Conversion of the Property to more intensive residential uses would not substantially change oak woodland habitat value in this case because it is already substantially altered. Impacts could occur as pruning and understory clearing conducted annually for fire safety in areas where structures are proposed close to oak woodland. The project would not remove oak woodlands on the Property. The project may affect 0.09 acres of oak woodland habitat by installation of a wall.

Impacts to individual oak trees require mitigation as per the City of El Paso de Robles tree ordinance (refer to Section 9.2).

9.2 Potential Impacts to Oak Trees

The City of Paso Robles requires mitigation for removal of oak trees with a diameter at breast height (DBH) of 6 inches or greater. Diameter at breast is measured at 4.5 feet from the ground or, if the trunk is split below 4.5 feet, at the narrowest point below the split. Impacts include any ground disturbance within the critical root zone (CRZ), or any trimming of branches 4 inches in diameter or greater. The critical root zone (CRZ), as defined by the City of Paso Robles, is an area of root space that is within a circle circumscribed around the trunk of a tree using a radius of 1 foot per inch DBH, e.g., a 20-inch diameter tree has a CRZ with a radius of 20 feet as measured from the center of the tree (City of El Paso de Robles–Ordinance No. 835 N.S). This measurement often extends beyond the actual drip-line of the tree.

The proposed Project has been designed to minimize impacts to oak trees. Two oaks would be removed, a senescent valley oak along Experimental Station Road, and a young valley oak that has been poorly pruned multiple times. Impacts to oak trees are likely to occur during development of the project site. An oak tree report and protection plan has been prepared for the Property that provides specific information regarding trees to be impacted, type and extent of impact, and gives detailed protection and mitigation recommendations (Althouse and Meade, Inc. and Davey Resource Group, 2012).

Impacts to individual native oak trees can typically be mitigated to a less than significant level. Complete analysis of the impacts to native oak trees will be performed as part of a tree report as required by the City of Paso Robles.

9.3 Potential Impacts to Nesting Birds

Vegetation removal and construction activities associated with the proposed development could result in adverse impacts to nesting birds if conducted during nesting season (March 15 through August 15). Annual mowing and clearing of vegetation for fire safety in the open space at the east edge of the could also result in adverse impacts to nesting birds. The potential for the Project to adversely affect nesting birds can be reduced (refer to section 10.3).

9.4 Potential Impacts to Special Status Species

Appropriate habitat for eight special status animals was identified on the Property. No rare animals or special status plants were observed on the Property during surveys in 2005, 2006, and 2012. Project potentially could result in adverse effects on special status species. Preconstruction surveys will reduce the potential for impacts to a less than significant level.

9.4.1 Special status birds

Burrowing owl is a ground nesting bird that may winter on site but is unlikely to nest on the Property. Loggerhead shrike is commonly observed in the vicinity of the project site and could nest in existing landscape plants or blue oak trees. Impacts to or take of rare nesting birds can be avoided (see Section 10.4.2).

9.4.2 Special status reptiles

Silvery legless lizard (*Anniella pulchra pulchra*) could occur in loamy soils beneath tree or shrub canopy on the Property. Construction activities associated with the Project potentially could result in adverse impacts on silvery legless lizard if appropriate pre-construction protection measures are not implemented. Pre-construction habitat protection or focused surveys and relocation would reduce the potential for such impacts (refer to Section 10.4.3).

9.4.3 Special status mammals

The Property contains potential habitat for Townsend's big-eared bat, pallid bat, hoary bat, and fringed myotis, all special concern bat species. Badgers and San Joaquin Kit Fox are historically known from grasslands in the region, but are extremely unlikely to occur on the Property due to its isolation from more extensive appropriate habitat, and heavily disturbed condition.

A. Bats

Townsend's big-eared bat, pallid bat, fringed myotis, and hoary bat are special concern bat species that are known to roost in trees, buildings, and/or bridges. Existing residences on the Property were not surveyed for bats. Maternal bat colonies are protected by the California Department of Fish and Game. Significant impacts to special status bats and maternal bat colonies can be avoided (see Section 10.4.5).

B. San Joaquin kit fox

The project site is within the known range of San Joaquin kit fox. Development on lands surrounding the Property, and current land uses on site have effectively removed potential San Joaquin Kit Fox habitat from the subject Property. Although the site still retains some grassland, appropriate access corridors no longer exist for kit fox movement to this site. Impenetrable pasture fence on portions of the Property contribute to movement barriers. However, typical preconstruction survey and protective measures for kit fox are provided in Section 10.4.5 as recommendations that would provide guidance to the applicant and protection of the species in the extremely unlikely event of kit fox presence during construction of the project.

In addition, a San Joaquin Kit Fox Habitat Evaluation Form completed for the project (Althouse and Meade 6-8-12) describes 2.9 acres San Joaquin kit fox habitat that will be impacted by the project. This 2.9 acres is subject to mitigation, with a evaluation score of 61 (typically a 2 to 1 mitigation ratio). The balance of the project area, 9.3 acres of the 12.2 acre total, is not San Joaquin kit fox habitat.

10.0 Minimization and Mitigation Measures

This section provides recommendations and mitigations to reduce the effect of the Project on biological resources. Where potentially adverse impacts to biological resources could occur during construction and operation (maintenance, fire safety vegetation clearing, etc.) of the Project or due to the presence of the Project, we provide biological resource (BR) mitigation measures designed to offset the adverse effect.

10.1 Habitats

The proposed Project would primarily affect California annual grassland, anthropogenic, livestock pens and abandoned orchard habitats. Individual blue and valley oak trees would also be affected. Areas outside proposed construction, landscaping, and recreational facilities would be retained as open space. When former rangelands and croplands are removed from grazing or cultivation, an increase in weedy species and fuel buildup can occur.

We provide the following recommendations to avoid, minimize and/or mitigate potential Project effects on habitats. Mitigation recommendations provided in Section 10.3 and 10.4 address potential adverse effects of habitat removal on special status species and nesting birds.

10.1.1 Anthropogenic, Livestock Pens, California Annual Grassland, and Abandoned Orchard Habitat

Loss of human-modified habitats and California annual grassland usually does not require mitigation except where a project affects special status species or important wildlife populations. See Section 10.4.5 for discussion of special status mammals.

10.1.2 Blue oak woodland

The project would not remove blue oak woodland. Mitigation recommendations for impacts to individual trees are discussed in section 10.2.

10.1.3 Wetland

The isolated wetland adjacent to Experimental Station Road will be completely removed. The wetland was created by residential nuisance water.

- **BR-1.** Nuisance water will be piped into the project's stormwater system. A new bioswale will be created to filter nuisance water from the subject parcel.
 - **<u>A.</u>** The bioswale is located along the southern property boundary, and will be part of the project's linear landscaping and stormwater detention system.
 - **B.** Prior to issuance of a grading permit for work that would affect the wetland and swale feature, the Regional Water Quality Control Board and the California Department of Fish and Game will be contacted to determine if permits to impact the nuisance water wetland are required under the Porter Cologne Act, Clean Water Act, or Fish and Game Code. If permits are required, applications will be made to appropriate agencies and approvals received.

Part of the bioswale will be vegetated with California meadow barley, a native wetland plant expected to cover the created wetland habitat. At least 250 square feet of wetland habitat will be created in the bioswale.

10.2 Individual Oak Tree Impacts

Oak tree impacts and mitigations shall be addressed by the Project arborist. A Tree Report shall be prepared according to City of Paso Robles standards. The following mitigation recommendations are presented here following guidelines set forth in the Paso Robles Tree Ordinance (City of El Paso de Robles - Ordinance No. 835 N.S).

- **BR-2.** Tree canopies and trunks within 50 feet of proposed disturbance zones should be mapped and numbered by a certified arborist or qualified biologist and a licensed land surveyor. Data for each tree should include date, species, number of stems, diameter at breast height (DBH) of each stem, critical root zone (CRZ) diameter, canopy diameter, tree height, health, habitat notes, and nests observed.
- **BR-3.** An oak tree protection plan shall be prepared and approved by the City of Paso Robles.
- **BR-4.** Impacts to the oak canopy or critical root zone (CRZ) should be avoided where practicable. Impacts include pruning, any ground disturbance within the dripline or CRZ of the tree (whichever distance is greater), and trunk damage.
- **BR-5.** Impacts to oak trees shall be assessed by a licensed arborist. Mitigations for impacted trees shall comply with the City of Paso Robles tree ordinance.
- **BR-6.** Replacement oaks for removed trees must be equivalent to 25% of the diameter of the removed tree(s). For example, the replacement requirement for removal of two trees of 15 inches DBH (30 total diameter inches), would be 7.5 inches (30" removed x 0.25 replacement factor). This requirement could be satisfied by planting five 1.5 inch trees, or three 2.5 inch trees, or any other combination totaling 7.5 inches. A minimum of two 24 inch box, 1.5 inch trees shall be required for each oak tree removed.
- **BR-7.** Replacement trees should be seasonally maintained (browse protection, weed reduction and irrigation, as needed) and monitored annually for at least 7 years. Replacement trees shall be of local origin, and of the same species as was impacted or removed.

10.3 Nesting Birds

Migratory non-game native bird species are protected by international treaty under the Federal Migratory Bird Treaty Act (MBTA) of 1918 (50 C.F.R. Section 10.13). Sections 3503, 3503.5 and 3513 of the California Fish and Game Code prohibit take (as defined therein) of all native birds and their active nests, including raptors and other migratory non-game birds (as listed under the Federal MBTA).

BR-8. Within one week of ground disturbance activities, if work occurs between March 15 and August 15, nesting bird surveys shall be conducted. If surveys do not locate nesting birds, construction activities may be conducted. If nesting birds are located, no construction activities shall occur within 100 feet of nests until chicks are fledged. A pre-construction survey report shall be submitted to the lead agency immediately upon completion of the survey. The report shall detail appropriate fencing or flagging of the buffer zone and make recommendations on additional monitoring requirements. A map of the Project site and nest locations shall be included with the report. The Project biologist conducting the nesting survey shall have the authority to reduce or increase the recommended buffer depending upon site conditions.

10.4 Avoidance, Minimization, and Mitigation for Special Status Species

10.4.1 Special Status Plant Species

No special status plant species were located or are expected to occur within the project area, therefore, no mitigation is recommended.

10.4.2 Special status birds

- **A.** Loggerhead shrike: In order to reduce the potential for disturbance nests of loggerhead shrike, the applicant shall implement BR-8 one week prior to ground disturbance or tree pruning activities (refer to Section 10.3). If burrows or nests of sensitive birds are identified in the work area, the following additional mitigation measures shall be implemented:
- **BR-9.** Occupied nests of special status bird species shall be mapped using GPS or survey equipment. Work shall not be allowed within the 100 foot buffer while the nest is in use. The buffer zone shall be delineated on the ground with orange construction fencing or flagging where it overlaps work areas
- **BR-10.** Occupied nests of special status bird species that are within 100 feet of project work areas shall be monitored at least every two weeks through the nesting season to document nest success and check for project compliance with buffer zones. Once burrows or nests are deemed inactive and/or chicks have fledged and are no longer dependent on the nest, work may commence in these areas.
- **B.** Burrowing Owl: In order to reduce the potential for impacts to burrowing owls, the applicant shall implement the following within two weeks prior to ground disturbance activities.
- **BR-11.** Pre-construction surveys for burrowing owls shall be conducted not more than 14 days prior to any work that affects habitat containing burrows. The pre-construction surveys shall be conducted in a manner sufficient to determine no burrowing owls are present in the work areas. Pre-construction surveys shall be conducted throughout the year, when work is proposed, to account for breeding, wintering, and transient owls.
- **BR-12.** If burrowing owls are present in the work areas during the breeding season (February 1 through August 31), the burrows must be monitored to determine if a breeding pair is present. If a breeding pair is confirmed, the burrow must be avoided and protected from impacts via a 250 foot setback from the burrow. If a breeding pair is not present, passive relocation may be used. If burrowing owls are present during the non-breeding season, a passive relocation effort, such as a one-way door, may be implemented. Monitoring and mitigation must be conducted under guidance from a qualified wildlife biologist. Mitigation and protection procedures should incorporate recommendations outlined in the burrowing owl protocol survey guidelines (California Burrowing Owl Consortium 1993).

10.4.3 Silvery legless lizard

Silvery legless lizard could potentially be present in Project construction areas. The following mitigation measure shall be implemented to reduce potential direct adverse effects on special status reptiles:

California legless lizard occurs on the Property in areas of sandy soil and leaf litter. To minimize potential impacts to this species, the following mitigation measure is recommended:

- **BR-13.** A focused pre-construction survey for legless lizard shall be conducted within the project site prior to construction Pre-construction surveys shall be conducted where ground disturbance will occur in potential legless lizard habitat, around existing trees and shrubs where soils are friable. The pre-construction survey shall be conducted by a qualified biologist familiar with legless lizard ecology and survey methods. The scope of the survey shall be determined by a qualified biologist and shall be sufficient to determine presence or absence in the project areas. If the focused survey results are negative, a letter report shall be submitted to the County, and no further action shall be required. If legless lizards are found to be present in the proposed work areas the following steps shall be taken:
 - Obtain approval from California Department of Fish and Game for project biologist to relocate of special status species prior to start of construction activities. Prepare and submit a Management Plan pertaining to the capture and relocation of legless lizards, including a map of proposed relocation sites, to CDFG.
 - Legless lizards shall be captured by hand by the project biologist and relocated to an appropriate location well outside the project areas.
 - Construction monitoring shall be required for all new ground-breaking activities located within legless lizard habitat.

10.4.4 Spadefoot toads

A large puddle forms annually in an existing swale and could harbor Western spadefoot toad, although none were observed on the Project site. To minimize potential for impacts to Western spadefoot toad, we recommend the following measures.

- **BR-14.** Perform a focused survey for the presence of Western spadefoot toad beginning in January, during the rainy season. Surveys shall focus on determining presence or absence of adult or juvenile spadefoots on the Property, and on determining if the subject puddle is suitable for breeding.
- **BR-15.** If spadefoot toads are found on the property, a Management Plan shall be developed. This plan shall address monitoring ground disturbance activities near breeding pools to relocate disturbed spadefoot toads, relocation of toads to appropriate habitat outside the Project area or creation of and relocation to on-site habitat.
- **BR-16.** If the focused survey does not identify spadefoot toads on the Property, a biological monitor shall be present during initial site preparation and grubbing. If no spadefoot toads are found, construction activities may continue without daily monitoring. If special status species are found, a qualified biologist shall move them to the nearest safe location. At that time, the Project biologist shall have the authority to recommend additional monitoring if it is determined that spadefoot toads could move onto the Project site during construction, or be forced out of underground burrows during grading.

10.4.5 Special status mammals

To reduce the potential for loss of special status mammals, the applicant should implement the following mitigation measure, as applicable:

A. Bats

Roosting bats and/or maternal bat colonies may be present in trees with appropriate cavities or loose bark or in existing residential structures on the project site.

- **BR-17.** Prior to removal of any trees over 20 inches DBH, a survey shall be conducted by a qualified biologist to determine if any of the trees proposed for removal or trimming harbor sensitive bat species or maternal bat colonies. Maternal bat colonies may not be disturbed.
- **BR-18.** Prior to demolition of existing structures, a survey shall be conducted to determine if roosting bats or maternal bat colonies are present. Roosting bats may be excluded from the structure in consultation with the project biologist. Maternal bat colonies may not be disturbed. If maternal bat colonies are present, demolition shall not commence without consultation with the California Department of Fish and Game.

San Joaquin Kit Fox. The Property is located in the San Joaquin kit fox corridor area in San Luis Obispo County. Development of the project would result in a net loss of kit fox habitat. In some cases, kit fox are adaptable to inhabiting locations within fences and with views restricted by human infrastructure (USFWS 1998 pg. 130, Cypher. et al. 2005, Cypher and Frost. 1999, Cypher and Warrick. 1994). The following mitigation recommendations are designed to reduce the potential for direct impacts to kit fox to a less than significant level.

- **BR-19.** Prior to issuance of grading and/or construction permits, the applicant shall submit evidence to the City of Paso Robles, Department of Community Development, Planning Division (City) that states that one or a combination of the following three San Joaquin kit fox mitigation measures has been implemented:
 - a. Provide for the protection in perpetuity, through acquisition of fee or a conservation easement of 5.8 acres of suitable habitat in the kit fox corridor area (e.g. within the San Luis Obispo County kit fox habitat area, northwest of Highway 46), either onsite or off-site, and provide for a non-wasting endowment to provide for management and monitoring of the Property in perpetuity. Lands to be conserved shall be subject to the review and approval of the California Department of Fish and Game (Department) and the City.
 - This mitigation alternative (a.) requires that all aspects of this program must be in place before City permit issuance or initiation of any ground disturbing activities.
 - b. Deposit funds into an approved in-lieu fee program, which would provide for the protection in perpetuity of suitable habitat in the kit fox corridor area within San Luis Obispo County, and provide for a non-wasting endowment for management and monitoring of the Property in perpetuity.
 - Mitigation alternative (b) above, can be completed by providing funds to The Nature Conservancy (TNC) pursuant to the Voluntary Fee-Based Compensatory Mitigation Program (Program). The Program was established in agreement

between the Department and TNC to preserve San Joaquin kit fox habitat, and to provide a voluntary mitigation alternative to project proponents who must mitigate the impacts of projects in accordance with the California Environmental Quality Act (CEQA). The fee, payable to "The Nature Conservancy", would total \$14,500. This fee is calculated based on the current cost-per-unit of \$2,500 per acre of mitigation, which is scheduled to be adjusted to address the increasing cost of Property in San Luis Obispo County and the City of El Paso de Robles; your actual cost may increase depending on the timing of payment. This fee must be paid after the Department provides written notification about your mitigation options but prior to County permit issuance and initiation of any ground disturbing activities.

c. Purchase 5.8 credits in a Department-approved conservation bank, which would provide for the protection in perpetuity of suitable habitat within the kit fox corridor area and provide for a non-wasting endowment for management and monitoring of the Property in perpetuity.

Mitigation alternative (c) above, can be completed by purchasing credits from the Palo Prieto Conservation Bank. The Palo Prieto Conservation Bank was established to preserve San Joaquin kit fox habitat, and to provide a voluntary mitigation alternative to project proponents who must mitigate the impacts of projects in accordance with the California Environmental Quality Act (CEQA). The cost for purchasing credits is payable to the owners of The Palo Prieto Conservation Bank, and would total \$14,500. This fee is calculated based on the current cost-per-credit of \$2500 per acre of mitigation. The fee is established by the conservation bank owner and may change at any time. Your actual cost may increase depending on the timing of payment. Purchase of credits must be completed prior to City permit issuance and initiation of any ground disturbing activities.

- **BR-20. Prior to issuance of grading and/or construction permits**, the applicant shall provide evidence that they have retained a qualified biologist acceptable to the City. The retained biologist shall perform the following monitoring activities:
 - i. Prior to issuance of grading and/or construction permits and within 30 days prior to initiation of site disturbance and/or construction, the biologist shall conduct a pre-activity (i.e. pre-construction) survey for known or potential kit fox dens and submit a letter to the City reporting the date the survey was conducted, the survey protocol, survey results, and what measures were necessary (and completed), as applicable, to address any kit fox activity within the project limits.
 - ii. The qualified biologist shall conduct weekly site visits during site-disturbance activities (i.e. grading, disking, excavation, stock piling of dirt or gravel, etc.) that proceed longer than 14 days, for the purpose of monitoring compliance with required Mitigation Measures BR-19 through BR-29. Site disturbance activities lasting up to 14 days do not require weekly monitoring by the biologist unless observations of kit fox or their dens are made on-site or the qualified biologist recommends monitoring for some other reason (see BR-15iii). When weekly monitoring is required, the biologist shall submit weekly monitoring reports to the City.
 - iii. Prior to or during project activities, if any observations are made of San Joaquin

Kit fox, or any known or potential San Joaquin kit fox dens are discovered within the project limits, the qualified biologist shall re-assess the probability of incidental take (e.g. harm or death) to kit fox. At the time a den is discovered, the qualified biologist shall contact USFWS and the CDFG for guidance on possible additional kit fox protection measures to implement and whether or not a Federal and/or State incidental take permit is needed. If a potential den is encountered during construction, work shall stop until such time the USFWS determines it is appropriate to resume work.

If incidental take of kit fox during project activities is possible, **before project activities commence**, the applicant must consult with the USFWS. The results of this consultation may require the applicant to obtain a Federal and/or State permit for incidental take during project activities. The applicant should be aware that the presence of kit foxes or known or potential kit fox dens at the project site could result in further delays of project activities.

- iv. **In addition,** the qualified biologist shall implement the following measures:
 - 1. Within 30 days prior to initiation of site disturbance and/or construction, fenced exclusion zones shall be established around all known and potential kit fox dens. Exclusion zone fencing shall consist of either large flagged stakes connected by rope or cord, or survey laths or wooden stakes prominently flagged with survey ribbon. Each exclusion zone shall be roughly circular in configuration with a radius of the following distance measured outward from the den or burrow entrances:

Potential kit fox den: 50 feet

Known or active kit fox den: 100 feet

• Kit fox pupping den: 150 feet

- 2. All foot and vehicle traffic, as well as all construction activities, including storage of supplies and equipment, shall remain outside of exclusion zones. Exclusion zones shall be maintained until all project-related disturbances have been terminated, and then shall be removed.
- 3. If kit foxes or known or potential kit fox dens are found on site, daily monitoring by a qualified biologist shall be required during ground disturbing activities.

Monitoring: Required prior to issuance of a grading and/or construction permit. Compliance will be verified by the City of Paso Robles, Planning Division.

BR-21. Prior to issuance of grading and/or construction permits, the applicant shall clearly delineate the following as a note on the project plans: "Speed signs of 25 mph (or lower) shall be posted for all construction traffic to minimize the probability of road mortality of the San Joaquin kit fox". Speed limit signs shall be installed on the project site within 30 days prior to initiation of site disturbance and/or construction.

- **BR-22.** During the site disturbance and/or construction phase, grading and construction activities after dusk shall be prohibited unless coordinated through the City, during which additional kit fox mitigation measures may be required.
- **BR-23.** Prior to issuance of grading and/or construction permit and within 30 days prior to initiation of site disturbance and/or construction, all personnel associated with the project shall attend a worker education training program, conducted by a qualified biologist, to avoid or reduce impacts on sensitive biological resources (i.e. San Joaquin kit fox). At a minimum, as the program relates to the kit fox, the training shall include the kit fox's life history, all mitigation measures specified by the City, as well as any related biological report(s) prepared for the project. The applicant shall notify the City shortly prior to this meeting. A kit fox fact sheet shall also be developed prior to the training program, and distributed at the training program to all contractors, employers and other personnel involved with the construction of the project.
- BR-24. During the site-disturbance and/or construction phase, to prevent entrapment of the San Joaquin kit fox, all excavations, steep-walled holes and trenches in excess of two feet in depth shall be covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks. Trenches shall also be inspected by construction workers for entrapped kit fox each morning prior to onset of field activities and immediately prior to covering with plywood at the end of each working day. Before such holes or trenches are filled, they shall be thoroughly inspected for entrapped kit fox. Any kit fox so discovered shall be allowed to escape before field activities resume, or removed from the trench or hole by a qualified biologist and allowed to escape unimpeded.
- **BR-25. During the site-disturbance and/or construction phase,** any pipes, culverts, or similar structures with a diameter of four inches or greater, stored overnight at the project site shall be thoroughly inspected for trapped San Joaquin kit foxes before the subject pipe is subsequently buried, capped, or otherwise used or moved in any way. If during the construction phase a kit fox is discovered inside a pipe, that section of pipe will not be moved. If necessary, the pipe may be moved only once to remove it from the path of activity, until the kit fox has escaped.
- **BR-26.** During the site-disturbance and/or construction phase, all food-related trash items such as wrappers, cans, bottles, and food scraps shall be disposed of only in closed containers. These containers shall be regularly removed from the site. Food items may attract San Joaquin kit foxes onto the project site, consequently exposing such animals to increased risk of injury or mortality. No deliberate feeding of wildlife shall be allowed.
- **BR-27.** Prior to, during and after the site-disturbance and/or construction phase, use of pesticides or herbicides shall be in compliance with all local, State and Federal regulations. This is necessary to minimize the probability of primary or secondary poisoning of endangered species utilizing adjacent habitats, and the depletion of prey upon which San Joaquin kit foxes depend.
- **BR-28.** During the site-disturbance and/or construction phase, any contractor or employee that inadvertently kills or injures a San Joaquin kit fox or who finds any such animal either dead, injured, or entrapped shall be required to report the incident immediately to

the applicant and City. In the event that any observations are made of injured or dead kit fox, the applicant shall immediately notify the USFWS and CDFG by telephone. In addition, formal notification shall be provided in writing within three working days of the finding of any such animal(s). Notification shall include the date, time, location and circumstances of the incident. Any threatened or endangered species found dead or injured shall be turned over immediately to CDFG for care, analysis, or disposition.

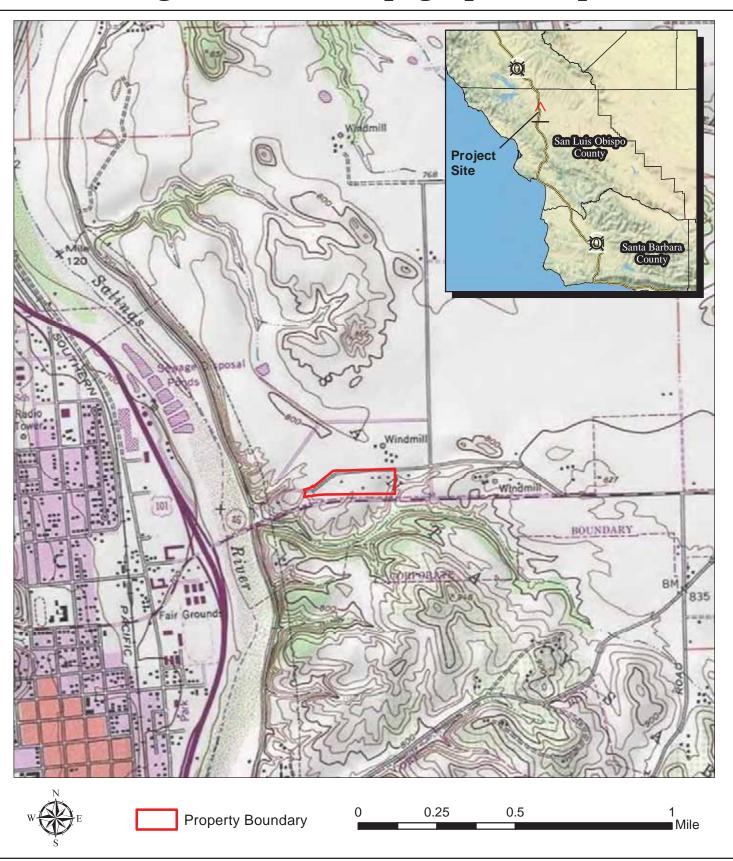
- **BR-29. Prior to final inspection, or occupancy, whichever comes first,** should any long internal or perimeter fencing be proposed or installed, the applicant shall do the following to provide for kit fox passage:
 - i. If a wire strand/pole design is used, the lowest strand shall be no closer to the ground than 12 inches.
 - ii. If a more solid wire mesh fence is used, 8" x 12" openings near the ground shall be provided every 100 yards
 - iii. Upon fence installation, the applicant shall notify the City to verify proper installation. Any fencing constructed after issuance of a final permit shall follow the above guidelines

Monitoring (San Joaquin Kit Fox Measures BR-19 to BR-29): Compliance will be verified by the City of Paso Robles Planning Division in consultation with the California Department of Fish and Game. As applicable, each of these measures shall be included on construction plans.

11.0 Figures

- Figure 1. USGS Topographic Map
- Figure 2. Aerial Photograph
- Figure 3. USDA Soil Map Units
- Figure 4. CNDDB & FWS Critical Habitat Map
- Figure 5. Biological Resources Map
- Figure 6. Preliminary Architectural Site Plan (Arris Studio)
- Figure 7. Preliminary Grading and Drainage Plan (Ashley and Vance)
- Figure 8. Preliminary Utility Plan (Ashley and Vance)

Figure 1. USGS Topographic Map

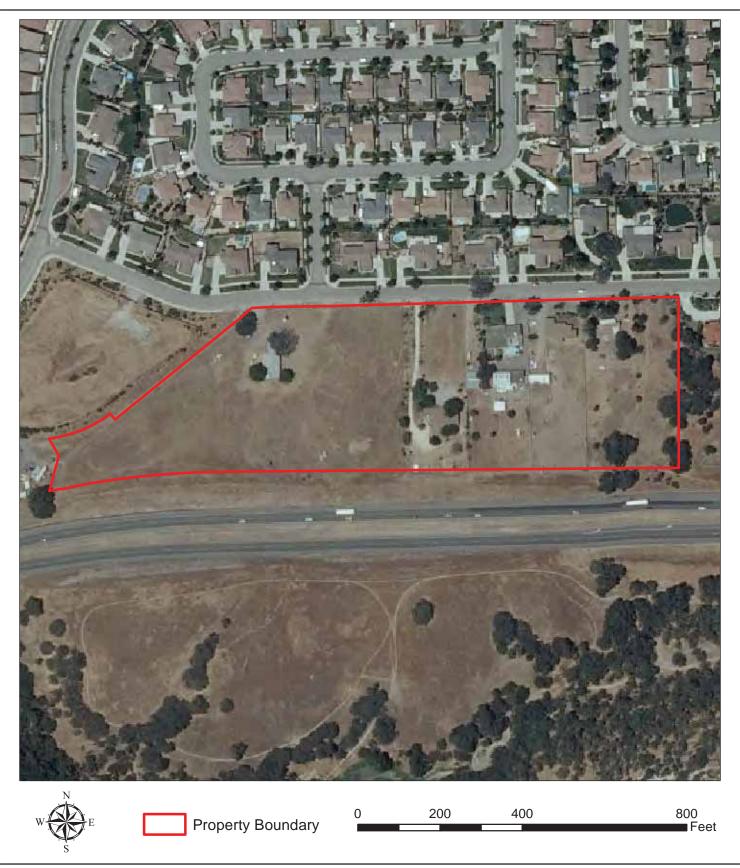


Buena Vista Apartments Experimental Station Road

USGS Topographic Map Map Updated: July 02, 2012, 11:12 AM



Figure 2. Aerial Photograph



Buena Vista Apartments Experimental Station Road

2010 San Luis Obispo County NAIP Aerial Photography Map Updated: July 03, 2012, 08:06 AM



Figure 3. USDA Soils Map



100: Arbuckle fine sandy loam, 0-2% slopes
106: Arbuckle-San Ysidro complex, 2-9% slopes
101: Arbuckle fine sandy loam, 2-9% slopes
152: Linne-Calodo complex, 9-30% slopes

103: Arbuckle-Positas complex, 15-30% slopes 180: Nacimiento-Los Osos complex, 30-50% slopes

104: Arbuckle-Positas complex, 30-50% slopes

0 500 1,000 2,000 Feet

Buena Vista Apartment Experimental Station Road

Soil Survey of San Luis Obispo County Inland Paso Robles 2010 San Luis Obispo County NAIP Aerial Photography Map Updated: July 03, 2012, 08:33 AM



Figure 4. CNDDB & FWS Critical Habitat Map

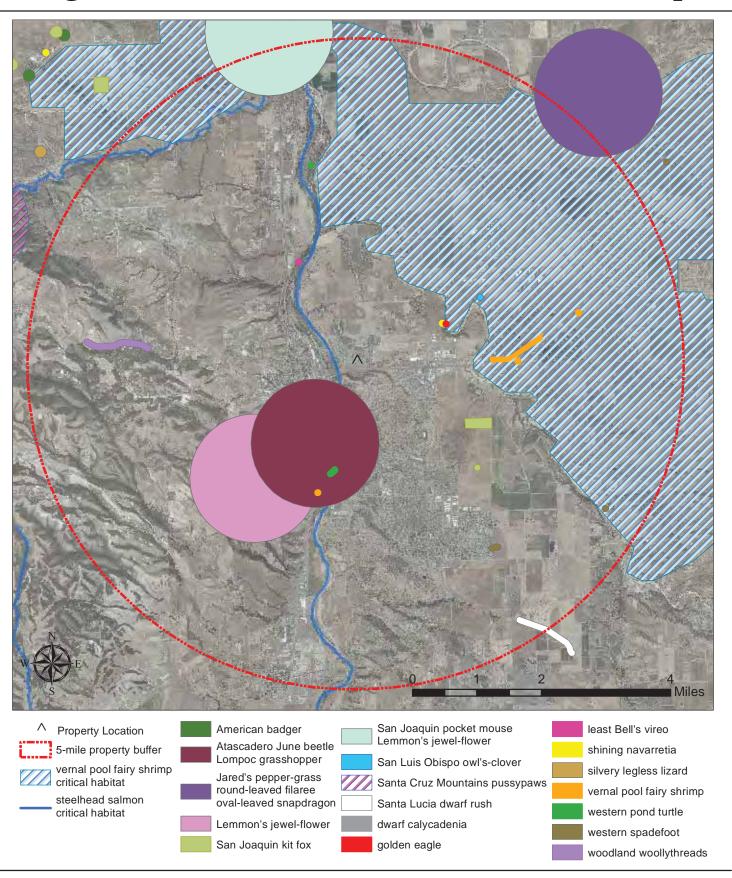


Figure 5. Habitat Map

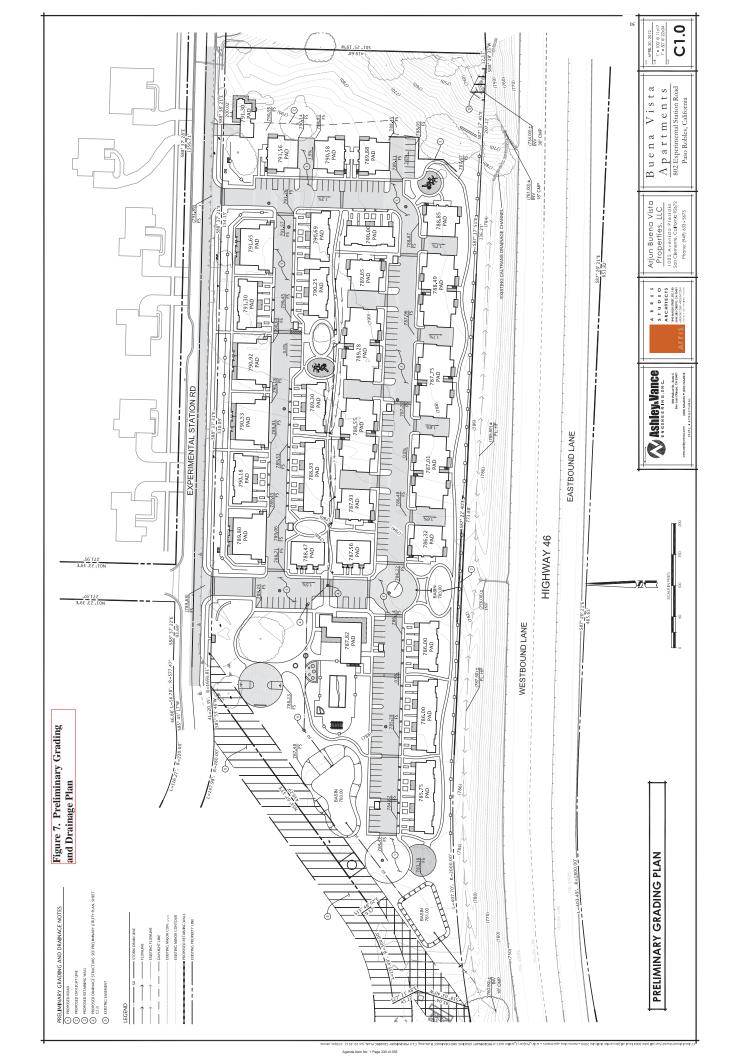


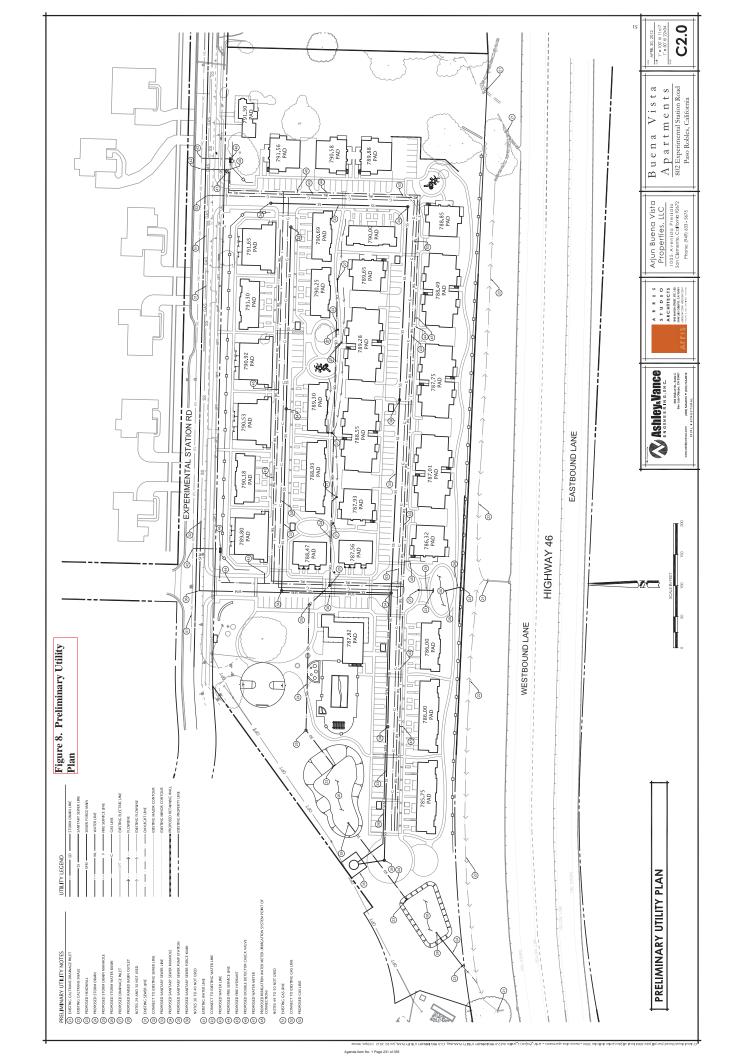
Buena Vista Apartments Experimental Station Road

2010 San Luis Obispo County NAIP Aerial Photography Map Updated: July 11, 2012, 03:55 PM









12.0 Photographs



1. The existing residential properties are on large lots, some of which are used as pasture for stock animals. View southeast, 2006 condition.



2. An existing trailer would be removed. Landscape trees may be removed, while native oak trees would be protected.



3. Condition of disturbed California annual grassland at the west end of the Property in 2012.



4. Typical condition of livestock pen habitat on the Property in 2012.



5. Annual grasses and forbs dominate the grassland and pasture areas. Occasional mature oaks remain on the property. View north in 2006.



 View southeast of blue oak woodland, on a hillside above an ephemeral drainage. Highway 46 East is in the background.



 A small swale begins at a culvert from under Experimental Station Road on the residential parcel to the east, and continues through Tract 2696 to Highway 46 East. Standing water was present on February 28, 2005.



8. The swale has been altered somewhat but continues to have ponded water during the wet season. Photo taken April 20, 2012, following 1.75 inches of rain over the previous week.



 Stormwater inlet collects water that is carried under street toward the Property. Cattails indicated by arrow. Mulefat bush to the left, and landscape and fruit trees to the right in photo taken July 2012, view south.



10. Dry swale in pasture. Piles of dirt appear to have been used for bicycle jumps. Plants are weedy upland species. Photo July 10, 2012, view south.



11. Areas inside pastures typically had much lower vegetative cover than ungrazed areas. Photo taken along fence in 2012.



12. A small wetland has formed at the outlet of a culvert draining nuisance water from the adjacent residential development. Photo 2006.



13. Typical pasture fencing with narrow openings at the lower portion of the fence. This type of fencing is difficult for many medium sized wildlife species to move through.



14. An existing oak at the northeast property corner died in 2006 and would be removed.

13.0 References

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Kit Fox Habitat Evaluation Form Cover Sheet

Project Name

Buena Vista Apartments Paso Robles Date

6-8-12

Project Location

802 Experimental Station Road

Paso Robles

Include project vicinity map and project boundary on copy of U.S.G.S. 7.5. minute map (size may be reduced)

U.S.G.S. Quad Map Name

Paso Robles

Lat/Long or UTM coordinates (if available)

N 35.644675°

W 120.675786°

Project Description: Residential Apartments

Project Size: 12.2 acres

Amount of Kit Fox Habitat Affected: 2.9 acres

Quantity of WHR Habitat Types Impacted (i.e. - 2 acres annual grassland, 3 acres blue oak woodland)

WHR type UAG - Grassland

2.36 acres

WHR type

Oak Woodland

0.09 acres

WHR type

Abandoned orchard

0.45 acres

Comments:

Question 3 is answered, "Project area surrounded by ag but less than 200 yards from habitat (5)", although there is no ag, but rather development surrounding the property. This answer is the best fit because Highway 46 is to the south, but habitat is present across the highway approximately 75 yards from the property.

Dan & Meade

Form Completed by:

Revised 03/02

San Joaquin Kit Fox Habitat Evaluation Form

Is the project within 10 miles from a recorded San Joaquin kit fox observation or within contiguous suitable habitat as defined in Question 2(A-E)?

YES - Continue with evaluation form

NO – Evaluation form/surveys are not necessary

- 1. Importance of the project area relative to Recovery Plan for Upland Species of the San Joaquin Valley, California (Williams et al, 1998).
 - A. Project would block or degrade an existing corridor linking core populations or isolate a subpopulation (20).
 - B. Project is within a core population (15)
 - C. Project area is identified within satellite population (12)
 - D. Project area is within a corridor linking satellite populations (10)
 - E. Project area is not within any of the previously described areas but is within known kit fox range (5)
- 2. Habitat characteristics of the project area.
 - A. Annual grassland or saltbush scrub present >50% of site (15)
 - B. Grassland or saltbush scrub present but comprises <50% of project area (10)
 - C. Oak savannah present on >50% of site (8)
 - D. Fallow ag fields or grain/alfalfa crops (7)
 - E. Orchards/vineyards (5)
 - F. Intensively maintained row crops or suitable vegetation absent (0)
- 3. Isolation of project area
 - A. Project area surrounded by contiguous kit fox habitat as described in Question 2a-e (15)
 - B. Project area adjacent to at least 40 acres of contiguous habitat or part of an existing corridor (10)
 - C. Project area adjacent to <40 acres of habitat but linked by existing corridor (i.e.-river, canal, aqueduct) (7)
 - D. Project area surrounded by ag but less than 200 yards from habitat (5)
 - E. Project area completely isolated by row crops or development and is greater than 200 yards from potential habitat (0)
- 4. Potential for increased mortality as a result of the project implementation. Mortality may come from direct (e.g. construction related) or indirect (e.g. –vehicle strikes due to increases in post development traffic) sources.
 - A. Increase in mortality likely (10)
 - B. Unknown mortality effects (5)
 - C. No long term effect on mortality (0)

5. Amount of potential kit fox habitat affect

- A. > 320 acres (10)
- B. 160-319 acres (7)
- C. 80-159 acres (5)
- D. 40-79 acres (3)
- E. <40 acres (1)

6. Results of project implementation

- A. Project site will be permanently converted and will no longer support foxes (10)
- B. Project area will be temporarily impacted but will require periodic disturbance for ongoing maintenance (7)
- C. Project area will be temporarily impacted and no maintenance necessary (5)
- D. Project will result in changes to agricultural crops (2)
- E. No habitat impacts (0)

7. Project shape

- A. Large block (10)
- B. Linear with >40 foot right-of way (5)
- C. Linear with <40 foot right-of-way (3)
- 8. Have San Joaquin kit foxes been observed within 3 miles of the project area within the last 10 years?
 - A. Yes (10)
 - B. No (0)

Scoring

1.	Recovery importance	20
2.	Habitat condition	10
3.	Isolation	5
4.	Mortality	5
5.	Quantity of habitat impacted	1
6.	Project results	10
7.	Project shape	10
8.	Recent observations	0
		61

Total

Mitigation Monitoring and Reporting Plan

Project File No./Name: PD 12-005, Rezone 12-003, SPA 12-003 – Buena Vista Apartments.

Approving Resolution No.: Date: October 16, 2012

The following environmental Mitigation Measures were either incorporated into the approved plans or were incorporated into the Conditions of Approval. Each and every Mitigation Measure listed below has been found by the approving body to lessen the level of environmental impact of the project to a less than significant level. A completed and signed checklist for each mitigation measure indicates that it has been completed.

See attached Mitigation Summary Table for Mitigation Measure Descriptions.

Mitigation		Monitoring Dept or	Shown	Verified	
Measure	Туре	Agency	on Plans	Implementation	Remarks
AQ-1	Project	Planning Division,			
		Building Division			
BR 1 – BR 19					
GHG -1	Project	Planning Division			
Oak 1 – Oak 8	Project	Planning Division			
N1-N4	Project	Planning Division			

Explanation of Headings:

Type Project, ongoing, cumulative

Monitoring Dept. or Agency Dept or Agency responsible for monitoring a particular MM

Shown on Plans When a MM is shown on the plans, this column will be initialed & dated Verified Implementation When a MM has been implemented, this column will be initial & dated

Remarks Area for describing status of ongoing MM, or other information

TRAFFIC IMPACT ANALYSIS

BUENA VISTA APARTMENTS
PASO ROBLES, CALIFORNIA

This Traffic Impact Analysis has been prepared under the supervision of Pritam Deshmukh, P.E.

Signed



LSA

November 2012



Attachment 6 Traffic Analysis Buena Vista Apartments

Agenda Item No. 1 Page 244 of 355

TRAFFIC IMPACT ANALYSIS

BUENA VISTA APARTMENTS PASO ROBLES, CALIFORNIA

Submitted to:

Donald Benson P.O. Box 608 Paso Robles, California 93447

Prepared by:

LSA Associates, Inc. 20 Executive Park, Suite 200 Irvine, California 92614-4731 (949) 553-0666

LSA Project No. DBE1202



November 2012

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APPENDICES

A: INTERSECTION LOS WORKSHEETS

B: PROJECT DRIVEWAY LOS WORKSHEETS

C: MITIGATED INTERSECTION LOS WORKSHEETS

INTRODUCTION

The purpose of this Traffic Impact Analysis (TIA) is to identify the potential traffic impacts associated with development of the Buena Vista Apartments Project located at 802 Experimental Station Road in the City of Paso Robles (City) in San Luis Obispo County (County), California. The proposed project includes construction of 142 apartment units. The project site is located on the south side of Experimental Station Road, north of State Route 46 (SR-46), west of North River Road and River Oaks Drive, and east of Buena Vista Drive. Figure 1 shows the location of the proposed project. A site plan of the Buena Vista Apartments Project is illustrated in Figure 2.

METHODOLOGY

Based on consultation with City Public Works staff, a TIA is required because the proposed project would generate more than 100 peak-hour trips. This TIA evaluates the following five scenarios:

- 1. Existing
- 2. Existing Plus Project
- 3. Existing Plus Project Plus Cumulative Projects
- 4. Future (2025)
- 5. Future (2025) Plus Project

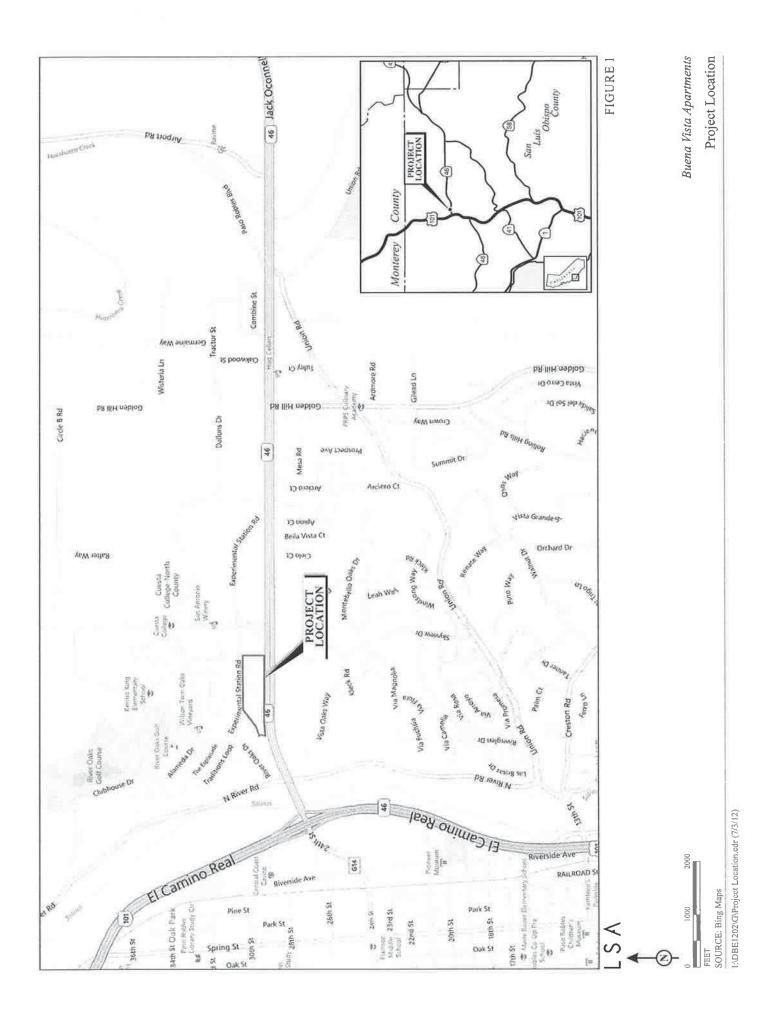
Study Area. The study area was confirmed with City Public Works staff prior to preparation of the TIA and represents the key locations to assess changes in operation based on traffic generated by the project. The following three intersections are included in the study area, as shown on Figure 3:

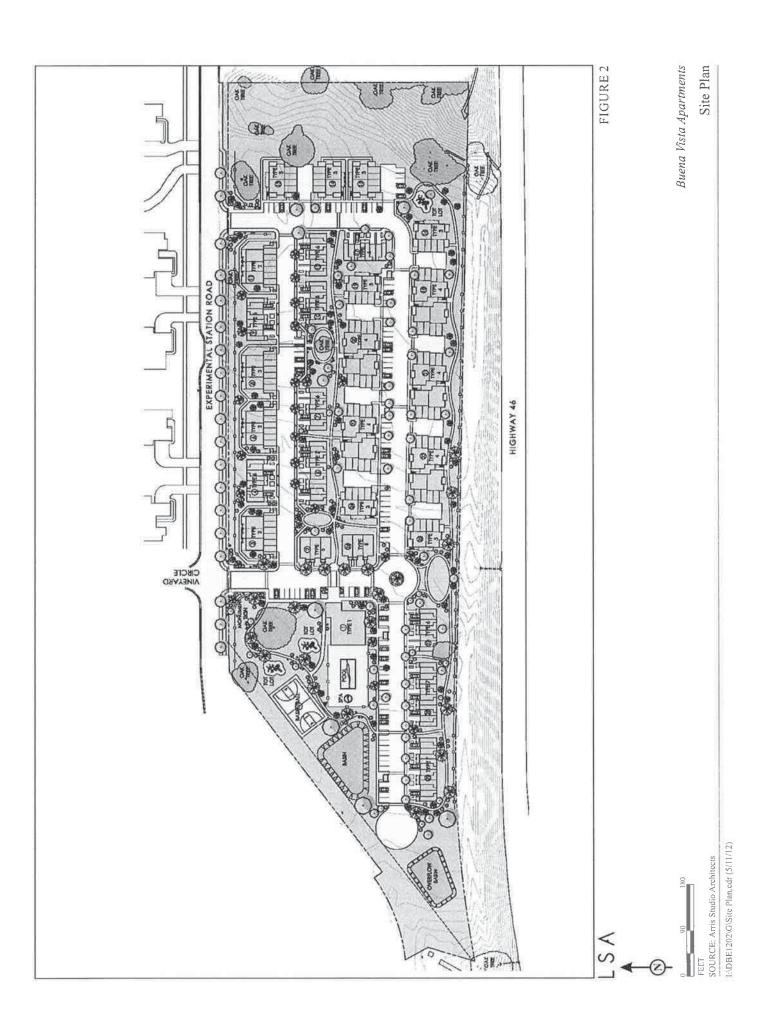
- 1. North River Road/River Oaks Drive
- 2. Buena Vista Drive/Experimental Station Road
- 3. Buena Vista Drive/SR-46

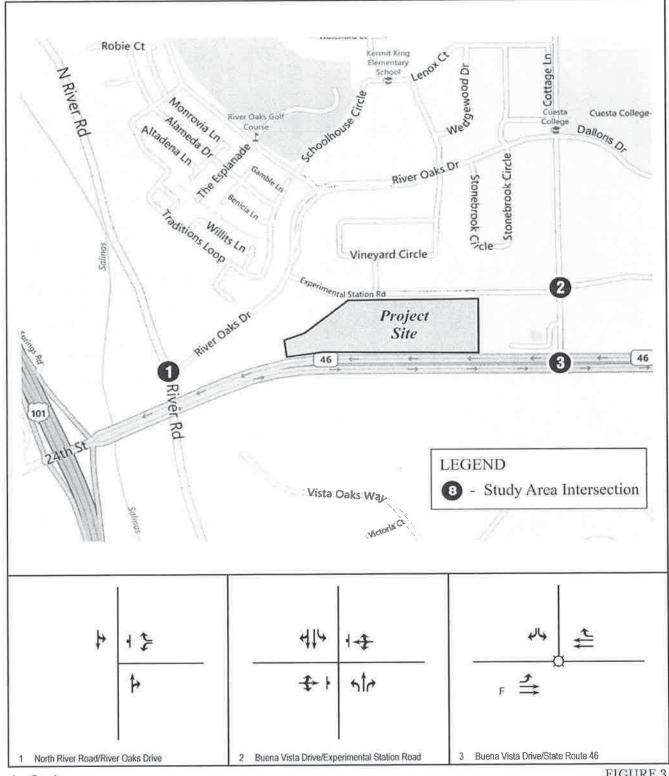
Intersection Level of Service Methodology. The 2000 Highway Capacity Manual (HCM 2000) methodology was used to determine the peak-hour levels of service (LOS) at the signalized and unsignalized study area intersections. The HCM 2000 intersection methodology presents LOS in terms of total intersection delay and approach delay of the major and minor streets (in seconds per vehicle). The relationship of LOS and delay is summarized below:

LOS	Signalized Intersection Delay (seconds)	Unsignalized Intersection Delay (seconds)
A	≤10.0	≤10.0
В	>10.0 and ≤15.0	>10.0 and ≤20.0
С	>15.0 and ≤25.0	>20.0 and ≤35.0
D	>25.0 and ≤35.0	>35.0 and ≤55.0
Е	>35.0 and ≤50.0	>55.0 and ≤80.0
F	>50.0	>80.0

LOS = level of service







LSA

Ø Signal

- Stop Sign

F Free (Uncontrolled Movement)

FIGURE 3

Buena Vista Apartments Study Area Intersections and Geometrics According to the adopted City General Plan Circulation Element (April 2011), the purpose of the circulation system is to maintain and enhance safe and efficient person mobility in the City. To support this goal, the Circulation Element deemphasizes an autocentric measure (i.e., LOS) in favor of measures that represent and support a more efficient use of resources, the mobility of people, the quality of life, and the small-town feel desired by residents. In addition, measures supporting person mobility will offer more travel choices, support public health goals by encouraging walking and biking, and reduce greenhouse gas emissions.

However, the California Department of Transportation (Caltrans) has its own traffic impact thresholds to assess a project's impact on all State facilities. Caltrans has established the LOS C/D cusp as the LOS standard for State Highway intersections (i.e., Buena Vista Drive/SR-46). If the LOS for an existing State Highway facility exceeds the acceptable LOS C/D cusp, the existing measures of effectiveness should be maintained.

EXISTING CONDITIONS

Key roadways in the vicinity of the proposed project are as follows:

- 1. **North River Road.** North River Road is a two-lane north-south collector that parallels Highway 101. It extends from Creston Road in Paso Robles to San Miguel (a census-designated place [CDP]). The posted speed limit is 40 miles per hour (mph).
- 2. **River Oaks Drive.** River Oaks Drive is a two-lane east-west collector that extends from North River Road to Buena Vista Drive. It becomes Dallons Road east of Buena Vista Drive. Pedestrian sidewalks are located on both sides of the street.
- 3. **Experimental Station Road.** Experimental Station Road is a two-lane east-west collector that extends from River Oaks Drive to its terminus east of Buena Vista Drive. The posted speed limit is 25 mph. Parking is permitted on the north side of the street. Pedestrian sidewalks are located on both sides of the street. Direct access to the project site will be provided along Experimental Station Road.
- 4. **Buena Vista Drive.** Buena Vista Drive is a north-south arterial that extends north of SR-46 to the Paso Robles Municipal Airport. It has one northbound lane and two southbound lanes with a landscaped median in the vicinity of the project site. The posted speed limit is 40 mph. Pedestrian sidewalks are located on the west side of the street only. Cuesta College is located on Buena Vista Drive at the northeast corner of Buena Vista Drive/River Oaks Drive—Dallons Road.
- 5. **SR-46.** SR-46 is a four-lane east-west highway that extends from State Route 1 (SR-1) near Cambria (a CDP) to State Route 99 (SR-99) in the San Joaquin Valley. The posted speed limit is 55 mph. SR-46 is classified as a four-lane highway in the City's Circulation Element.

The existing geometrics at the study area intersections are shown in Figure 3.

Existing (2011) peak-hour traffic volumes at North River Road/River Oaks Drive and Buena Vista Drive/SR-46 were obtained from the Ayres Hotel Project Traffic and Circulation Study prepared by Penfield & Smith (February 2012). In order to develop existing traffic volumes for Buena Vista Drive/Experimental Station Road, the northbound departure (northbound through, eastbound left, and westbound right) and southbound approach (southbound left, southbound through, and southbound

right) volumes at Buena Vista Drive/SR-46, and the northbound approach (northbound left, northbound through, and northbound right) and southbound departure (southbound through, eastbound right, and westbound left) volumes at Buena Vista Drive/River Oaks Drive—Dallons Drive, were averaged. Turn movements in and out of Experimental Station Road from Buena Vista Drive were based on the location and number of single-family residences adjacent to this intersection and access to/from these residences via Experimental Station Road, Buena Vista Drive, or River Oaks Drive. The 2011 traffic volumes are considered to be representative of current traffic conditions within the project study area. The existing peak-hour traffic volumes at the three study area intersections are illustrated in Figure 4.

As previously discussed, the HCM methodology was used to determine the LOS at study area intersections. All intersection LOS worksheets are provided in Appendix A. A summary of existing intersection LOS is presented in Table A. As Table A indicates, all study area intersections currently operate at acceptable LOS (LOS C or better).

Table A: Existing Level of Service Summary

		AM Pea	k Hour	PM Pea	k Hour
	Intersection	Delay	LOS	Delay	LOS
1	North River Rd/River Oaks Dr	10.3	В	9.5	A
2	Buena Vista Dr/Experimental Station Rd	9.3	Α	9.0	A
3	Buena Vista Dr/State Route 46	20.7	С	18.2	В

Delay is reported in seconds.

LOS = level of service

PROPOSED PROJECT

For the purposes of disclosing the approximate number of trips generated by the proposed apartment project, trip rates contained in the Institute of Transportation Engineers (ITE) *Trip Generation* Manual, 9th Edition (2012) were used. The project trip generation is shown in Table B. Based on 142 apartment units, the project is forecast to generate approximately 944 average daily trips (ADT), 72 a.m. peak-hour trips (14 inbound and 58 outbound), and 88 p.m. peak-hour trips (57 inbound and 31 outbound).

Table B: Project Trip Generation

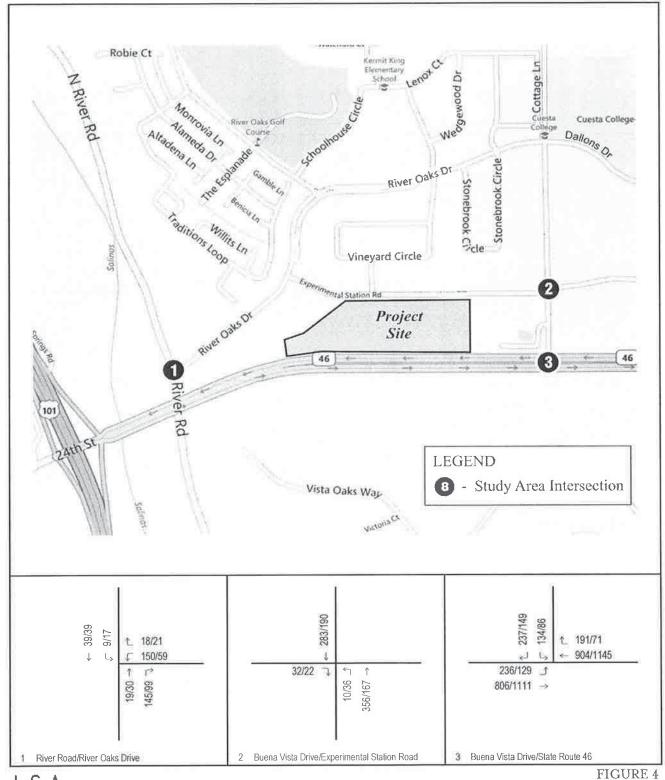
				AN	1 Peak	Hour	PM	Peak I	Iour
Land Use	Size	Unit	ADT	In	Out	Total	In	Out	Total
Trip Rates1									
Apartment		DU	6.65	0.10	0.41	0.51	0.40	0.22	0.62
Trip Generati	ion						//		
Apartment	142	DU	944	14	58	72	57	31	88

Institute of Transportation Engineers (ITE) Trip Generation Manual, 9th Edition (2012).

Land Use Code (220) - Apartment

ADT = average daily trips

DU = dwelling unit



LSA

123/456

AM/PM Volumes

Buena Vista Apartments
Existing Peak-Hour Volumes

The project trips were distributed to the surrounding roadways based on the location of the project in relation to local and regional transportation facilities. Figure 5 illustrates the project trip distribution and assignment. For purposes of this project, it is assumed that 15 percent of trips are destined to the south via North River Road, 30 percent to the east via SR-46, and 55 percent to the west via SR-46.

EXISTING PLUS PROJECT CONDITIONS

The project trip assignment was manually added to the existing (no project) volumes to develop the existing plus project volumes. The existing plus project peak-hour traffic volumes at the three study area intersections are illustrated in Figure 6. Table C provides a summary of existing plus project intersection LOS. As Table C indicates, all study area intersections are forecast to operate at acceptable LOS (LOS C or better). Therefore, the project will not create a significant intersection impact in the existing plus project condition.

Table C: Existing Plus Project Level of Service Summary

			Exis	ting		Ex	isting P	lus Proj	ect
		AM I Ho		PM P Hot		AM I Ho		PM 1 Ho	
	Intersection	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1	North River Rd/River Oaks Dr	10.3	В	9.5	A	10.4	В	9.6	A
2	Buena Vista Dr/Experimental Station Rd	9.3	Α	9.0	A	9.6	A	9.1	A
3	Buena Vista Dr/State Route 46	20.7	С	18.2	В	21.3	С	22.8	С

Delay is reported in seconds.

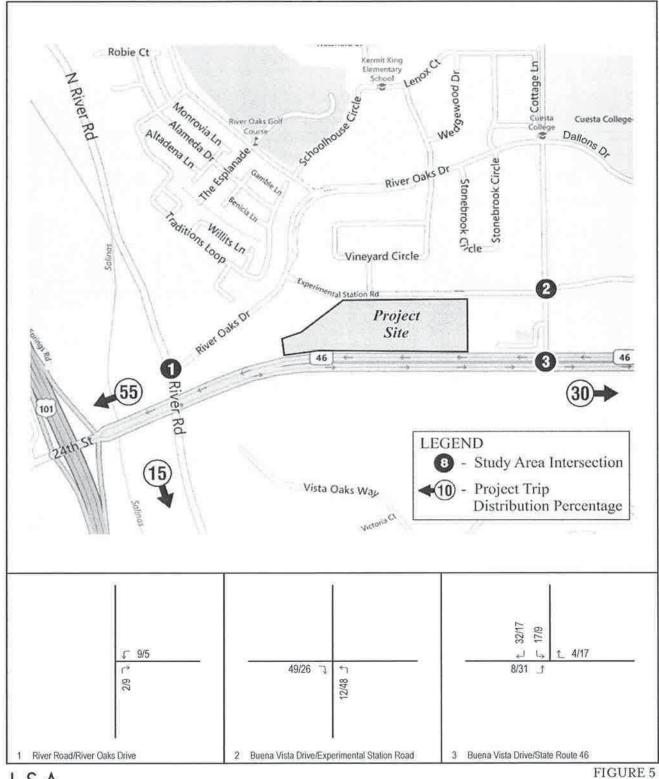
LOS = level of service

EXISTING PLUS PROJECT PLUS CUMULATIVE PROJECT CONDITIONS

The existing plus project plus cumulative projects condition was developed by adding trips from approved/pending (cumulative) projects in the project vicinity to the existing plus project traffic volumes. Two cumulative projects were identified by City staff, as described below:

- 1. River Oaks Center Supermarket (Willhoit Commercial) northwest corner of Buena Vista Drive/Experimental Station Road: 18,000-square-foot (sf) supermarket
- 2. Ayres Hotel northeast corner of Buena Vista Drive/Experimental Station Road: 226 hotel rooms
- 3. The Cove southwest corner of River Oaks Drive/Experimental Station Road: 51 detached single-family homes

The trip generation for the cumulative projects is provided in Table D. The ITE trip rates were used to generate trips for the 18,000 sf supermarket, the 226 hotel rooms, and the 51 single-family homes. The trips for the supermarket and the single-family homes were manually distributed and assigned to the surrounding roadways based on proximity of the site to local/regional transportation facilities. The hotel trip assignment was obtained from the Ayres Hotel traffic and circulation study. The cumulative projects peak-hour volumes are shown in Figure 7.

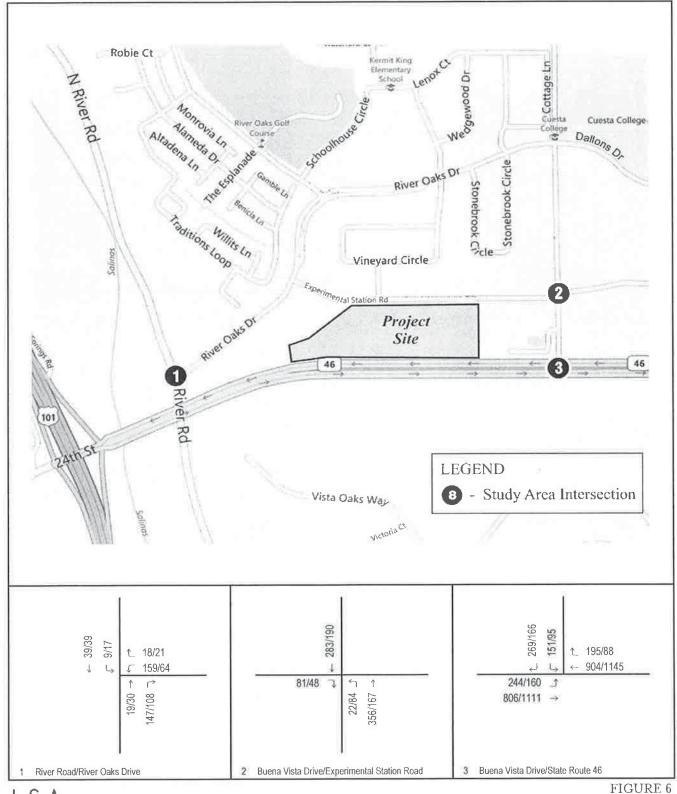


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AM/PM Volumes

Buena Vista Apartments
Project Trip Distribution and Assignment



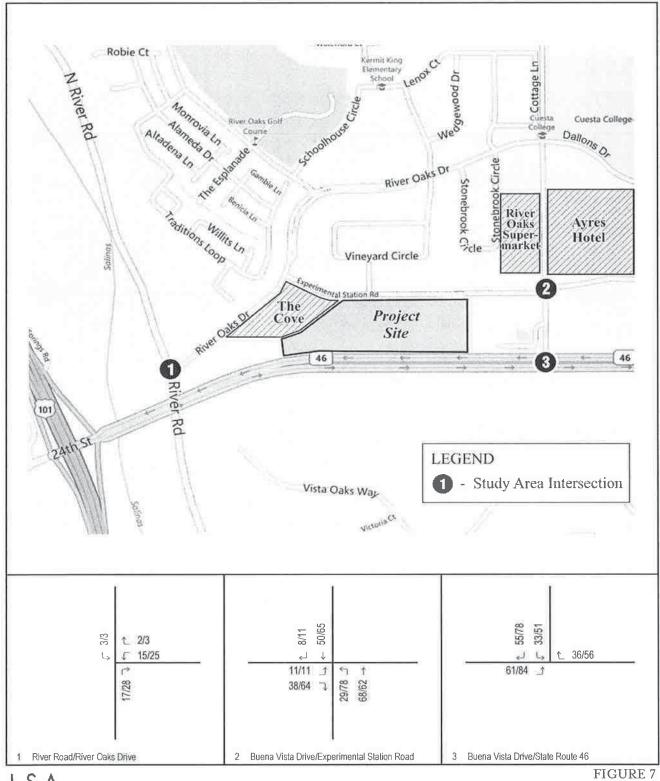
LSA

123/456

AM/PM Volumes

FIGURE 0

Buena Vista Apartments
Existing Plus Project Peak-Hour Volumes



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AM/PM Volumes

Buena Vista Apartments Cumulative Projects Peak-Hour Volumes

Table D: Cumulative Projects Trip Generation

				AN	I Peak I	Hour	PM	Peak I	Iour
Land Use	Size	Unit	ADT	In	Out	Total	ln	Out	Total
Trip Rates1									
Supermarket		TSF	102.24	2.11	1.29	3.40	4.83	4.65	9.48
Hotel		Occupied room	8.92	0.39	0.28	0.67	0.34	0.36	0.70
SFD		DU	9.52	0.19	0.56	0.75	0.63	0.37	1.00
Trip Generat	ion								
Supermarket	18.000	TSF	1,840	38	23	61	87	84	171
Hotel	226	Occupied room	2.016	88	63	151	77	81	158
SFD	51	DU	486	10	29	39	32	19	51
Total			4,342	136	115	251	196	184	380

Institute of Transportation Engineers (ITE) Trip Generation Manual, 9th Edition (2012).

Land Use Code (850) - Supermarket

Land Use Code (310) - Hotel

Land Use Code (210) - Single-Family Detached Housing (SFD)

ADT = average daily trips

TSF = thousand square feet

The cumulative project volumes were manually assigned to the existing plus project volumes to develop the existing plus project plus cumulative project volumes. The existing plus project plus cumulative project peak-hour traffic volumes at the three study area intersections are illustrated in Figure 8. Table E provides a summary of existing plus project plus cumulative project intersection LOS. As Table E indicates, all study area intersections are forecast to operate at acceptable LOS (LOS C or better). Therefore, the project will neither create nor contribute to a significant intersection impact in the existing plus project plus cumulative project condition.

Table E: Existing Plus Project Plus Cumulative Projects Level of Service Summary

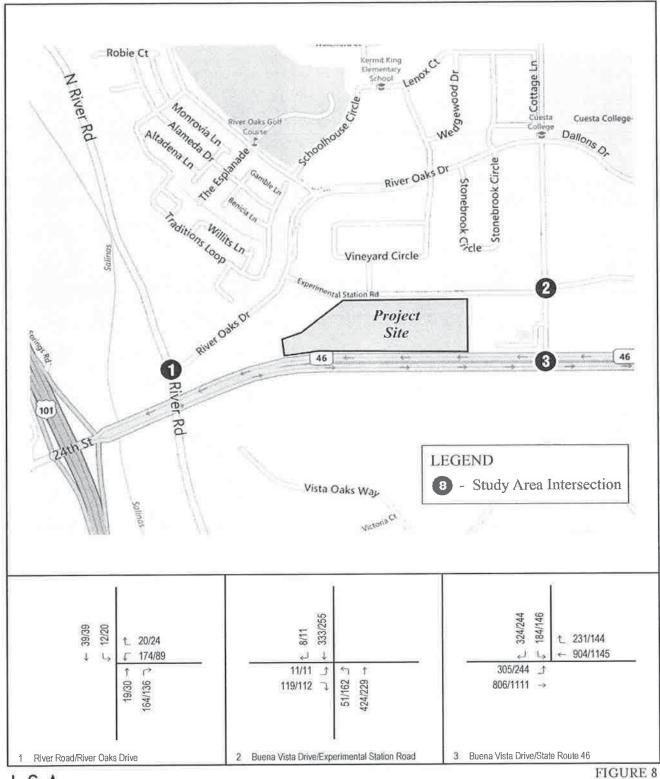
		AM Pea	ık Hour	PM Pea	k Hour
	Intersection	Delay	LOS	Delay	LOS
1	North River Rd/River Oaks Dr	10.7	В	10.0	A
2	Buena Vista Dr/Experimental Station Rd	11.9	В	11.5	В
3	Buena Vista Dr/State Route 46	22.3	С	22.9	С

Delay is reported in seconds.

LOS = level of service

FUTURE (2025) CONDITIONS

Future peak-hour traffic volumes at North River Road/River Oaks Drive and Buena Vista Drive/SR-46 were obtained from the Ayres Hotel traffic and circulation study. These traffic volumes were developed based on 2025 traffic projections developed for the City's adopted Circulation Element. The future traffic volumes for Buena Vista Drive/Experimental Station Road were developed based on the methodology described in the existing conditions. The future (2025) peak-hour traffic volumes at the three study area intersections are illustrated in Figure 9.

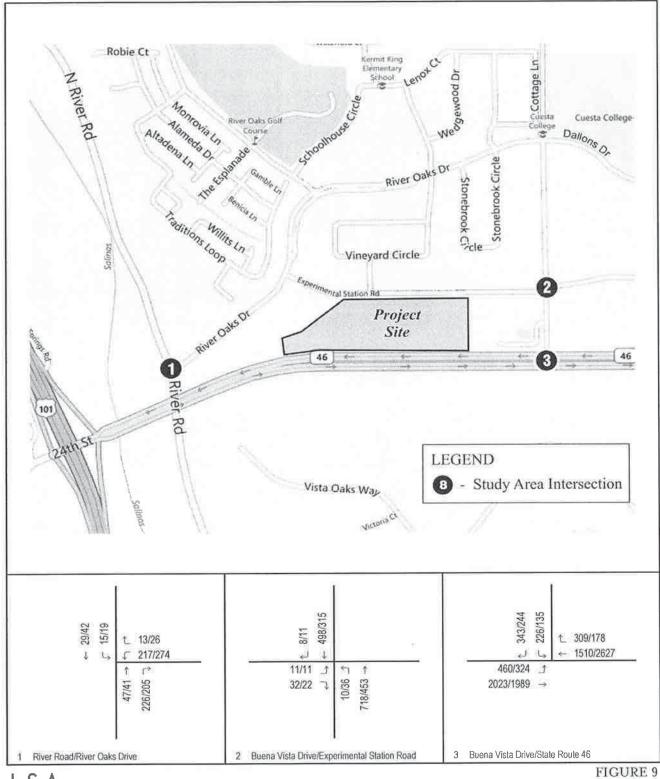


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AM/PM Volumes

Buena Vista Apartments
Existing Plus Cumulative Plus Project Peak-Hour Volumes



LSA

123/456

AM/PM Volumes

Buena Vista Apartments
Future (2025) Peak-Hour Volumes

Table F provides a summary of future intersection LOS. As Table F indicates, all study area intersections are forecast to operate at acceptable LOS (LOS C or better), with the exception of Buena Vista Drive/SR-46 (LOS D in the a.m. peak hour and LOS F in the p.m. peak hour).

Table F: Future (2025) Level of Service Summary

		AM Pea	k Hour	PM Pea	k Hour
	Intersection	Delay	LOS	Delay	LOS
1	North River Rd/River Oaks Dr	12.0	В	12.9	В
2	Buena Vista Dr/Experimental Station Rd	19.5	С	14.1	В
3	Buena Vista Dr/State Route 46	50.8	D	120.6	F

Delay is reported in seconds.

LOS = level of service

Italicized delay and LOS exceed City and Caltrans LOS criteria.

FUTURE (2025) PLUS PROJECT CONDITIONS

The project trip assignment was manually added to the future (no project) volumes to develop the future plus project volumes. The future (2025) plus project peak-hour traffic volumes at the three study area intersections are illustrated in Figure 10. Table G provides a summary of future plus project intersection LOS. As Table G indicates, all study area intersections are forecast to operate at acceptable LOS (LOS C or better), with the exception of Buena Vista Drive/SR-46 (LOS D in the a.m. peak hour and LOS F in the p.m. peak hour). The project would increase the deficient delays at Buena Vista Drive/SR-46 by 3.3 seconds in the a.m. peak hour (from 50.8 seconds to 54.1 seconds) and 5.8 seconds in the p.m. peak hour (from 120.6 seconds to 126.4 seconds). Project mitigation is described later in this report.

Table G: Future (2025) Plus Project Level of Service Summary

			Fut	ure		Fı	iture P	lus Proje	ct
		AM I Ho		PM P Hot		AM I Ho		PM I Ho	
	Intersection	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1	North River Rd/River Oaks Dr	12.0	В	12.9	В	12.1	В	13.1	В
2	Buena Vista Dr/Experimental Station Rd	19.5	С	14.1	В	16.2	С	13.3	В
3	Buena Vista Dr/State Route 46	50.8	D	120.6	F	54.1	D	126.4	F

Delay is reported in seconds.

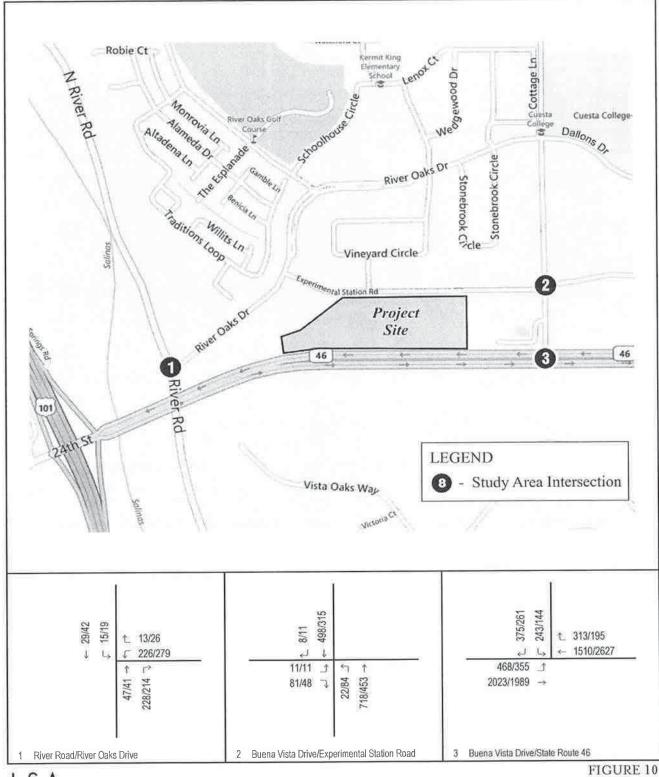
LOS = level of service

Italicized delay and LOS exceeds City and Caltrans LOS criteria.

Bolded delay and LOS indicates a significant project impact.

ACCESS ANALYSIS

Access to the Buena Vista Apartments site will be provided via two full-access driveways on Experimental Station Road. Figure 11 illustrates the project driveway volumes. In order to assess the operation of the project driveways, an HCM unsignalized intersection analysis was prepared.

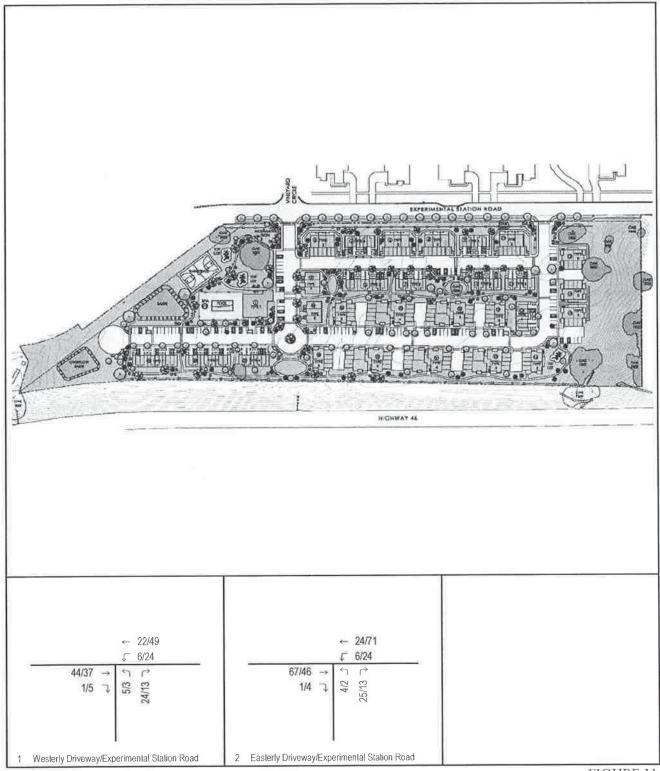


LSA

123/456

AM/PM Volumes

Buena Vista Apartments
Future (2025) Plus Project Peak-Hour Volumes



LSA

123/456 AM/PM Volumes

FIGURE 11

Buena Vista Apartments Project Driveway Volumes The project driveway LOS worksheets are provided in Appendix B. Table H provides a summary of the project driveway LOS. As Table H indicates, both project driveways are forecast to operate at acceptable LOS (LOS A).

Table H: Project Driveways Level of Service Summary

		AM Pea	ık Hour	PM Pea	k Hour
	Project Driveway	Delay	LOS	Delay	LOS
1	Westerly Driveway	8.7	A	8.7	A
2	Easterly Driveway	8.8	A	8.7	A

Delay is reported in seconds. LOS = level of service

PEDESTRIAN AND BICYCLE FACILITIES

Pedestrian sidewalks are located throughout the project study area along Experimental Station Road, Buena Vista Drive, and River Oaks Drive. The proposed project will construct pedestrian paths and sidewalks on site that will connect to the existing sidewalks on the south side of Experimental Station Road. Residents of the Buena Vista Apartments will be able to walk to/from all surrounding land uses, including Cuesta College located at the northeast corner of Buena Vista Drive/River Oaks Drive—Dallons Drive. Adequate pedestrian accessibility will be provided with the project.

Designated bike lanes do not exist in the project vicinity. However, the following bikeways are proposed as part of the City's Bicycle Master Plan (December 2009):

- Experimental Station Road: Class III bikeway between River Oaks Drive and Buena Vista Drive
- River Oaks Drive: Class II bike lanes between North River Road and Buena Vista Drive
- Buena Vista Drive: Class II bike lanes between SR-46 and the northern City limits

Although bike facilities are not currently provided within the study area, the project would provide sufficient bike and pedestrian connectivity and accessibility on the project site. Residents and guests of Buena Vista Apartments will have the opportunity to walk and bike to local destinations surrounding the project site.

MITIGATION MEASURES

A significant intersection impact at Buena Vista Drive/SR-46 has been identified. This intersection is forecast to operate at unsatisfactory LOS under future (2025) without project conditions (LOS D [50.8 seconds of delay] in the a.m. peak hour and LOS F [120.6 seconds of delay] in the p.m. peak hour). The project would increase the already-deficient delays by 3.3 seconds and 5.8 seconds in the a.m. and p.m. peak hours, respectively. The project would add 61 a.m. peak-hour trips and 74 p.m. peak-hour trips to Buena Vista Drive/SR-46 and would be required to pay its traffic mitigation fees per the City's fee structure to offset its impact.

Similar to the Ayres Hotel Project, the Buena Vista Apartments Project would contribute its fair-share to the City's traffic mitigation fees in order to mitigate its significant impact. However, two physical improvements have been identified to reduce the delays to both preproject levels (Mitigation 1) and acceptable levels (Mitigation 2). A description of each mitigation measure is described below:

- Mitigation 1: the addition of a second eastbound left-turn lane.
- Mitigation 2: the addition of a second eastbound left-turn lane and a third westbound through lane.

Table I provides a summary of future plus project intersection LOS with mitigation. The mitigated intersection LOS worksheets are provided in Appendix C. As Table I indicates, Mitigation 1 would improve the delays to preproject conditions. Mitigation 2 would improve the delays to acceptable LOS (LOS C or better); however, the addition of a third westbound through lane would conflict with the City's adopted Circulation Element designation of SR-46 as a four-lane highway.

Table I: Future (2025) Plus Project Level of Service Summary with Mitigation

			Fut	ure		Fu	iture Pl	us Proje	ct
		AM I Ho		PM P Hot		AM I Ho		PM 1 Ho	
	Intersection	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
3	Buena Vista Drive/State Route 46	50.8	D	120.6	F	54.1	D	126.4	F
	Mitigation 1	(#)		180	*	31.5	С	103.1	F
	Mitigation 2	*:	-	20	-	26.0	С	27.0	С

Delay is reported in seconds.

LOS = level of service

Italicized delay and LOS exceeds City and Caltrans LOS criteria.

Bolded delay and LOS indicates a significant project impact.

CONCLUSIONS

Based on the LOS analysis of the three study area intersections, a significant intersection impact is forecast at Buena Vista Drive/SR-46. The project will pay applicable City traffic mitigation fees to mitigate its impact at this intersection.

Both project driveways are forecast to operate at acceptable LOS with implementation of the project. The proposed project would provide sidewalks and paths on site that would connect to the existing pedestrian circulation system. With implementation of the proposed bike lanes in the City's Bicycle Master Plan, residents and guests will be able to walk and bike to all adjacent land uses. Therefore, the project would not impact pedestrian/bike connectivity or accessibility within the vicinity of the project.

APPENDIX A INTERSECTION LOS WORKSHEETS

	88 83 93 88 88 89 89 89 89 89 89 89 89 89 89 89	SWR. SWR. SWR. SWR. SWR. SWR. SWR. SWR.	S. S	SBT SWL S 39 150 0% 0% 0% 0.92 0.92 0 0.92 0.92 0 0.92 0.92 0 0.92 0.92 0 0.92 0.92 0 0.92 0.92 0 0.92 0.92 0 0.92 0.92 0 0.92 0.92 0 0.92 0.92 0 0.92 0.92 0 0.92 0.92 0 0.93 0.93 0 0.93	Service State Stat	
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None

None

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Existing Conditions AM 7/4/2012

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	Jena Vista Apartments	Synchro 7 - Report
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ICU Level of Service A

0.6 30.9% 15

Average Delay Intersection Capacity Utilization Analysis Period (min)

ICU Level of Service A

4.7 27.1% 15

Intersection Summary
Average Delay
Intersection Capacity Utilization
Analysis Period (min)

Synchro 7 - Report Page 1

HCM Signalized Intersection Capacity Analysis
3: State Route 46 & Buena Vista Drive

	1	1	Ļ	1	*	*	
Movement	183	EBT	WBT	WBR	188	SBR	A 100 C C C C C C C C C C C C C C C C C C
ane Configurations	K	**	\$	¥.	¥	*	
Volume (vph)	236	908	904	181	134	237	
Ideal Flow (voholl)	1700	1700	1700	1700	1200	1700	
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util, Factor	1.00	0,95	0.95	1,00	1.00	1,00	
F.	1,00	1.00	1,60	0.85	1.00	0.85	
Fit Protected	0.95	1.00	1,00	1.00	0.95	1.00	
Satd. Flow (prot)	1583	3167	3167	1417	1583	1417	
Fit Permitted	0.95	1,00	1,00	1.00	0.95	1,00	
Satd, Flow (perm)	1583	3167	3167	1417	1583	1417	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	
Adi. Flow (vah)	257	876	983	208	146	258	
RTOR Reduction (vph)	0	0	0	138	0	185	
Lane Group Flow (vph)	257	976	983	69	146	73	
Turn Type	Prot			Perm		Perm	
Protected Phases	7	4	60		9		
Permitted Phases		9		10		9	
Actuated Green, G (s)	11.0	52.0	20.0	20.0	17.0	17.0	
Effective Green, g (s)	11.0	52.0	20.0	20.0	17.0	17.0	
Actuated g/C Ratio	0.18	18.0	0.33	0.33	0.28	0.28	
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 Gro Cap (vph)	290	3167	1056	472	449	401	
w's Ratio Prot	60.16	00.16	c0.31		60'0		
wis Ratio Perm		0.12		0.05		50'0	
v/c Ratio	0.89	0.28	0.93	0.15	0.33	0.18	
Uniform Delay, d1	23.9	0.7	19.3	14.0	17.0	16.2	
Progression Factor	1,00	1,00	1,00	1,00	1.00	1,00	
Incremental Delay, d2	25.9	0.0	14.0	0,1	1.9	1.0	
Delay (s)	49.8	0.7	33.4	14.2	18.9	17.2	
Level of Service	۵	∢	O	œ	603	æ	
Approach Delay (s)		11.9	30.0		17.8		
Approach LOS		æ	O		œ		
Intersection Summary		SHEET	Species	STATE OF	SUPERIOR STATE	Section 1	SOUTH ATTENDED STATES OF THE PARTY OF THE PA
HCM Average Control Delay			20.7	I	OM Leve	HCM Level of Service	v
HCM Volume to Capacity ratio			0.66	U	Come of fact time (c)	time fel	c
Actuated Lydes Lengin (s) Intersection Capacity Utilization Analysis Period (min)	6		60.8% t5	9 2	2 Level	CU Level of Service	3 m
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Synchro 7 - Report Page 3

Buena Vista Apartmenis LSA Associates, Inc.

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Movement	田田	EBT	EBR	WBE	WBT	WBR	NBI	NBT	NBR	SBL	SBT	SBR
Lane Configurations		+‡			4		N.	+	*	K	414	
Volume (veh/h)	0	0	22	0	0	0	36	167	0	0	190	
Sign Control		Stop			Stop			Free			Free	
Grade	h	%0		1000	950	00000	-	%0	3	3	%0	17
Peak Hour Factor	0.92	0.92	0.85	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph) Pedestrians	0	0	24	0	0	0	89	182	0	0	207	
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage Right him flore (veh)												
Median tone								Mone			Norse	
Median storage veh)												
Upstream signal (ft)								347				
pX, platoon unblocked												
vC, conflicting volume	466	488	103	387	466	182	207			182		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	466	466	103	387	456	182	207			182		
tC, single (s)	7.5	6,5	6.9	7.5	6.5	6.9	4.1			4,1		
tC, 2 stage (s)	9	1	1	100	200	998	18.00			1000		
tF(s)	3.5	4.0	33	3.5	4,0	33	22			2.2		
p0 queue free %	100	100	25	100	100	100	26			100		
cM capacity (veh/h)	469	478	932	521	478	830	1362			1391		
Direction, Lane #	183	WB 1	NB 1	NB 2	NB3	58.1	\$82	SB3			STATE OF	
Volume Total	24	0	38	182	o	0	138	69				
Volume Left	0	0	39	0	0	0	0	0				
Volume Right	24	0	0	0	0	0	0	0				
HS3	932	1700	1362	1700	1700	1700	1700	1700				
Volume to Capacity	0.03	000	0.03	0.11	0.00	0.00	90.0	0.04				
Queue Length 95th (ft)	~	0	2	0	0	0	0	0				
Control Delay (s)	0.6	0.0	7.7	0.0	0.0	0.0	0.0	0.0				
Lane LOS	¥	V	4			d						
Approach Delay (s)	0,0	0.0	1,4			0.0						
Approach LOS	ď	×										
Intersection Summary	STATES.			1000	DESIGNATION OF THE PERSON NAMED IN	Section.		100	SQ15550	NEW YORK	CONTRACT	巖
Average Delay Intersection Capacity Utilization Analysis Period (min)	2		1.1 26.5% 15	2	ICU Level of Service	Service			æ			
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Existing Conditions PM 7/4/2012

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NBT

HCM Unsignalized Intersection Capacity Analysis 1: River Road & River Oaks Drive

Stop 59 8.00 0.92 64

30 0% 0.92 33

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ICU Level of Service A

3.4 25.6%

Intersection Summary
Average Delay
Intersection Capacity Utilization
Analysis Period (min)

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Buena Vista Apartments LSA Associates, Inc.

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88

140

None

None

Lare Configurations
Volume (veht/n)
Sign Control
Grade
Grade
Hourly flow rate (veht/n)
Pedestrians
Lane Wudth (ft)
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2.4 2.4 2.4

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140 61 0 18 108 0 1700 1443 0.08 0.01

Direction, Lane #
Volume Total
Volume Left
Volume Bright
Volume Bright
Volume D. Capacity
Volume Length 95th (fit)
Control Delay (s)
Lane LOS
Approach Delay (s)
Approach LOS

Movement EBI. Lane Configurations Total Lost time (sh) 1788 Total Lost time (s) 4.0 Lane Uhl, Factor 1,00						
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	1111	1145	7.1	98	149	
			1700	1700	1700	
			4.0	4.0	4.0	
	0.95	98'0	1.00	1.00	1,00	
2007			0.85	1.00	0.85	
FIt Protected 0.95			1,00	0.95	1,00	
Sald, Flow (prot) 1583			1417	1583	1417	
			1.00	0.95	1.00	
Satd. Flow (perm) 1583	3 3167		1417	1583	1417	
Peak-hour factor, PHF 0.92	2 0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph) 140	0 1208	1245	11	83	162	
RTOR Reduction (vph)	0	0	450	0	116	
Lane Group Flow (vph) 140	0 1208	1245	35	8	46	
Turn Type Prot)t		Регт		Perm	
Protected Phases	-	80		ω		
Permitted Phases			00		w	
	0 52.0	25.0	25.0	17.0	17.0	
(2)			25.0	17.0	17.0	
0	0		0.45	0.28	0.28	
Clearance Time (s) 4,0			40	4 0	4.0	
Vehicle Extension (s) 3.0	3.0	3.0	3.0	3.0	3.0	
(vph)			580	449	401	
v/s Ratio Prot c0.09	0	60.39		90'0		
v/s Ratio Perm			0.02		0.03	
v/c Ratio 0.89			0.05	0.21	0.11	
			10.4	199	15,9	
			1.00	1.00	1.00	
Incremental Delay, d2 40.2			0.0	1.0	9'0	
Delay (s) 56.8		302	10.5	17.4	16.5	
Service			603	m	00	
Approach Delay (s)	7.7	53		16.8		
Approach LOS	7	0		m		
Intersection Summary	Septiment of the leading of the lead	MENNIN	NAME OF TAXABLE		STATE OF THE STATE OF	TEST THE DESCRIPTION OF
HCM Average Control Delay		18.2	主	DM Level	HCM Level of Service	89
HCM Volume to Capacity ratio		0.71				4 4
Actuated Cycle Length (s) Intersection Capacity Utilization		58.7%	5 Q	Sum of lost time (s) ICU Level of Servio	Sum of lost time (s) ICU Level of Service	Q 60
Analysis Period (min)		15				

		1-1
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None 283 283 583 583 583 388 100 198 4.1 < 0,92 None 347 103 0 0 1700 0.06 0.06 NBT 308 24 55 ICU Level of Service 0.00 0.92 5.9 3.3 742 00000 335 2: Experimental Station Road & Buena Vista Drive 677 3500 387 387 0077 0023 1.3 33.2% 15 154 333 52 63 EBT Stop 09% 0.92 742 742 335 742 3.5 9.8 88.5 0.10 0.10 8 8 9.6 9.6 9.6 4 EB Average Delay Intersection Capacity Utilization Analysis Penod (min) cSH
Volume to Capacity
Queue Length 95th (ft)
Control Delay (s) Median slorage veh)
Upstream signal (ft)
Dy, plation unblocked
Vc, conflicting volume
VC1, stage 1 conf vol
VC2, stage 2 comf vol
VC2, stage 3 comf vol
VC2, stage (s)
fc, stage (s)
fc, stage (s) Movement Lane Configurations Volume (vahh) Sign Control Grade Peak Hour Factor Lane Width (ff)
Walking Speed (ft/s)
Percent Blockage
Right turn flare (veh) Lane LOS Approach Delay (s) Approach LOS p0 queue free % cM capacity (veh/h) Hourly flow rate (vph) Direction, Lans # Volume Total Volume Leff Volume Right Intersection Sur Medlan type

101

6.4

None

None

Lane Width (ft)
Walking Speed (ft/s)
Percent Blockage
Right turn flare (veh)
Median type

180

Median slorage verh)
Upstream signal (ft)
PX, platon unblocked
VC, conflicting volume
vC1, stage 1 conf vol
vC2, stage 2 conf vol
vC4, unblocked vol
(C5, single (s)

3.3

3.5

22 99 1385 SW1

SB 1

8 2 5 8 8 0 8

173 0.222 0.221 10.28 10.4 10.4 10.4

Volume to Capacilly
Queue Length 85th (ft)
Control Delay (s)
Lane LOS
Approach Delay (s)
Approach LOS

Existing Plus Project AM

HCM Unsignalized Intersection Capacity Analysis

Existing Plus Project AM 7/4/2012

HCM Unsignalized Intersection Capacity Analysis

1: River Road & River Oaks Drive

Ĭ SBL

> NBR 147

NBT

0.92

0.92

Peak Hour Factor Hourly flow rate (vph) Pedestrians

수요 문송일 2

Lane Configurations Volume (veh/h) Sign Control

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¥

ICU Level of Service

4.9 27.8%

Average Delay Intersection Capacity Utilization Analysis Period (min)

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p0 queue free % cM capacity (veħ/ħ)

(S)

Direction, Lane #
Volume Total
Volume Left
Volume Right
cSH

Existing Plus Project AM	7/4/2012	
HCM Signalized Intersection Capacity Analysis	3: State Route 46 & Buena Vista Drive	

	1	t	,	,	1	•	
Vovement	193	EBT	WBT	WBR	SBL	SBR	
are Configurations	K	*	**	¥c.	k-	×	
(olume (vph)	244	896	904	195	151	269	
deal Flow (vphpl)	1700	1700	1700	1700	1700	1700	
Fotal Lost time (s)	4.0	4.0	9.4	4.0	4.0	4.0	
Lane Util, Factor	1.90	0.95	0.95	1.00	1,00	1.00	
E	1,00	1,00	1,00	0,85	1,00	0,85	
Fit Protected	0.95	1.00	1,00	1.00	0.95	1.00	
Satd, Flow (prof)	1583	3167	3167	1417	1583	1417	
Fil Permitted	0.95	1,00	1.00	1.00	0,95	1.00	
Sald. Flow (perm)	1583	3167	3167	1417	1583	1417	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	265	876	983	212	164	292	
RTOR Reduction (vph)	0	0	0	141	0	209	
Lane Group Flow (vph)	265	878	583	71	164	83	
um Type	Prot			Perm		Perm	
Protected Phases	-	*0"	.00		w		
Permitted Phases		9		600		40	
Actuated Green, G (s)	11.0	52,0	20.0	20.0	17.0	17.0	
Effective Green, g (s)	11.0	52.0	20.0	20.0	17.0	17.0	
Actuated g/C Ratio	0.18	0.87	0.33	0.33	0.28	0.28	
Clearance Time (s)	0.4	4.0	4.0	0.4	4.0	4.0	
(ehicle Extension (s)	3.0	3.0	3.0	3.6	3.0	3.0	
ane Gro Cap (voh)	280	3167	1058	472	449	401	
	c0.17	0.16	c0,31		00.10		
v/s Ratio Perm		0.12		0.05		90'0	
//c Ratio	0.81	0.28	0.93	0.15	0.37	0.21	
Jaiform Delay, d1	24.0	0.7	19.3	14.0	17.2	16.4	
Progression Factor	1.00	1.00	1.00	1,00	1.00	1,00	
ncremental Delay, d2	31.2	0.0	14.0	0.1	2.3	51	
Delay (s)	55.2	1.0	33,4	14.2	19.5	17.5	
evel of Service	ш	4	O	m	m	00	
Approach Delay (s)		13.4	30.0		18.2		
Approach LOS		ထ	O		ω		
nlersection Summary	2000		- N	X 60 X	PONTEN.	Company of the last	SALESSA BONCE CARLES WHI
HCM Average Control Delay			21.3	Ĩ	CM Leve	HCM Level of Service	υ
Antonia Code Length (c)			80.0	V	Sum of lost time (s)	(s) auti	12.0
ntersection Capacity Utilization			62.4%	9	U Level	ICU Level of Service	en.
Analysis Period (min)			12				
-							

Synchro 7 - Report

Buena Vista Apartments LSA Associates, Inc.

CEBL EET EBR WBL WBT WBR HBL NBT NBR SBL SBT	rs EBL rs	48 48 52 52 52 52 53 93 93 93 93 93 93 93 93 93 93 93 93 93						88F 0 28	Fig. 5 and a sec	SBR
Suppose	15) 16) 16) 16) 17) 18) 18) 19) 19) 19) 19) 19) 19) 19) 19) 19) 19	103 52 52 52 53 94 932 933 933 931						6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	♣ 09 1 390	0
(c) 0 48 0 0 84 167 0 0 199 199 199 199 199 199 199 199 199	(s)	48 032 032 032 033 033 033 033 034 031 031 031 031 031 031 031 031 031 031						0 0.92	190 Free 3%0	0
(c) Stop Stop Free Over Control of Stop Control of Control of Control of Control of Control of	(s)	52 52 52 52 52 53 54 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9						0.92	Free 0%	
(s) (b) (c) (c) (d) (d) (e) (e) (e) (e) (e) (e) (e) (e) (e) (e	(s)	0.92 52 52 52 53 93 93 93 93 93						0.92	960	
(a)	(s) (s) (s) (b) (c) (d) (d) (d) (d) (d) (d) (d) (d) (d) (d	0.92 52 52 53 53 53 93 84 93 93						0.92		
(s) (b) (c) (c) (d) (d) (d) (e) (e) (e) (e) (e) (e) (f) (f) (f) (f) (f) (f) (f) (f) (f) (f	(s) (s) (h) (h) (h) (h) (h) (h) (h) (h) (h) (h	52 103 103 8.9 9.4 932 932 933 933 933 933 933 933 933 933						C	0.92	0.92
None None None None None None ST1 152 207 182	577 7.5 7.5 7.0 7.0 8.3 8.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	103 103 8.9 9.4 9.32 9.32 9.33						0	207	0
S71 571 103 520 571 182 207 182 207 75 6.5 6.9 4.1 4.1 4.1 4.1 3.5 6.5 6.9 7.5 6.5 6.9 4.1 4.1 4.1 4.1 5.5 6.5 6.9 7.5 6.5 6.9 4.1 4.1 4.1 6.0 5.2 6.9 7.5 6.5 6.9 7.5 6.5 6.9 7.5 6.5 6.9 7.9 6.9 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0	577 7.55 7.55 1.00 383 52 0.00 0.00	103 103 6.9 9.4 932 932 933					ø.			
S71 571 103 520 571 182 207 182 577 18	571 7.5 7.5 1.00 3.83 3.83 5.00 5.00 5.00 5.00 5.00 5.00 5.00 5.0	103 103 103 103 103 103 103 103 103 103								
S71 571 103 520 571 182 207 182 S71 571 103 520 571 182 207 182 3.5 4.0 3.3 3.5 4.0 3.3 2.2 2.2 100 94 100 100 100 93 383 4.01 932 393 4.01 839 1362 5.2 0 91 182 0 0 0 0 5.2 0 91 182 0 0 0 0 5.2 0 91 182 0 0 0 0 5.2 0 91 182 0 0 0 0 5.2 0 91 182 0 0 0 0 5.3 1700 1352 1700 1700 1700 1700 5.4 0 0 7.8 0.0 0.0 0.0 0.0 6.4 0 0 0 6.4 0 0 0 7.8 0.0 0.0 0.0 0.0 8.1 0.0 2.5 0.0 0.0 0.0 8.2 0 0 0 0 8.3 0.0 2.6 0.0 0.0 0.0 9.3 0.0 2.6 0.0 0.0 0.0 9.4 0 0 0 9.5 0.0 0.0 0.0 0.0 9.5 0.0 0.0 0.0 0.0 9.7 0.0 0.0 0.0 0.0 9.7 0.0 0.0 0.0 0.0 9.8 0.0 0.0 0.0 0.0 9.9 0.0 0.0 0.0 0.0 9.9 0.0 0.0 0.0 0.0 9.9 0.0 0.0 0.0 0.0 9.9 0.0 0.0 0.0 0.0 9.9 0.0 0.0 0.0 0.0 9.9 0.0 0.0 0.0 0.0 0.0 9.9 0.0 0.0 0.0 0.0 0.0 9.9 0.0 0.0 0.0 0.0 0.0 0.0 9.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 9.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 9.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	571 571 7.5 3.0 383 381 V	103 103 103 103 103 103 103 103 103 103								
None None None None None None None None	571 571 7.5 3.5 100 383 381 52 52	103 103 103 103 103 103 103 103 103 103					m			
571 571 103 520 571 182 207 182 207 75 6.5 6.9 7.5 6.5 6.9 7.5 6.5 6.9 7.5 6.5 6.9 4.1 4.1 4.1 3.3 2.2 207 100 94 100 100 93 100 100 93 100 100 94 100 100 100 93 100 100 93 100 100 93 100 100 93 100 100 93 100 100 93 100 100 93 100 100 93 100 100 93 100 93 100 100 100 93 100 100 100 100 93 100 100 100 100 100 100 100 100 100 10	571 577 7.5 3.5 130 383 52 52	103 103 94 932 981							None	
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571 571 103 520 571 182 207 162 7.5 6.5 6.9 7.5 6.5 6.9 4.1 3.5 4.0 3.5 3.5 4.0 3.3 2.2 100 100 94 100 100 100 93 383 4.01 952 993 4.01 630 1962 5.2 0 91 182 0 0 18 69 5.2 0 91 182 0 0 0 0 5.2 0 0 0 0 0 0 5.2 0 0 0 0 0 0 5.2 0 0 0 0 0 0 5.3 1700 1382 1700 1700 1700 1700 0.06 0.00 0.07 0.11 0.00 0.00 0.00 0.00 6.5 0 0 0 0 0 0 0 6.5 0 0 0 0 0 0 0 7.8 0.0 0.0 0.0 0.0 0.0 8.1 0.0 7.8 0.0 0.0 0.0 0.0 0.0 8.1 0.0 26 5% (CU Level of Service A 15	57. 2.5 1.00 3.83 3.83 V. V. S.	103 103 103 103 103 103 103 103 103 103				7 25	7			
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lage (s) 2.07 1103 5.20 5.71 182 2.07 1162 minoted vol signal contrivol milocked vol 5.7 5 6.5 6.9 7.5 6.5 6.9 4.1 4.1 4.1 4.1 signa (s) 3.5 4.0 3.3 3.5 4.0 3.3 2.2 2.2 2.2 2.2 2.2 2.2 2.2 2.2 2.2	13ge 1 cont vol 13ge 2 cont vol 13ge 2 cont vol 13ge (s) 7.5 13ge (s) 3.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2	103 3.3 94 932 181				E T		791		
State Stat	ingle (s) 7.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3	103 123 124 128 129 129 129 129 129 129 129 129 129 129				2 5				
age (s) 7.5 6.5 6.9 7.5 6.5 6.9 4.1 4.1 a.1 a. a. b.	15. 15. 15. 15. 15. 15. 15. 15. 15. 15.	33 53 69 18 18 18 18 18 18 18 18 18 18 18 18 18				77		182		
siage (s) 3.5 4.0 3.3 3.5 4.0 3.3 2.2 2.2 2.2 100 packly (vehh), 38.3 4.01 93.2 39.3 4.01 100 100 93 100 packly (vehh), 38.3 4.01 93.2 39.3 4.01 83.0 136.2 1391 100 packly (vehh), 38.3 4.01 93.2 39.3 4.01 83.2 136.2 1391 100 packly (vehh), 38.3 4.01 93.2 39.3 4.01 83.2 136.2 1391 100 packly (s) 8.1 10.2 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	adge (s) 3.5 pacific (ee % 100 pacify (vehn) 383 mon. Lane # 1881 vehn) 100 pacify (vehn) 100 pacify	33.3 93.2 93.2 93.2						4.1		
3.5 4.0 3.3 3.5 4.0 3.3 2.2 2.2 pacity (vehh) 383 401 100 100 93 100 pacity (vehh) 383 401 830 452 1391 pacity (vehh) 383 401 830 452 1391 pacity (vehh) 383 401 830 401 830 1391 pacity (vehh) 383 401 830 401 830 1391 1391 pacity (vehh) 383 401 830 401 830 1391 1391 pacity (vehh) 382 401 830 401 830 1391 1391 pacity (vehy) 382 401 830 401 830 400 0	3.5 3.6 100 pacity (yeh/h) 383 383 (son, Lane # EB 1 V e feft) 5.2 e feft	3.5 19.5 19.6 19.6 19.6 19.6 19.6 19.6 19.6 19.6								
active % 100 100 94 100 100 93 100 100 100 100 100 100 100 100 100 10	eue free % 100 pacity (veh/h) 383 con, Lane # EB 1 V s Total 52 re Left 0	932 NB 1				5		22		
### ### ### ### ### ### ### ### ### ##	383 S2 0	932 81		Ŭ		23		6		
EB 1 WB 1 NB 1 NB 2 NB 3 SB 1 SB 2 SB 3 SB 2 SB 3 SB 3 SB 3 SB 3 SB 3 SB 3 SB 3 SB	52 0 E	NB 1		N		22		1391		
52 0 91 182 0 138 69 52 0 91 182 0 0 0 0 52 0 0 0 0 0 0 0 0 52 0 0 0 0 0 0 0 0 532 1700 1352 1700 1700 1700 1700 0,0 0,0 0,0 0,0 0,0 0,0 0,0 0,0 0,0 0	80	8	182	ĕ	S		3	1000		
10 0 91 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 (0	0			co.			
52 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	200	00		0	0		0			
832 1700 1352 1700 1700 1700 1700 1700 1700 1700 170	ne Right 52	0					0			
(ff) 6.06 6.06 6.04 (ff) 6.06 6.04 (ff) 6.06 6.04 (ff) 6.06 6.06 6.04 (ff) 6.06 6.06 6.04 (ff) 6.06 6.06 6.04 (ff) 6.06 6.06 6.06 6.06 6.06 6.06 6.06 6.0	932	1362	ě.				0			
(f) 4 0 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	90'0	0.07					7			
9.1 0.0 7.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	•	'n					0			
17	9,1	9					0			
WY 2.2 CU Level of Service A Sundan 26.5% ICU Level of Service A Sundan 7.	æ •	E e			0					
2.2 Lation 26.5% ICU Level of Service A	. d	077			0.4					
2.2 28.5% ICU Level of Service A 15 Comober 7	TO STATE OF THE PARTY OF THE PA	108 110	100 M	10000	3	The state of	Section 2			33
ization 26.5% ICU Lèvel of Service A:	A Committee of the comm	00								ı
Sumbhr 7	Average Ustay Intersection Capacity Utilization Analysis Period (min)	26.5% 15	ICUL	evel of Ser	vice		A			
Sundan 7										
Sumehm 7										
- 7 adday/S										- 1
	Bliena Vista Apartmenis							Ś	Synchro 7 -	Report

Existing Plus Project PM 7/4/2012

HCM Unsignalized Intersection Capacity Analysis 2: Experimental Station Road & Buena Vista Drive

Existing Plus Project PM 7/4/2012

Movement	38 54 38 64 38 65 65 65 65 65 65 65 65 65 65 65 65 65	SWP	
title) or 0,92, 0,93, 0,94, 0			
or 622 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.		*- ;	
or 0,0% (yph) 33 117 18 (11%) 33 117 18 (veh) None (veh) None (veh) (150 oliocked ol			
(th) 33 117 18 (th) 39 117 18 (th) Mone (veh) None 150 oldume 150			
(1%) (veh) None (veh) (4(1) iocked iocked introl introl introl ivol ivol ivol ivol ivol ivol ivol iv		8	
None (40) (10) (10) (10) (10) (10) (10) (10) (1			
veh) (ff) (ff) (ff) (ff) (ff) (ff) (ff) (f	None		
ri vol			
rit vol Ivol Ivol	171	16	
lov!			
	171		
7	6,4	6.2	
	3.5		
	16		
cM capacity (veh/h) 1431	808		
Direction Lane # NB1 SB1 SW1	SWZ		
Volume Total 150 61 70	23		
0	0		
me Right 117 0	23		
1700 1431	996		
0.0	0.02		
0 (2) (4)	24		
Confrol Delay (s) 0.0 2.4 9.9	00° 4		
	ς		
}			
Intersection Summary	You control		
Average Delay 28.4 Intersection Capacity Utilization 26.5% Analysis Period (min) 15	ICU Lev	ICU Level of Service	*

Existing Plus Project PM 7/4/2012 S m Sum of fost time (s) ICU Level of Service HCM Level of Service 1,000 17.0 17.0 17.0 4.0 3.0 401 0.04 0.13 1.00 1.00 1.00 8 0.77 0.28 0.28 4.0 3.0 7.0 0.07 0,23 1,00 1,20 17,7 17,0 17,0 17,0 17,0 HCM Signalized Intersection Capacity Analysis 3: State Route 46 & Buena Vista Drive 8 24.0 24.0 4.0 3.0 3.0 567 24.0 24.0 0.40 4.0 3.0 1267 05.39 22.8 0.73 60.0 61.2% 0.98 17.8 21.1 38.9 0 0 1145 1100 1100 1100 1100 1245 1245 1245 520 520 687 93167 25 0 4.0 34 0 185 185 1700 1700 1700 1700 1,00 Intersection Surimary
HCM Average Control Delay
HCM Volume to Capacity ratio
Actuated Cycle Length (s)
Intersection Capacity Utilization
Analysis Perind (min)
c Gritical Lans Group Movement
Lare Configurations
Volume (vph)
Total Lost sime (s)
Lare Uil. Factor
Fit Protected
Sadd, Flow (prof)
Flo Lane Gro Cap (vph)
vis Ratio Prot
vis Ratio Prot
vis Ratio Perm
vis Ratio Perm
Vis Ratio
Unitorn Delay, d1
Progression Factor
Incremental Delay d2
Delay (s)
Level of Service
Approach Delay (s)
Approach Delay (s)

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Buena Vista Apartments LSA Associates, Inc.

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Existing Plus Project Plus Cumulative AM 10/29/2012 HCM Unsignalized Intersection Capacity Analysis 1: River Road & River Oaks Drive

	4-	* _	>	-	\	4	
Movement	NBT	NBR	SBL	SBT	SWL	SWR	
Lane Configurations	,2			42	<i>b</i> -	*	4
Volume (vehih)	6	164	12	39	174	20	
Sign Cantrol	Free			Free	Stop		
Grade	%0			960	%0		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	21	178	13	4	189	22	
Pedestrians							
Lane Width (ft)							
Walking Speed (fi/s)							
Percent Blockage							
Right turn flare (veh)							
Median type	None			None			
Median storage veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			189		178	110	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			188		178	110	
IC, single (s)			4.1		6.4	6.2	
tC, 2 stage (s)			(4)		1	2	
(F (s)			2.2		3.5	3.3	
p0 queue free %			66		76	80	
cM capacity (veh/h)			1373		804	苦	
Direction, Lane #	NB 1	SB 1	SW1	SW2			
Volume Total	199	52	189	22			
Volume Left	0	50	189	0			
Volume Right	178	0	0	22			
SH	1700	1373	804	944			
Volume to Capacity	0.12	0.01	0.24	0.02			
Queue Length 95th (ft)	0		23	2			
Control Delay (s)	0.0	1.0	10.9	8.9			
Langlos		A	ω	×			
Approach Delay (s)	0.0	1.9	10.7				
Approach LOS			00:				
Intersection Summary	100000000000000000000000000000000000000	10000					
Average Delay			5.0		l.		
Intersection Capacity Utilization	noon		31.4%	O	U Level c	ICU Level of Service	(A)
Contract and Contract			:				

	Jena Vista Apartments	Synchro 7 - Report
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	0	For	200	MIDN	400	odin	- NON	- 1000	COM	100	- COT	000
Novertunik	702	9	LDO	TO.	4	MON	No.	4	K	×	Att	3
Volume (veh/h)	11	0	119	0	0	0	10	424	.0	•0	333	60
Sion Control		Stop	28		Stop	9 (Free			Free	
Grade		%0			%			%0			0%0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourty flow rate (vph)	12	0	129	0	0	0	22	461	0	0	362	a
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								347				
pX, platoon unblocked												
vC, conflicting volume	938	838	185	882	942	461	371			461		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	938	938	185	882	942	461	37.1			461		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)	220.00									-		
(F (s)	3.5	4.0	63	3.5	4.0	3,3	22			22		
p0 queue free %	8	100	84	100	100	100	98			100		
cM capacity (veh/h)	211	251	825	196	249	547	1184			1097		
Direction, Lane #	183	WB 1	NB 1	NB 2	NB 3	SB 1	\$82	SB 3	2016	0000	Sec.	
Volume Total	141	0	55	461	0	0	241	129		3		
Volume Left	12	0	55	0	0	0	0	٥				
Volume Right	129	0	0	0	0	0	0	co				
cSH	662	1700	1184	1700	1700	1700	1700	1700				
Volume to Capacity	0.21	0.00	0.05	0.27	0.00	0.00	0.14	0.08				
Queue Length 95th (ft)	8	0	4	O	0	0	0	0				
Control Delay (s)	11.8	0.0	8.2	0.0	00	0.0	0.0	0.0				
Lane LOS	60	∢.	V									
Approach Delay (s)	13.0	0.0	6.0			0.0						
Approach LOS	œ	∢.										
Intercaction Summan	NUMBER OF	No.		2000	SERVICE	000		SHIP	SPORT	20000	100	000
Average Delay			2.1									
Telegraphic Consells Dilection												

Buena Vista Apartments LSA Associates, Inc.

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Existing Plus Project Plus Cumulative AM HCM Signalized Intersection Capacity Analysis 3: State Route 46 & <u>Buena</u> Vista Drive

10/29/2012		
	*	day
	٨	Ö
	1	COM
Drive	ţ	TOW
Vista	1	Taw You
oute 46 & Buena Vista Drive	1	CD

Accordinguations (EBL EBT WBT WBR SBL SBR followment) and Configurations (S) 866 806 700 1700 1700 1700 1700 1700 1700 170	٠	\	t		,		•	
ans	新日本の日本日本の	183	EBT	WBT	WBR	SBL	SBR	STATE STREET, STATE STREET, STATE ST
1705 1700	ane Configurations	¥	**	**	¥.	K	¥.	
1700 1700	olume (vph)	305	806	304	231	184	324	
1,00 0,95 0,95 1,00 1,00 1,00 1,00 1,00 1,00 1,00 1,0	lest Flow (vphp!)	1700	1700	1700	1700	1700	1700	
100 0.95 0.95 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	otal Lost time (s)	4,0	4.0	4.0	4,0	4.0	4.0	
100 100 100 0.85 100	ane Ubl. Factor	1.00	0,95	0.95	1.00	1.00	1,00	
1583 3167 3167 417 1583 1417	1	1.00	1.00	1.00	0.85	1.00	0.85	
1583 3167 3167 1417 1583 1417 1583 1418 1418		0.95	1.00	1.00	1.00	0.95	1.00	
1583 3167 100 100 0.95 100 1583 3167 3167 1417 1583 1417 1583 3167 3167 1417 1583 1417 1583 3167 3167 1417 1583 1417 1583 3167 3167 1417 1583 1417 1583 3167 168 0.0 264 1583 3167 168 0.0 264 1583 3167 168 0.0 264 1583 3167 168 0.0 264 1583 3167 168 0.0 264 1583 3167 168 0.0 264 1583 3167 168 0.0 264 1583 3167 168 0.0 265 1583 3167 168 0.0 25 1584 0.6 20 0.1 2 0.0 2 1584 0.6 20 0.1 2 0.0 2 1584 0.6 20 0.1 2 0.1 2 1585 0.0 127 0.2 4.6 1.7 1584 0.6 20 0.1 27 0.2 4.6 1.7 1584 0.6 20 0.1 27 0.2 4.6 1.7 1584 0.6 20 0.1 27 0.2 4.6 1.7 1584 0.6 20 0.1 27 0.2 4.6 1.7 1584 0.6 20 0.1 27 0.2 4.6 1.7 1585 0.0 1.2 7 0.2 4.6		1583	3167	3167	1417	1583	1417	
1583 3167 3167 1417 1583 1417 1583 1417 1583 1417 1583 1417 1583 1417 1583 1417 1583 1417 1583 1417 1583 1417 1583 1417 1583 1417 1583 1417 1583 1417 1583 1417 1583 151 1584		0.95	1.00	1.00	1.00	0.95	1.00	
0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92		1583	3167	3167	1417	1583	1417	
332 876 983 251 200 332 0 0 0 0 264 1 332 876 983 251 200 332 1 4 8 8 200 888 1 49 57.0 219 219 162 162 149 57.0 219 219 162 162 149 57.0 219 219 162 162 149 57.0 219 219 162 162 140 57.0 219 219 162 162 140 57.0 219 219 162 162 140 57.0 219 219 162 162 140 57.0 219 219 162 162 140 57.0 219 219 162 162 140 57.0 219 219 162 162 140 57.0 219 17 395 353 0.01 0.10 0.10 1.00 268 0.0 12 7 52 210 195 140 102 0.10 1.00 1.00 268 0.0 12 7 52 210 195 146 297 152 210 195 146 297 152 210 195 147 297 228 148 297 228 149 597 228 141 597 228 141 597 228 142 597 228 143 597 228 144 597 297 228 145 297 228 145 297 228 146 297 228 147 169 160 100 100 100 100 100 100 100 100 100		0.92	0.92	0.92	0.92	0,92	0.92	
nn (wph) 0 0 0 166 0 264 w (vph) 932 878 988 86 200 88 es 7 4 8 6 6 6 es 6 6 7 449 570 219 219 162 162 do 023 0.88 0.34 0.34 0.25 0.25 do 023 0.88 0.34 0.34 0.25 0.25 do 023 0.17 0.31 0.06 0.01 0.10 0.00 0.00 do 021 0.17 0.031 0.06 do 022 0.00 0.00 0.00 do 023 0.00 0.00 0.00 es 0.00 0.00 0.00 do 023 0.00 0.00 do 023 0.00 0.00 do 023 0.00 0.00 do 024 0.00 0.00 do 025 0.00 0.00 do 026 0.00 0.00 do 027 0.00 0.00 do 028 0.00 0.00 do 029 0.00 0.00 do 029 0.00 0.00 do 020 0.00 do 0		332	876	983	251	200	352	
Prof. 8	(hgh) uc	0	0	0	166	0	264	
Prot	ane Group Flow (vph)	332	876	983	92	200	88	
7 4 8 6 6 14.9 57.0 21.9 21.9 16.2 16.2 14.9 57.0 21.9 21.9 16.2 16.2 14.9 57.0 21.9 21.9 16.2 16.2 14.9 57.0 21.9 21.9 16.2 16.2 14.0 4.0 4.0 4.0 4.0 4.0 2.3 3167 1067 477 395 353 20.21 0.17 c0.31 0.06 0.91 0.28 0.92 0.18 0.51 0.25 24.4 0.6 20.7 15.2 21.0 19.5 1.00 1.00 1.00 1.00 1.00 1.00 2 26.8 0.0 12.7 0.2 4.6 1.7 2 26.8 0.0 12.7 0.2 4.6 1.7 2 26.8 0.0 12.7 0.2 4.6 1.7 2 26.8 0.0 12.7 0.2 4.6 1.7 2 26.8 0.0 2.7 33.4 15.4 25.5 21.2 2 6.9 0.0 2.7 0.2 22.8 2 7.2 3.4 16.4 29.7 22.8 2 8 0.0 2.7 0.00 0.00 0.00 1.00 1.00 2 26.8 0.0 12.7 0.2 4.6 1.7 2 26.8 0.0 12.7 0.2 4.6 1.7 2 26.8 0.0 12.7 0.2 2.8 2 2.8 0.0 12.7 0.2 2.8 2 2.8 0.0 2.7 0.00 0.00 0.00 0.00 0.00 0.00 0	urn Type	Prot			Perm		Perm	
149 570 219 219 162 162 149 570 219 219 162 162 149 570 219 219 162 162 140 40 40 40 40 40 40 30 30 30 30 30 30 363 3167 1067 47 395 353 0021 0.17 0.031 0.06 0.91 0.00 0.00 0.00 0.00 0.91 0.00 0.00 0.00 0.00 0.91 0.00 0.00 0.00 0.00 0.92 0.07 152 210 19.5 0.03 0.00 0.00 0.00 0.00 0.00 0.00 0.00	rotected Phases	٢	4	10		9		
14.9 57.0 21.9 21.9 16.2 16.2 16.2 16.2 0.23 0.88 0.34 0.34 0.25 0.25 0.88 0.34 0.34 0.25 0.25 0.88 0.34 0.34 0.25 0.25 0.88 0.34 0.34 0.25 0.25 0.25 0.35 0.35 0.35 0.35 0.35 0.35 0.35 0.3	ermitted Phases		9		00		9	
149 570 219 219 162 162 40 40 40 40 40 40 30		14.9	57.0	21.9	21.9	16.2	16.2	
0.23 0.88 0.34 0.34 0.25 0.25 4.0 4.0 4.0 4.0 4.0 3.0		14.9	57.0	21.9	21.9	16.2	16.2	
1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,		0.23	0.88	0.34	0.34	0.25	0.25	
3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0		4.0	4.0	4.0	4.0	4.0	4.0	
20.21 0.17 0.03 477 395 353 0.02 0.02 0.17 0.03 0.06 0.01 0.00 0.00 0.00 0.00 0.00 0.00		3.0	3.0	3.0	3.0	3.0	3.0	
co.21 0.17 co.31 co.13 co.13 co.13 co.22 0.17 co.33 0.06 0.06 0.10 0.10 0.10 0.06 0.10 0.10		363	3167	1067	477	395	353	
0.91 0.26 0.06 0.06 0.06 0.06 0.06 0.06 0.06		50.21	0.17	60.31		60.13		
22 26.8 0.92 0.18 0.51 0.25 1.00 1.00 1.00 1.00 1.00 2.2 26.8 0.0 12.7 0.2 4.6 1.7 51.2 0.7 33.4 15.4 25.5 21.2 D. A. C. B. C.			0.10		90.0		90.0	
24.4 0.6 20.7 15.2 21.0 19.5 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.		0.91	0.28	0.92	0.18	0.51	0.25	
100 100 100 100 100 100 100 100 100 100		24.4	9.0	20.7	15.2	21.0	19.5	
2 268 0.0 12.7 0.2 4.6 1.7 51.2 0.7 33.4 15.4 25.5 21.2 51.2 0.7 33.4 15.4 25.5 21.2 51.2 0.7 33.4 15.4 25.5 21.2 51.2 0.7 33.4 15.4 25.5 21.2 51.2 0.7 2.2 1.2 51.3 1.4.6 29.7 2.3 51.3 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5		1.00	1.00	1,00	1.00	1.00	1.00	
S1.2	92	26.8	0.0	12.7	0.2	4.6	1.7	
Delay (s) 14.6 29.7 22.8 Delay (s) 14.6 29.7 22.8 LOS Machine of the control o		51.2	0.7	33.4	15.4	25.5	21.2	
14.6 29.7 22.8 B C C C C 22.3 HCM Level of Service 65.0 Sum of lost time (s) 65.0 IOU Level of Service 15.1		۵	¥	O	m	O	o	
3y 22.3 HCM Level of Service of S5.0 Sum of lost time (s) 15.1 (c) Level of Service of 15.1 (c) Level of 15.1 (c) Lev	oproach Delay (s)		14.6	29.7		22.8		
3y 22.3 HCM Level of Service 0.79 0.79 Sum of lost time (s) 65.0 Sum of lost time (s) 151 Level of Service 1.5	pproach LOS		800	O		O		
3y 22.3 HCM Level of Service of 55.0 Sum of lost time (s) 65.0 Sum of lost time (s) 15.1 Level of Service 15.1 To Level of Service 15.1 Service of Service 15.1 Service of Service 15.1 Service of Service 15.1 Service of Service of Service 15.1 Service of	ntersection Summary							A DOMESTIC PROPERTY OF STREET
ratio 0.79 Sum of lost time (s) 65.0 Sum of lost time (s) 120 Level of Service 15	ICM Average Control Delay			22.3	Ĭ	CM Level	of Service	o
55.0 Sum of lost time (s) 55.0 Sum of lost time (s) 56.2% ICU Level of Service 15	ICM Volume to Capacity ratio			0,79				
15	ctuated Cycle Length (s)			65.0	S	um of lost	time (s)	12.0
	mersection Capacity Unization Analysis Period (min)			15	2	D CEAR	ogumio II	•

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Buena Vista Apartments LSA Associates, Inc.

Existing Plus Project Plus Cumulative PM 10/29/2012 HCM Unsignalized Intersection Capacity Analysis 2: Experimental Station Road & Buena Vista Drive

ļ

HCM Unsignalized Intersection Capacity Analysis Existing Plus Project Plus Cumulative PM 1: River Road & River Oaks Drive

SWR 24

Stop 0% 0.92 97

30 Pree 0% 0.92 33

Movement
Lare Configurations
Volume (vehh)
Sign Control
Grade
Peak Hour Factor
Pudurly flow rate (vph)
Pedestirans
Lane Width (ft)
Walking Speed (fts)
Percent Blockage
Right tum fiare (veh)

4

3 SBL

¥_

NBR

NBT

	\	†	/	-		,			1	A	•	7
Movement	183	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4		K	4	W_	N-	44	
Volume (veh/h)	11	0	112	0	0	0	162	229	0	0	255	1
Sign Control		Stop			Stop			Free			Free	
Grade		%0			%0			%0			%	
Peak Hour Factor	0 92	0.92	0.92	0.92	0.92	0.92	0.92	0,92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	12	0	122	0	0	0	176	249	0	0	277	`
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								347				
pX, platoon unblocked												
vC, conflicting volume	884	884	145	861	890	249	289			249		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked val	884	884	145	861	890	249	588			249		
tC, single (s)	7.5	6.5	6.9	7.5	6,51	6.9	4.1			4.1		
tC, 2 stage (s)												
IF (s)	3,57	4.0	3,3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	94	100	86	100	100	100	98			100		
cM capacity (veh/h)	214	244	877	192	242	751	1270			1314		
Direction, Lane #	EB 1	WB 1	NB.1	NB 2	NB 3	SB 1	88.2	883	2000	Spirit System	10000	15
Volume Total	134	0	176	248	0	0	185	104				
Volume Left	12	0	176	0	0	0	0	0				
Volume Right	122	0	0	0	0	0	0	12				
LSH.	687	1700	1270	1700	1700	1700	1700	1700				
Volume to Capacity	0.19	0.00	0.14	0.15	0.00	000	0.11	90.0				
Queue Length 95th (ft)	<u>60</u>	0	Ç.	0	0	0	0	0				
Control Delay (s)	1.5	0.0	89	0.0	0.0	0.0	0.0	0.0				
Lane LOS	œ	∢	4									
Approach Delay (s)	11.5	0.0	3.4			0.0						
Approach LOS	æ	ď										
Intersection Summary	Second Second		No.	200	Sylvenia	The second	STATE OF	STS ST	STATE OF			Ü
Average Delay			3.5									
Intersection Capacity Utilization	ation		36.7%	2	U Level o	ICU Level of Service			4			
Analysis renot imin			2									

107

192

180

Median slorage veh)
Upstream signal (ft)
px, platon unblocked
vc, conflicting volume
vCr, stage 1 conf vol
vCz, stage 2 conf vol
vCu, unblocked vol
(Cc, stage 8)
(C, stage 8)

None

Median type

107

6.4

3.3

3.5

2.2 98 1395

SW2

NB1 \$81

Direction, Lane #
Volume Total
Volume Left
Volume Right
cSH

27 A 27

Volume to Capacity
Queue Length 95th (1t)
Control Delay (s)
Lane LOS
Approach Delay (s)
Approach LOS

Buena Vista Apartments LSA Associates, Inc.

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ICU Level of Service

30.2%

Intersection Summary
Average Delay
Intersection Capacity Utilization
Analysis Period (min)

Buena Vista Apartments LSA Associates, Inc.

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tF (s) p0 queue free % cM capacity (veh/h)

HCM Signalized Intersection Capacity Analysis 3: State Route 46 & Buena Vista Drive

Existing Plus Project Plus Cumulative PM 10/29/2012

Movement EBI ane Configurations 244		100000000000000000000000000000000000000					
8	707	EBT	WBT	WBR	SBL	SBR	
	K	**	44	R	ķ	K	
	244	1111	1145	144	146	244	
	700	1700	1700	1700	1700	1780	
	4.0	4.0	4.0	4.0	4,0	4.0	
	00	0.95	0.95	1.00	1.00	1.00	
	00.1	1.00	1.00	0.85	1,00	0.85	
Fit Protected 0	96.0	1.00	1.00	1.00	0.95	1.00	
Satd, Flow (proft) 15	583	3167	3167	1417	1583	1417	
Fit Permitted 0	38	1.00	1.00	1,00	0.95	1.00	
erm)	1583	3167	3167	1417	1583	1417	
Peak-hour factor, PHF 0	0.92	0.92	0.92	0.92	0.92	0.92	
	265	1208	1245	157	159	265	
(rich) uc	0	0	0	92	0	201	
	265	1208	1245	99	159	25	The second second second
	Prot			Perm		Perm	
Phases	-	4	60		9		
Permitted Phases		(0)		80		6	
Actuated Green, G (s)	2.0	62.0	29.0	29.0	17.0	17.0	
(\$	12.0	62.0	29.0	29.0	17.0	17.0	
	117	0.89	0.41	0.41	0.24	0.24	
	6.0	4.0	4.0	4.0	4.0	4.0	
8)	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Gro Cap (voh)	271	3167	1312	587	384	344	
1	20.17	60.25	60,39		0.10		
//s Ratio Perm		0.14		90.0		0.05	
	86'0	0.38	0.95	0.11	0.41	0.19	
Uniform Delay, d1 2	60	0.7	19.8	12.5	22.3	21.0	
Progression Factor 1	1.00	1.00	1.00	1.00	1.00	1.00	
d2	0.8	0.1	14.2	0.1	3.3	1.2	
	6.97	9.0	34.0	12.7	25.6	22.2	
	ш	æ	O	m	O	o	
Approach Delay (s)		14.5	31.5		23.5		
Approach LOS		co	O		O		
ritersection Summary			A 187	2		100 S 100	
4CM Average Control Delay			22.9	포	M Level	HCM Level of Service	O
4CM Volume to Capacity ratio			0.76				
Actuated Cycle Length (s)			70.0	S S	Sum of lost time (s)	Sum of lost time (s)	000
Analysis Period (min)			15				

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Buena Vista Apartments LSA Associates, Inc.

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The Company of the	HCM Unsignalized Intersection Capacity Analysis 1: River Road & River Oaks Drive	er Oaks	Drive					7107/4//	2: Experimental Station Road & Buena Vista Drive	מווטווי יוטוומי	an a	l		
Name Sept SMP SM		4	X		->	4	4			1	†	~	1	Į.
Figure F	ent	捌	NBR	SBL	SBT	SWL	SWR		Movement	EBL	EBT	EBR	WBL	WBT
Fig. 256 15 25 17 13 13 13 13 13 13 13 1	unfigurations	١.			+3	*	K		Lane Configurations		4			4
Prese Pres	(veh/h)	14	226	15	29	217	13		Volume (veh/h)	11	0	32	0	0
1,00 1,00	ntrol	Free			Free	Stop			Sign Control		Stop			Stop
51 246 16 32 032 032 032 032 032 032 032 032 032		%0			%0	%0			Grade		%0			%0
Hough (levs) St. 246 16 32 236 14 Hough (levs) Hou	our Factor	0.92	0.92	0.92	0.92	0.92	0,92		Peak Hour Factor	0,92	0.92	0.92	0.92	0.92
The state of the	low rate (vph)	'n	246	118	32	236	14		Hourly flow rate (vph)	12	0	35	0	0
Major Majo	ians								Pedestrians					
Name	idth (ft)								Lane Width (ft)					
Number N	Speed (fVs)								Walking Speed (ft/s)					
Figure F	Biockage								Percent Blockage					
Name	rn flare (veh)								Right (urn flare (veh)					
Median storage veh Upstream signal (th)	type	None			None				Median type					
297 238 174 (1) Upstream signal (II) Distream signal (III) District Distric	storage veh)								Median storage veh)					
P.K. Dialonounblocked P.K. Dialonounblocked 174 297 178 178 275 1108 4.1 8.4 6.2 2.38 174 6.4 6.2 1108 275 1108 4.1 8.4 6.2 3.5 3.3 6.9 6.8 6.8 7.5 6.5 6.9 7.5 6.5 6.9 7.5 6.5 6.9 7.5 6.5 6.9 7.5 6.5 6.9 7.5 6.5 6.9 7.5 6.5 6.9 7.5 6.5 6.9 7.5 6.5 6.9 7.5 6.5 6.9 7.5 6.5 6.9 7.5 6.9 7.5 6.9 7.5 6.9 7.5 6.5 6.9 7.5 6.9 7.5 6.9 7.5 6.9 7.5 6.9 7.5 6.9 7.5 6.9 7.5 6.9 7.5 6.9 7.5 6.9 7.5 6.9 7.5 6.9 7.5 6.9 7.5	m signal (ft)								Upstream signal (ft)					
297 238 174 V.C. conflicting volume 1346 1348 275 1108 V.C. conflicting volume 1346 1348 275 1108 V.C. single (s) 75 5.5 1108 V.C. single (s)	bon unblocked								pX, platoon unblocked			1		1
VCI, stage 1 contivol VCI, unblocked vol VCI, unblo	flicting valume			297		238	174		vC, conflicting volume	1348	1348	275	1108	1352
297 238 1774 (C. single (s) 7.5 5.5 1108 175 110	ige 1 conf vol								VC1, stage 1 conf vol					
Control Delay Control Dela	ge 2 conf vol			4		100000	7.7		VCZ, Stage Z coni Vol	29.80	20.00	260	4400	4000
% 22 3,5 4,0 3,5	locked vol			287		238	174		vcu, unblocked voi	3348	1346	2/2	1100	2001
% 22 3.5 3.3 3.5 4.0 3.3 3.5 4.0 3.3 3.5 4.0 3.3 3.5 4.0 3.3 3.5 4.0 3.3 3.5 4.0	a (s)			7		6.4	6.2		tC, single (s)	7,5	0,5	9	7.5	6.5
% 22 3.5 4.0 3.5 4.0 3.5 4.0 3.3 3.5 4.0 3.3 3.5 4.0 3.3 3.5 4.0 3.3 3.5 4.0 3.3 3.5 4.0 3.3 3.5 4.0 3.3 3.5 4.0 3.3 3.5 4.0 3.3 3.5 4.0 3.5 4.0 3.5 4.0 3.5 4.0 3.5 4.0 3.5 4.0 3.5 4.0 3.5 4.0 4.7 9.1 7.0 1.1	ge (s)								tC, 2 stage (s)	77.50	100	(545)	1000	0.0
1265 1265 1267				22		3.5	3.3		(F (s)	3,5	4,0	3.3	3.5	4.0
NBT SBH SW4 SW2	e free %			88		98	98		% bo doe tree	68	100	S	100	100
NBT SBT SW1 SW2	icity (veh/h)			1285		741	870		oM capacity (veh/h)	108	148	722	155	147
297 48 236 14 9 11 780 0 16 236 0 14 0 11 0 11 0 11 0 11 0 0 11 0	n Lane #	W	SB 1	SW1	SW2	100000000000000000000000000000000000000	1000	The same of the sa	Direction, Lane#	EB 1	WB 1	NB 1	NB2	NB3
246 0 16 236 0 11 0 14 0 17 0 17 0 17 0 17 0 17 0 17	Total	297	48	236	14				Volume Total	47	0	=	780	0
246 0 0 14 0	Left	0	16	236	0				Volume Leff	ţ	0	=	0	0
1700 1265 741 870 1016 170	Right	246	0	0	14				Volume Right	35	0	0	0	0
0.17 0.01 0.32 0.02 0.01 0.46 0.00 0.01 0.46 0.00 0.01 0.46 0.00 0.01 0.46 0.00 0.01 0.46 0.00 0.01 0.46 0.00 0.01 0.46 0.00 0.01 0.46 0.00 0.01 0.46 0.00 0.01 0.46 0.00 0.01 0.46 0.00 0.01 0.46 0.00 0.01 0.46 0.00 0.01 0.01 0.01 0.01 0.01 0.01 0.0	,	1700	1265	741	870				HS3	285	1700	1016	1700	1700
0 1 34 1 0 1 1 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0	to Capacity	0.17	0.01	0,32	0.02				Volume to Capacity	0.16	0.00	0.01	0.46	0.00
0.0 2.8 12.1 9.2 Control Delay (s) 19.5 0.0 8.6 Lane LOS 2.8 12.0 A Approach Delay (s) 19.5 0.0 0.1	enath 95th (ft)	0	-	34	_				Queue Length 95th (ft)	14	0		0	0
0.0 2.8 (2.0 Approach Delay (s) Approach LOS Approach LOS	Delay (s)	0.0	2.8	12.1	9.2				Control Delay (s)	19.5	0.0	9.6	0.0	0.0
0.0 2.8 (2.0 Approach Delay (s) Approach LOS B	SO		V	Ф	⋖				Lane LOS	O	∢	∢		
8	ch Delay (s)	0.0	2.8	12.0					Approach Delay (s)	19.5	0.0	0.1		
	Sh Los			m					Approach LOS	O	ď			

0.92

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11 0.92

744 498 Free 0.92 541

None

None 347 780

550

780

22 100 100 833

22 99 1016

338

90 0.0 1700 0.0 0.0

0.21

0.00

57

6.9

Future No Project AM 7/4/2012

un	
Analysis Period (min)	Buena Vista Apartments LSA Associales, Inc,

ICU Level of Service A

52.2%

Intersection Summary Average Delay Intersection Capacity Utitzation

ICU Level of Service

5.2 38.4%

Average Delay Intersection Capacity Utilization Avalysis Period (min)

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Buena Vista Apartments LSA Associates, Inc.

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	4	†	ļ	1	۶	•	
Movement	E81	EBT	WBT	WBR	SBI	SBR	THE RESERVE OF THE PARTY OF THE
ane Configurations	2	**	**	W.	K	W_	
/olume (vph)	460	2023	1510	308	226	343	
deal Flow (vphpl)	1700	1700	1700	1700	1700	1700	
Fotal Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	
ane Util, Factor	1,00	0.95	0.95	1.00	1.00	1.00	
T.	1.00	1.00	1.00	0.85	1.00	0,85	
=It Protected	0.95	1,00	1,00	1.00	0.95	1.00	
Satd. Flow (prot)	1583	3167	3167	1417	1583	1417	
-it Permitted	0.95	1.00	1.00	1,00	0.95	1.00	
Sald. Flow (perm)	1583	3167	3167	1417	1583	1417	
Peak-hour factor, PHF	0.92	0,92	0.92	0.92	0.92	0.92	
Adl, Flow (vph)	200	2199	1641	336	246	373	
RTOR Reduction (vph)	0	0	0	118	0	318	
ane Group Flow (vph)	200	2199	1641	218	246	55	
urn Type	Prot			Perm		Регт	
Protected Phases	7	4	ab		ω		
Permitted Phases		9		00		9	
Actuated Green, G (s)	38.0	122.0	61.0	61.0	19,0	18,0	
Effective Green, g (s)	38.0	122,0	61.0	61.0	19.0	19.0	
Actuated g/C Ratio	0.29	0.94	0.47	0.47	0.15	0.15	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	
/ehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	463	3167	1486	999	231	207	
//s Ratio Prot	c0.32	0.55	c0.52		c0.15		
v/s Ratio Perm		0.14		0.15		0.04	
v/c Ratio	1.08	0.69	1.10	0.33	1.06	0.26	
Jniform Delay, d1	46.0	0.7	34.5	21.6	55.5	49.3	
Progression Factor	1,00	1.00	1.00	1.00	1.00	1,00	
Incremental Delay, d2	65.0	0.7	57.4	0,3	77.4	1,6	
Delay (s)	111.0	1.4	81.9	21.9	132.9	52.4	
_evel of Service	L	⋖	u	U	u.	۵	
Approach Delay (s)		21.7	80.0		84.4		
Approach LOS		O	u.		i.		
ntersection Summary			Section	1000		WELL STATES	STATE STREET, STATE OF THE PARTY OF
HCM Average Control Delay HCM Volume to Capacity ratio		-	1.09	Ĩ	SM Level	HCM Level of Service	٥
Actuated Ovele Length (s)			130.0	Ø	Sum of lost time (s)	time (s)	12.0
Intersection Capacity Utilization Analysis Period (min)			99.1%	Ö	Utevelo	ICU Level of Service	L

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Control Carbon Earl Earl Earl Earl West Wes West West West West West West West West West	And the configurations of the configuration of the configura	NBR P	*	<u>ب</u>	
Approximations 11	Accomparations the first politication of the		NBR		5
outrol Stop 6 (whith) 11 0 0 22 0 0 0 36 463 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ortrol Syp Syp Syp Free Control Syp		Ī	* 4	47
Orditor (1979) Stop Stop Stop Stop Stop Stop Stop Stop	Stop			0 315	315
Factor (194) 12 0 24 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Factor (uph) 12 0,24 0,0 0,0 0,0 0,0 0,0 0,0 0,0 0,0 0,0 0,	Free	28 =	Free	Free
919 919 177 766 925 492 354 492 354 75 65 69 41 177 766 925 492 354 499 177 766 925 492 354 499 177 766 925 492 254 499 177 766 925 492 354 499 177 766 925 492 354 499 177 766 925 492 354 499 177 766 925 492 354 499 177 766 925 492 354 499 177 766 925 492 354 499 177 766 925 492 354 499 177 766 925 492 354 499 177 766 925 492 1261 1761 1761 1761 1761 1761 1761 176	12 0 24 0 0 0 39 492 919 919 177 766 925 492 354 75 6.5 6.9 7.5 6.5 6.9 4.1 25 100 97 100 100 97 221 251 835 277 259 522 1201 28 100 97 100 100 100 97 29 0 0 0 28 125 12 0 39 0 0 0 0 0 12 0 39 0 0 0 0 0 12 0 0 0 0 0 12 10 0 0 0 0 0 0 14 1 0.0 0.03 0.29 0.0 0.00 0.00 14 1 0.0 0.03 0.29 0.0 0.0 0.00 14 1 0.0 0.03 0.29 0.0 0.00 15 14 0.0 0.03 0.29 0.0 0.00 16 8 A A A A A A A A A A A A A A A A A A	0.00	0.00		0 00
919 919 177 766 925 492 354 492 347 756 925 492 354 499 177 766 925 492 354 499 177 766 925 492 354 499 177 766 925 492 354 499 177 766 925 492 354 499 170 100 100 100 100 97 221 251 251 835 277 259 522 1201 100 122 125 1201 100 100 100 100 100 100 100 100 10	919 919 177 766 925 492 354 75 65 65 692 492 354 75 65 65 692 75 65 693 41 35 22 354 75 65 692 75 65 693 41 35 22 354 75 692 75 65 693 41 35 22 354 75 692 75 65 693 41 35 22 354 75 693 692 77 259 522 1201 EB1 WB1 NB1 NB2 NB3 527 1201 97 120 97 22 1201 120 97 120 1700 1700 1700 1700 1700 1700 1700	0	0		342
None 919 919 177 766 925 492 354 49 7.5 6.5 6.9 7.5 6.5 6.9 4.1 4.4 3.5 4.0 3.3 3.5 4.0 3.3 2.2 9.19 919 177 766 925 492 354 4.9 9.19 919 177 766 925 492 354 4.9 9.19 919 177 766 925 492 354 4.9 9.2 100 97 7.5 6.5 6.9 6.9 9.2 1 261 835 277 259 522 1201 106 EB1 WB1 NB1 NB2 NB2 581 582 583 9.0 9 0 0 0 12 7.0 9 42 0 0 0 0 12 7.0 0 9 12 7.0 0 0 0 0 12 7.0 0 0 0 0 0 14.1 0.0 8.1 0.0 0.0 0.0 0.0 14.1 0.0 8.1 0.0 0.0 0.0 0.0 14.1 0.0 0.6 0.0 0.0 0.0 14.1 0.0 0.6 0.0 0.0 0.0 15. 100 0.6 0.0 0.0 0.0 15. 100 0.6 0.0 0.0 0.0 15. 100 0.6 0.0 0.0 0.0 15. 100 0.	None 347 919 919 177 766 925 492 354 7.5 6.5 6.9 6.5 6.9 41 3.5 4.0 3.3 3.5 4.0 3.3 2.2 9.1 919 177 766 925 492 354 7.5 6.5 6.9 6.5 6.9 41 3.5 4.0 3.3 3.5 4.0 3.3 2.2 9.1 919 177 766 925 492 354 2.2 56 6.9 6.5 6.9 6.9 4.1 2.2 56 6.9 6.9 6.9 6.0 6.0 2.4 0 39 4.2 0 0 228 126 2.4 0 39 4.2 0 0 0 0 2.4 0 0 0 0 0 2.4 0 0 0 0 0 2.4 0 0 0 0 0 2.4 0 0 0 0 0 2.4 0 0 0 0 0 2.4 0 0 0 0 0 2.4 0 0 0 0 0 2.4 0 0 0 0 0 2.5 6.5 6.5 6.5 6.5 6.5 6.5 2.6 6.5 6.5 6.5 6.5 6.5 6.5 2.7 7 0 3 0 0 0 0 0 2.8 0 0 0 0 0 0 0 14.1 0 0 8.1 0.0 0.0 0.0 0.0 2.8 A A 14.1 0.0 0.6 B A A 14.1 0.0 0.6 2.9 0.0 0.0 0.0 0.0 0.0 14.1 0.0 0.6 2.9 0.0 0.0 0.0 0.0 14.1 0.0 0.6 2.9 0.0 0.0 0.0 0.0 14.1 0.0 0.6 2.9 0.0 0.0 0.0 0.0 14.1 0.0 0.6 2.9 0.0 0.0 0.0 0.0 14.1 0.0 0.6 2.9 0.0 0.0 0.0 0.0 14.1 0.0 0.6 2.9 0.0 0.0 0.0 0.0 2.9 0.0 0.0 0.0 0.0 2.9 0.0 0.0 0.0 0.0 2.9 0.0 0.0 0.0 0.0 2.9 0.0 0.0 0.0 0.0 2.9 0.0 0.0 0.0 0.0 2.9 0.0 0.0 0.0 0.0 2.9 0.0 0.0 0.0 0.0 2.9 0.0 0.0 0.0 0.0 2.9 0.0 0.0 0.0 0.0 2.9 0.0 0.0 0.0 0.0 2.9 0.0 0.0 0.0 0.0 2.9 0.0 0.0 0.0 0.0 2.9 0.0 0.0 0.0 0.0 2.9 0.0 0.0 0.0 0.0 2.9 0.0 0.0 0.0 0.0 2.9 0.0 0.0 0.0 0.0 2.9 0.0 0.0 0.0 0.0 2.9 0.0 0.0 0.0 0.0 2.9 0.0 0.0 0.0 2				
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6) 14.1 0.0 0.6 B A A O.6 Nery 0.9 CRU Level of Service A 15	e) 14.1 0.0 0.6 Dary 0.9 city Ulitzation 43.3% (CU Level of Service 15	0.0	00		
7 (5) (4,1 0.0 0.6 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	7 (5) (4.1 0.0 0.6 0.0 0.0 minery 0.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0				
B A Ogeniery 0.9 pacity Unitzation 43.3% (CU Level of Service A 15.0%)	B A 0.9 0.9 0.9 (CU Level of Service (min) 15				
0.9 15.35% ICU Level of Service A	Unication 43.5% ICU Level of Service				
0.9 15 ICU Level of Service A	Unitization 43.5% ICU Level of Service	100 TO 10	100 PM	No. of the last	Single N
ization 43,3% ICU Level of Service A	Unitzation 43.5% (CU Level of Service 15				
92	io.	ď	4		

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Buena Vista Apartments LSA Associates, Inc.

ICU Level of Service

6.6 44.8% 15

Average Delay Intersection Capacity Utilization Analysis Period (min)

Future No Project PM

HCM Unsignalized Intersection Capacity Analysis

Future No Project PM

HCM Unsignalized Intersection Capacity Analysis

1: River Road & River Oaks Drive

0.92

0.92

0.92

274 274 Stop 0% 0.92 298

Free 0% 0.92

7 41 141 0.92 45

205

Movement
Lane Configurations
Volume (veh/h)
Sign Control
Grade

SBT

NBT

3

156

243

287

None

None

Peak Hour Factor
Hourly flow rate (vph)
Pedestrians
Lane Width (#)
Walking Speed (fits)
Percent Blockage
Right tun flare (veh)
Median type
Median storage veh)
Upstream signal (#)
Co., paleon unblocked
PC., paleon unblocked
VCU, unblocked vol
(CU, unblocked vol
(CC, shage (s)

3.3 97 890

3.5

2.2 98 1296

SW2

28 0.03 9.2 A

298 298 298 0.41 49 13.2 8 12.9 B

Direction, Lane #:
Volume Tatal
Volume Tatal
Volume Left
Volume Right
CSH
Volume Right
CSH
Countrol Delay (s)
Lane LOS
Approach LOS
Approach LOS
Approach LOS

267 68 0 21 223 0 1700 1296 0.16 0.02 0.0 2.5

156

243

267

•	4	†	ļ	1	٠	*	
Bouchers	in in	TRI	WRT	URD	8	COD	
and Confiningtons	A AC	**	**	W	k	*	
Johnne (veh)	324	1989	2627	178	135	244	
deal Flow (vohol)	1700	1700	1700	1700	1700	1700	
Fotal Lost time (s)	4.0	4.0	4.0	4.0	4,0	4.0	
ane Util, Factor	1.00	0.95	0.95	1.00	1.00	1,00	
T.	1.00	1,00	1.00	0.85	1.00	0,85	
Fli Protected	0.95	1.00	1.00	1.00	0,95	1,00	
Satd. Flow (prot)	1583	3167	3167	1417	1583	1417	
Flt Permitted	0,95	1.00	1,00	1,00	0.95	1.00	
Satd. Flow (perm)	1583	3167	3187	1417	1583	1417	
Peak-hour factor, PHF	0,92	0.92	0.92	0.92	0.92	0.92	
Adl. Flow (vph)	352	2162	2855	193	147	265	
RTOR Reduction (vph)	0	0	0	35	0	193	
.ane Group Flow (vph)	352	2162	2855	159	147	72	
urn Type	Prot			Perm		Perm	
Protected Phases	7	4	00		9		
Permitted Phases		9		80		9	
Actuated Green, G (s)	24.0	142.0	97.0	97.0	17.0	17.0	
Effective Green, g (s)	24.0	142.0	97.0	97.0	17.0	17.0	
Actuated g/C Ratio	0,16	0.95	0.65	0.65	0,11	0,11	
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 Gro Cap (vph)	253	3167	2048	916	179	161	
	c0.22	c0.57	06'00		60'0		
		0,11		0.11		0.05	
v/c Ratio	1.39	99'0	1.39	0.17	0.82	0.45	
Uniform Delay, d1	63.0	9.0	26.5	10.5	65.0	62.1	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	198.5	9.0	180.4	0.1	32.8	2.9	
Delay (s) 2	261.5	1.2	206.9	10.6	87.8	70.8	
Level of Service	L.	V	ட	四	ii.	u	
Approach Delay (s)		37.7	194.5		80.4		
Approach LOS		۵	ᄔ		ti.		
nlarsection Summary		200	STATE OF	III COLONIA	N. O. S. S. S.	Contractor of	Marchine Strates Bright
HCM Average Control Delay HCM Volume to Capacity ratio			120.6	H	2M Level	HCM Level of Service	u.
Actuated Cycle Length (s)			150.0	S	Sum of lost time (s)	time (s)	8.0
Intersection Capacity Utilization Analysis Period (min)	ria.		19.6%	Ö	ICU Level of Service	Service	H

Synchro 7 - Report
LSA Associates, Inc.

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Movement	W	183	EBR	WBL	WBT	WBR	NBI	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4		1	*	*-	1	4.7	
Volume (veh/h)	1	0	80	0	0	0	22	718	0	0	498	
Sign Control		Stop			Stop			Free			Free	
Grade		960	100	000	960	000	000	600	000	0.00	250	
Heak Hour Factor	12	0.50	280	0.32	0.32	780	24	780	0.32	200	2 25	7.0
Pedestrians	9	>	8	>	>);	5	3	ř	>	į	
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)								100000				
Upstream signal (ft)								347				
pX, platoon unblocked	100000	0.000	1		on de	004	44			-		
vC, conflicting volume	1374	1374	275	118/	13/8	/80	220			180		
vC1, stage 1 cont vol												
VCZ, stage Z cotti voi	1374	1374	275	1187	1378	780	550			780		
C cipale (c)	7.0	u u	0 0	1.5	100	0 9	41			4.5		
tC. 2 stage (s)	9	3	3	2	2	2						
(F(S)	70,	4.0	3.3	3,5	4.0	3,3	2.2			2.2		
no agene free %	88	100	88	100	100	100	88			100		
oM capacity (veh/h)	103	141	722	124	140	338	1016			833		
District and I	- du	WR 1	NB.1	NB.2	NB.3	58.1	58.2	583	×	1	ĕ	
Volume Tetal	400	0	2.4	ZBO	c	c	781	189		l		
Volume Left	3 5	o c	24	3 -	0	0 0	3	3 0				
Volume Right	60	0	0	0	0	0	0	60				
HSS	420	1700	1016	1700	1700	1700	1700	1700				
Volume to Capacity	0.24	0.00	0.05	0.46	00'0	00'0	0.21	0.11				
Queue Length 95th (ft)	23	0	2	0	0	0	0	0				
Control Delay (s)	16,2	0.0	8.6	0.0	0.0	0.0	0.0	0.0				
Lane LOS	O	V	∢									
Approach Delay (s)	16.2	0.0	0.3			0.0						
Approach LOS	O	⋖										
Intersection Summary		d lines			100			8			100	
Average Delay Intersection Capacity Utilization Analysis Period (min)			13 55.2% 15	Š	U Level	ICU Level of Service			00			
mersection Lepacity Onlicato Analysis Period (min)	_		5 6			5			3			

Future Plus Project AM 714/2012

HCM Unsignalized Intersection Capacity Analysis 1: River Road & River Oaks Drive

3 SBL 226 Stop 0.92 246

29 0% 0.92 32

0.92

0.92

70

NBR 228

NBT

nchro 7 - Report	Page 1
Sy	
ments	
Buena Vista Apartments	LSA Associates, Inc.

ICU Level of Service

5.4 39.1%

Average Delay Intersection Capacity Utilization Analysis Period (min)

Intersection Summary

Buena Vista Apartments LSA Associates, Inc.

Synchro 7 - Report Page 2

FF (s)
p0 queue free %
cM capacity (veh/h)

6.2

239

239

299

None

None

Movement
Lane Configurations
Volume (vehth)
Sign Conford
Grade
Peak Hour Factor
Hourly flow rate (vehth)
Pedestriens
Lane Width (ft)
Walking Speed (fts)
Percont Blockage
Right turn flare (vehth)
Median type
Median type
Amedian type
Conflicting volume
VC, conflicting volume
VC, stage 1 conf vol
VCL, stage 2 conf vol
VCL, stage 5 conf vol
VCL, stage 5 conf vol
VCL, stage 5 conf vol
VCL, stage 6 conf vol
VCL, stage 5 conf vol
VCL, stage 6 conf vol
VCL, stage 7 conf vol
VCL, stage 8 conf vol
VCL, stage 9 conf vol
VCL, stage 1 con Vol
VCL, stage 2 con Vol
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VCL, stage 1 con Vol
VCL, stage 1 con Vol
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VCL, stage 2 con Vol
VCL, stage 2 con Vol
VCL, stage 3 con Vol
VCL, stage 3 con Vol
VCL, stage 3 co

3.3 98 868

3.5 67 739

2.2 99 1262

SW 1

NB1 SB1

Direction, Lane #
Volume Total
Volume Total
Volume Right
CSH
Volume Right
CSH
Courted Length SER (#)
Control Delay (s)
Lane LOS
Lane LOS
Approach LOS
Approach LOS
Approach LOS

246 246 0 0 0 33 033 033 12.3 12.3 12.3 8

2 A B

				١	l		
	1	1	ţ	1	٠	*	
Movement	EBL	EBT	WBT	WBR	SBL	SBR	CONTRACTOR STREET CASE OF THE
Lane Configurations	k -	44	++	R.	<u> </u>	J.	
Volume (vph)	468	2023	1510	313	243	375	
ideal Flow (vphpf)	1700	1700	1700	1700	1700	1700	
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util, Factor	1.00	0.95	0.95	1,00	1.00	1.00	
æ	1.00	1.00	1.00	0.85	1,00	0.85	
Fit Protected	0.95	1,00	1,00	1,00	96.0	1,00	
Satd. Flow (prot)	1583	3167	3167	1417	1583	1417	
Fit Permitted	0.85	1.00	1.00	1.00	0.95	1.00	
Sald. Flow (perm)	1583	3167	3167	1417	1583	1417	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	
Adl. Flow (vph)	509	2199	1641	340	264	408	
RTOR Reduction (vph)	0	0	0	104	0	345	
Lane Group Flow (vph)	509	2199	1641	236	264	63	
Turn Type	Prot			Perm		Perm	
Protected Phases	7	4	80		9		
Permitted Phases		9		00		Ф	
Actuated Green, G (s)	44.0	142.0	71.0	71.0	23.0	23.0	
Effective Green, q (s)	44.0	142.0	71.0	71.0	23.0	23.0	
Actuated g/C Ratio	0.29	0.95	0.47	0.47	0.15	0.15	
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	3
Lane Grp Cap (vph)	464	3167	1499	671	243	217	
v/s Ratio Prot	c0.32	0,55	c0.52		c0.17		
v/s Ratio Perm		0.14		0,17		0.04	
v/c Ratio	1.10	0.69	1.09	0.35	1.09	0.29	
Uniform Delay, d1	53.0	9.0	39.5	25.0	63,5	56.2	
Progression Factor	1.00	1.00	1.00	1.00	1,00	1.00	
Incremental Delay, d2	7.07	0.7	53.7	0.3	82.7	3.3	
Delay (s)	123.7	5.	93.2	25.3	146.2	59.6	
Level of Service	ш	<	ᄔ	O	LL	144	
Approach Delay (s)		24.3	81.5		93.6		
Approach LOS		O	ட		ш		
Intersection Summary	10000		1		Section	GILLERY STEEL	A SECTION OF SECTION ASSESSED.
HCM Average Control Delay	_		54.3	至	CM Level	HCM Level of Service	٥
HCM Volume to Capacity ratio	tio		1.09	9	Sum of lact time (c)	Vima (e)	22
Intersection Capacity Utilization	vog		100.7%	5 ⊆	U Level	ICU Level of Service	90
Analysis Period (min)			57				

Synchro 7 - Report	Page 3
Buena Vista Aparlments	LSA Associates, Inc.

WBL WBT WBR 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NBR SBI	\$BT \$BR ↑↑ 315 11
\$00 80 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	453 0 0 √ Free	
Stop Stop 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0%	Free	
0% 0% 0% 0%		Free
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	.000 000 000 000 000	%0 000
0 52 0 0 0	0.00	
*		
	None	None
	347	
1023 1023 177 898 1029 492	354 492	
888 1029	354 492	
6.5 6.9 7.5		
4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4		
3.5 4.0 3.3 3.5 4.0 3.3 es	2.2 2.2	
216 835 207 215 522		
WR1 NB1 NB2 NB3 SB1	582 583	CONTRACTOR OF THE PERSON AND ADDRESS OF THE PERSON ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON AND A
0 04 400 0	I.	
91 0 0		
0 0 0 0		
1700 1201 1700 1700 1700		
0.00 0.08 0.29 0.00 0.00		
0 0 9 0		
0.0 8.2 0.0 0.0		
X C		
A		
	Waster St. 18 September	SERVICE SERVIC
1.6 1.6 ICU Level of Service 44.0% ICU Level of Service	4	
496 1700 1201 1700 1700 1700 1700 1710 1710	0.0	4

	4	X .,	3	-	\	4	
Movement	NBT	NBR	SBL	SBT	SWL	SWR	
gurations	,1			+∓	*	N.	
h)	4	214	18	42	279	26	
Sign Control	Pree 0%			Pree 0%	%0		
lour Factor	0.92	0,92	0.92	0.92	0.92	0,92	
ate (vph)	45	233	21	46	303	28	
Pedestrians Lane Width (ft) Walking Speed (ft/s)							
	None			None			
Median storage veh) Upstream signal (ft)							
pX, platoon unblocked			11		07.0	954	
vC, conficting volume vC1, stage 1 confivel vC2 stage 2 confivel			117		047	9	
VCv unblocked vol			277		248	181	
IC. single (s)			4		6.4	6.2	
tC, 2 stage (s)			1920				
F (s)			22		S. C.	3.3	
pU queue tree % cM capacity (veh/h)			1286		729 8	884	
Section 1	NR 4	CH.	SW.	SW2		THE RESIDENCE	Control of the Contro
	277	3 50	202	300			
Volume Left	0	2 c	303	30			
	233	0	0	28			
	1700	1286	729	884			
	9,16	8.02	0.42	0.03			
010	00	- 0	100	900			
Control Delay (8)	0.0	9 4	e ec	2. A			
Approach Delay (s)	0.0	2.5	13.1				
Approach LOS			ω				The state of the s
Intersection Summary	No.		September 1				
Average Delay Intersection Capacity Utilization Analysis Period (min)			6.7 45.2% 15	0	U Level o	ICU Level of Service	*
Average Delay Intersection Capacity Utilization Analysis Period (min)			6.7 45.2% 15	0	U Level o	f Service	<

	4	†	ţ	1	۶	*	
Movement	183	EBT	WBT	WBR	SBL	SBR	
Lane Configurations	15	**	**	R.	je.	¥C_	
Volume (vph)	385	1989	2627	185	144	261	
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	
Total Lost time (s)	4.0	4,0	4.0	4.0	4.0	4.0	
Lane Util, Factor	1.00	0.95	0.95	1,00	1,00	1,00	
E	1.00	1.00	1.00	0.85	1.00	0.85	
Fit Protected	0,95	1.00	1.00	1.00	0,95	1.00	
Satd. Flow (prot)	1583	3167	3167	1417	1583	1417	
Fit Permitted	0.95	1.00	1.00	1.00	0.95	1.00	
Satd, Flow (perm)	1583	3167	3167	1417	1583	1417	
Peak-hour factor, PHF	0.92	0,92	0.92	0.92	0,92	0.92	
Adf. Flow (vph)	386	2162	2855	212	157	284	
RTOR Reduction (vph)	0	0	0	37	0	201	
Lane Group Flow (vph)	386	2162	2855	175	157	83	
Turn Type	Prot			Регл		Perm	
Protected Phases	1	4	00		19		
Permitted Phases		(0)		669		Q)	
Actuated Green, G (s)	25.0	142.0	96.0	95.0	17.0	17.0	
Effective Green, g (s)	25.0	142.0	0.96	96.0	17.0	17.0	
Actuated g/C Ratio	0.17	0.95	0.64	0.64	0.11	0.11	
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 Gro Cap (vph)	284	3167	2027	206	179	161	
	c0.24	0.57	06.00		00.10		
vis Ratio Perm		0.11		0.12		90'0	
v/c Ratio	1,46	0.68	1,41	0.19	0.88	0.51	
Uniform Delay, d1	62.5	9.0	27.0	11.3	65.5	62.6	
Progression Factor	1.00	1,00	1.00	1.00	1.00	1,00	
Incremental Delay, d2	127.7	9:0	186.8	0.1	41.1	11.2	
Delay (s)	280.2	54	213.8	11.2	106.6	73.8	
Service	ta.	Ø	u_	m	ti.	ш	
Approach Delay (s)		45.0	199.8		85.5		
Approach LOS		۵	ш		u.		
Intersection Summary	18	200	SKRING	NO.		SPACETICS	PARTIES CONTRACTOR
HCM Average Control Delay			126,4	I	3M Level	HCM Level of Service	ı
HCM Volume to Capacity ratio			1.35				
Actuated Cycle Length (s)			150.0	ű	Sum of lost time (s)	time (s)	12.0
Intersection Capacity Utilization			122.1%	Θ	ICU Level of Service	Service	32
Andiyota contrain			2				

Synchro 7 - Report

Buena Vista Apartments

Agenda Item No. 1 Page 287 of 355

APPENDIX B PROJECT DRIVEWAY LOS WORKSHEETS

Proj	J AM O HCM 1	2 Zasterly Project Dwy/Experimen	Street Name: Easterly Project Dwy Experimental Station Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R	Control: Stop Sign Stop Tyon Uncontrolled Rights: Include Incl	Volume Module: Base Vol: Base Vol: Crowth Add: Added Vol: RaserEzWol: User Add: Little Ad	FINALORUME: 4 U 20 U U U U U CITACAL GAR MONDHE: CTATACAL GAR GAR ANNEX MANKE	5 X X X X X X X X X X X X X X X X X X X	Level Of Service Module: ZMay9th(): xxxx xxxx xxxxx xxxxx xxxxx xxxxx xxxxx
------	-----------------	----------------------------------	--	--	--	---	---	--

Fr: Jul 6, 2012 13:23:22

CA Traffix 8.0.0715 (c) 2008 Dowling Assoc. Licensed to LSA ASSOC. IRVINE,

2000 HCM Unitonalized Method (Fluthe Volume Alternative)	OO HCM	Chrs	gna!!	zed Me	thod	Level Of Service Computation Report signalized Method (Future Volume Al	e Volt	The AL	2000 HCM Shakeralized Method (Flutte Volume Alternative)	;ve)		
Intersaction #1 Westerly Project Dwy/Experimental Station	#1. Wes	Car.	Proj	ect Da	dxE/k	ner;men	tai St	atton				****
Average Delay (sec/veh): 2.4 Norst Case Level Of Service: A. 8.7]	(200)	veh):		2		Morat	CASE	evel	Of Ser	Morat Case Level Of Service: Al	8.7	
Street Name: Approach: Movement:	Nort	Westerly North Bound L - T - R	and v	Westerly Project Dwy th Bound South Bo T - R L - T	South Bound	punq -	I I	East Bound	riment, und	Experimental Station t Bound West Bound T - R L - C -	acuna Found	or,
Control: Rights:	Sto	Stop Sign Include	In le	St	Stop Sign Include	.gn		Uncontrolled	1	בורי	ontroll:	D,
Lanes:	0	0 51 0	0	0	0	0 0	0	0 0	0 1	0 1	0 0	0
Volume Module:		C	C.	C	C			5	L	0 70		
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Initial Bser	000	00	m c	000	00		0 0	40	n c	24	~ <	00
	0 0	0 0	0 0	00	0 0		00	o m	0	0 0	2 7	0 0
Initial Fut;	P)	0	m		0		0	37				0
User Adj;	1.00 1	0.00	00		1.00	e l	001	2,400	00*1	1.00 1.00		1.00
PHE Adj:	1,000 1	000	00 .		1.00		00	00 1 00		1.00 1.0		00*
	7 6	0 0			0 0		0 0	, <	0 <		1 0	0 0
FinalVolume:	o m	0			0 0	0	0	37.0	o in		49.0	0 0
		-	1			*****	****		****	****		*
Critical Gap	Module	4	0	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	2	>>>>	2000	>>>>	*****	1.0	>>	2
FOIL DESTRUCTIONS	r 10	0.0	, r	22222	2222	****** **** ***** ***** **** **** **** ****	XXXXX	XXXX	*****	2.2 WWW WWWW	200	XXX
	- 1	- 1	0 1		4			0000		2000	0000000	
Capacity Module:		7	-							0		
Chilict Vol:	13/	110	0 40		XXXX			XXXX	XXXX XXXX XXXX	42 XXX		XXX
Potent Cap.:			1030 1030			XXXXX	XXXX	XXXX	XXXX XXXX XXXXX	1580 XXXX		XXXXX
	7000		0 0	4		22222	AAAA	7777	44444	000		×××
vo_une/cap:	0.00		- 0 - 0	- XXXX	XXX	XXXX XXXX	XXXX	X I	NYXX XXXX O'O	0.02 %%%	i	XXXX
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Movement:	i E	123	33	173	113	- 3d		17 - 178 - 37	33	TS - ELT - 31	+ 152	100
		997.3	CXXXX	XXXX	XXXX	XXXXX		XXXX	XXXX XXXX XXXX	XXXX XXXX XXXX	XX XX	×××
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Shrd ConDellxxxxx		9. 7	CKKKK	XXXXX	XXXX	XXXXX	XXXXX XXXX XXXXX	XXXX	XXXXX	3 730	XX XX	×××
Spared tos:		C P		9	200000		8	3		000000	2	
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Intersection	000 HCM	M Uns.	evel	ed ve	rvice C Method	Computat (Future		on Report Volume Alt	lternat:	(e.v.)		
G.	#2 # # # # # # # # # # # # # # # # # #	sterly *****		Project Dw	Dwy/Experi	eriment	* In	Station	***	* * * *	* * * * *	* * * * *
1 4 4	- +	sec/veh)	* * *	1.9	***	Worst	Case	Level	Of Se	71.0e;	A [8	100
tre ppr		田上	Bound R	Project Sout	2 4	y Bound	H H	rd I	Experimental t Bound T - R	SE	0 D	
Control: Rights: Lanes:	St	op S	ign ide 0 0	0 0	top Sig Includ	o o	- G	ncontroll Include	rolled lude	0	controll Include	lled de 0 0
Volume Module					C				7	2.4	20	
ر ء, <	4 6	0 0	10	00	9	0 0	C	-	0.00	4 0	JC	1000
Triftal Base	000	2		-	000	2		-1				
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Ę	0	0	0	0	0	0	0			0	47	
4.1	2	0	13	0	0	0	0			24	1	
	00.	0	0	0	0	0	1,00	H	0.01	1.000	1.0	7 DO
PHF Adj:	1.00	1.00	1.00	1.00	1.00	I.00	1.00	d	I.,00	1,00	1.00	00* 1
PHF Volume:			13	0			0			24	1	
Vol	0	0	0	0	0	0	0		0	0	0	
	2	0	T3	0	0	0	0	4		24	71	0
	Modul	 E:										
Critical Go:		6.5	-	XXXXX	XXXX	XXXXX		XXXX XXXX	XXXXX	100	XXXX	XXXXX
lowJpTim	ري ري		69	XXXXX				XXXX		64		XXXXX
Capacity Modul	Te:	1						1				
Cnflict Vol:	167	167	4 8	XXXX	XXXX	XXXXX	XXXX	XXXX	XXXXX	50	XXXX	XXXXX
Cap	828	729	1027	XXXX	XXXX	XXXXX	XXXX	XXXX	XXXXX	1570	XXXX	XXXXX
Move Cap.:	818	718	1027	XXXX	XXXX	XXXXX	XXXX	XXXX	XXXXX	1570	XXXX	XXXXX
Volume/Cap:	00.0	00.0	10.0	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	0.02	XXXX	XXXX
T. 0.7 7.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1	N anin	Madila			1	1	-	1				
10101	٠.	1000				****	************			0	2000000	20000
	XXXX	2222	****	× × × × ×	7777	XXXXX	****	2222	22222			*****
TO TOTAL		*	*	*	*	*	*					,
Movement:	LI	LTS	- RT	H	- LTR	E-s	LI	- LER	EX	H	- LIB	E-i
0	XXXX	E 6 6	XXXXX			XXXXX	XXXX	×	×	XXXX	×	XXXXX
Duene:x	:XXXXX	0.0	XXXXX	XXXXX		XXXXX	XXXXX	XXXX	XXXXX	0.0	XXXX	XXXXX
Shrd ConDel:x	:xxxxx	8.7	XXXXX	XXXXX	XXXX	XXXXX	XXXXX	XXXX	XXXXX	7.3	XXXX	XXXXX
Shared LOS:	*	K	*	*	*	*	*	*	*	K	*	*
pproac		8.7		X	XXXXXX		×	XXXXXX		×	XXXXXX	
ApproachLOS:		A,						*				

APPENDIX C MITIGATED INTERSECTION LOS WORKSHEETS

11/6/2012 Future Plus Project AM-Mitigation 1 HCM Signalized Intersection Capacity Analysis 3: State Route 46 & Buena Vista Drive

375 1700 1,0

Future Plus Project PM-N	
HCM Signalized Intersection Capacity Analysis 3: State Route 46 & Buena Vista Drive	

Manual		1	†	Ļ	Ĭ	٠	*	
355 1969 2627 1700 1700 1700 1700 1700 1700 1700 17	Movement	183	EBT	WBT	WBR	SBL	SBR	SINGH PRINCES CONTROL
1,000 1,00	Lane Configurations	R.H.	**	**	R	r	×	
1700 1700 1700 1700 1700 1700 1700 1700	Volume (vph)	355	1989	2627	195	144	261	
4,0 4,0	Ideal Flow (vohol)	1700	1700	1700	1700	1700	1700	
0.97 0.35 0.95 1.00 1.00 0.85 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.9	Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	
100 1.00 1.00 0.95 1.00 0.85 1.00 0.85 0.95 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0	Lane Util Factor	260	0.95	0.95	1.00	1.00	1 00	
0.95 1.00 1.00 1.00 0.95 1.00 0.97 3167 3167 1477 1583 1477 0.95 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92	12	1.00	1.00	1.00	0,85	1,00	0,85	
3072 3167 3167 1417 1583 1417 3085 1.00 1.00 1.00 1.00 1.00 3072 3167 3167 1417 1583 1417 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.95 2.10 0.92 0.92 0.92 Prot	Fit Protected	0.95	1,00	1.00	1.00	0.95	1.00	
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	Analysis Period (min)			12				

Synchro 7 - Report Page 1

Sum of lost time (s) ICU Level of Service

31.5 0.92 150.0 85.6%

Actualed Cycle Length (s) Intersection Capacity Utilization Analysis Period (min) c Critical Lane Group 4CM Volume to Capacity ratio Infersection Summary HCM Average Control Delay

Synchro 7 - Report Page 1

Buena Vista Apartments LSA Associates, Inc.

Buena Vista Apartments LSA Associates, Inc,

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23.1 23.1 4.0 4.0 3.0 244 244 c0.17

83.3 83.3 83.3 4.0 4.0 3.0 4.0 60.52

Movement
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83.3 83.3 83.3 0.56 4.0 3.0 3.0

Synchro 7 - Report Page 1 Future Plus Project PM-Mitigation 2 12.0 E Sum of lost time (s) ICU Level of Service 6 17.0 17.0 0.11 4.0 3.0 0.92 284 201 83 83 261 261 1700 1.00 1.00 1.00 1.00 1.00 1.00 17.0 17.0 0.11 4.0 3.0 179 c0.10 0.88 65.5 1.00 41.1 HCM Signalized Intersection Capacity Analysis 98.3 98.3 0.66 4.0 3.0 929 0.92 212 51 51 161 0.96 23.9 1.00 8.6 8.6 32.5 0.0 0.0 0.0 0.0 State Route 46 & Buena Vista 142.0 0.95 4.0 3.0 3.0 3.0 3.0 0.57 0.157 0.06 1.00 1.2 4.0 0.6 1.00 0.6 1.2 4.0 1700 1700 1,00 1,00 1,00 3167 2,002 2,162 2162 355 1700 4.0 0.95 3072 0.95 386 0.92 386 7 22.7 22.7 0.15 4.0 3.0 465 c0.13 0.83 HCM Average Control Delay
HCM Volume to Capacity ratio
Actuated Cycle Length (s)
Intersection Capacity Utilization
Analysis Period (min)
c Critical Lane Group Peak-hour factor, PHF Adj. Flow (vph) RTOR Reduction (vph) Lane Group Flow (vph) Buena Vista Apartments LSA Associates, Inc. Permitted Phases Actuated Green, G (s) Effective Green, g (s) Actuated g/C Ratio ntersection Summary Clearance Time (s) Vehicle Extension (s) Lane Grp Cap (vph)
vls Ratio Prot
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vlc Ratio Incremental Delay, d2 Delay (s) Level of Service Approach Delay (s) Approach LOS Uniform Delay, d1 Progression Factor Volume (vph)
Ideal Flow (vphpl)
Total Lost time (s)
Lane Util, Factor Turn Type Protected Phases Satd. Flow (prot) Fit Permitted Satd. Flow (perm) Frt Fit Protected

Future Plus Project AM-Mitigation 2

HCM Signalized Intersection Capacity Analysis

3: State Route 46 & Buena Vista Drive

375 700 1,00

1700 1,000 1

Movement
Lane Configurations
Volume (uph)
Ideal Flow (uph)
Total Lost time (s)
Lane Util. Factor
Fit Protected
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1841

2199

\$2)	
Buena Vista Apartment	LSA Associates, Inc.

Synchro 7 - Report Page 1

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HCM Level of Service Sum of lost time (s) ICU Level of Service

26.0 0.77 150.0 84.2%

Intersection Summany
HCM Average Control Delay
HCM Volume to Capacity ratio
Actuated Cycle Length (s)
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c Critical Lane Group

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> incremental Delay, d2 Delay (s) Level of Service Approach Delay (s) Approach LOS

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Lane Grp Cap (vph) v/s Ratio Prot v/s Ratio Perm v/c Retto

Uniform Delay, d1 Progression Factor

39.6 39.6 39.6 3.0 374

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68.1 68.1 68.1 4.0 3.0 543

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30.3 30.3 30.3 30.3 77

RESOLUTION NO. 13-

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PASO ROBLES AUTHORIZING THE REMOVAL OF THREE OAK TREES AT 801 EXPERIMENTAL STATION ROAD

(BUENA VISTA APARTMENTS) APN: 025-391-006, 007, 080 & 081 & 025-541-021

WHEREAS, PD 12-005, RZ 12-003, SPA 12-003 (The Project), has been submitted by Don Benson on behalf of Arjun Buena Vista, LLC to establish a 142 unit apartment complex; and

WHEREAS, the project is proposed to be located on the 12.5-acre site on the south side of Experimental Station Road, west of Buena Vista Drive; and

WHEREAS, An Arborist Report was prepared for the project, an attached as Exhibit A, and indicates that there are 22 oak trees located within the projects impact area; and

WHEREAS, of the 22 trees, 3 trees are requested to be removed, one of the trees (Tree No. 101) is dead: and

WHEREAS, the Arborist Report indicates that Tree No. 49 is a 15-inch Valley Oak that has poor structure and Tree No. 70 is an old tree that has been abused as a result of trimming for utility lines and past road improvements; and

WHEREAS, the Community Development Director could not make the determination that Tree 49 or Tree 70 are "clearly dead or diseased beyond correction," and therefore, Section 10.01.050.C of the Oak Tree Ordinance would consider the tree "healthy" and require that the City Council make the determination of whether the tree should be removed or not, after consideration of the factors listed in Section 10.01.050.D; and

WHEREAS, there are 19 other trees being protected within the project disturbance that are being protected and used as focal points around the project site; and

NOW, THEREFORE, BE IT RESOLVED, that the City Council of the City of El Paso de Robles does hereby:

1. Authorize the removal of three (3) Valley Oak trees based on allowing the Buena Vista Apartment project to be constructed on the site at a location that would maximize the function of the buildings and therefore allow the reasonable use of the property for the purpose for which it has been zoned;

satisfaction of the Project Arborist and the City first Apartment building.	, prior to a Certificate of Occupancy of the
PASSED AND ADOPTED by the City Council of the February 2013 by the following vote:	City of El Paso de Robles this 19th day of
AYES: NOES: ABSTAIN: ABSENT:	
- [Duane Picanco, Mayor
ATTEST:	
Caryn Jackson, Deputy City Clerk	

Require forty-eight (8) 1.5-inch diameter Valley Oak replacement trees to be plated at the direction of the Arborist. The trees will need to be shown on the Oak Tree Replacement Plan for the project. All replacement trees will be required to be planted at the

2.

Preliminary Paso Robles Oak Tree Evaluation Report

and

Protection Plan

Buena Vista Apartments

802 Experimental Station Road Paso Robles, California

Prepared for

Donald W. Benson, Project Manager

P.O. Box 608 Paso Robles, CA 93447

by

ALTHOUSE AND MEADE, INC.

BIOLOGICAL AND ENVIRONMENTAL SERVICES

1602 Spring Street Paso Robles, CA 93446 (805) 237-9626

And

MICHAEL J. BOVA, ARBORIST

Davey Resource Group 7627 Morro Road Atascadero, CA 93422 Certified Arborist WE3372A Certified Tree Risk Assessor #981 (805) 286-0181

July 2012

786.01

Trees were assessed on June 14, 2012 by Michael J. Bova, Certified Arborist WE3372A, Certified Tree Risk Assessor #981, accompanied by Althouse and Meade, Inc. biologist Meg Perry. The report was collaboratively prepared by Althouse and Meade, Inc. and Davey Resource Group.

- Jufn	
	6/29/12
Michael J. Bova	Date
Certified Arborist WE3372A	
City Business License: 04600	
LynneDee Althouse, M.S.	Date
Supervising Biologist	

[Trees were previously assessed in October 2004 by Ted Elder, certified arborist (ISA #2301, exp.2006) and LynneDee Althouse, M.S., restoration ecologist.]

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Introduction and Project Description

The proposed project, Buena Vista Apartments, is a residential housing project on approximately 12.2 acres in northeastern Paso Robles, California. The proposed project would be on the south side of Experimental Station Road, immediately north of Highway 46 East between Buena Vista Drive and River Road. Buena Vista Apartments would consist of 141 units, a pool, tot lots, basketball courts, landscaping, and open space. The boundary of the Property and approximate locations of tagged trees are shown over an aerial photo in Figure 1, Appendix A.

This tree report provides baseline information on the number and type of native trees on the Property. The City of Paso Robles requires permits and mitigation for removal of oak trees. This report provides an inventory of oak trees on the Property and considers health, aesthetics, and habitat value for each tree (Appendix B). Photos of each oak tree on the Property and a preliminary tree protection plan and monitor's field report form are provided in Appendices C, D, and E.

Oak trees on the Property were previously surveyed by Twin Cities Surveying, Inc. in October 2004 and are accurately shown on the Site Plan (Appendix F). Two additional trees, 48 and 49, that were not previously large enough to be surveyed have been added in 2012. Based on the conceptual site grading and drainage plans by Ashley & Vance, dated April 30, 2012), Althouse and Meade, Inc. and Davey Resource Group have tabulated anticipated impacts and removals proposed for native oak trees on site. Changes in final grading plans could result in changes to actual impacts to trees on the Property.

A previous tree evaluation report¹ was prepared for the subject site, associated with a different design for residential housing. The previous project proposed 146 units and a clubhouse. Differences between the current project, Buena Vista Apartments, and the previous proposal, Paso de Vino, are discussed in this the Alternatives Discussion section of this report.

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¹ Althouse and Meade, Inc. 2006. Paso Robles Oak Tree Report and Protection Plan; Paso de Vino Residential Development, Tract 2696, Experimental Station Road. Prepared for SB Planning, Los Osos. [Trees were evaluated in 2004 by Ted Elder, arborist.]

Methods

The initial tree inventory was conducted in September 2004 by Althouse and Meade, Inc. A map of oak trees on the Property, including trunk and canopy locations, was prepared by Twin Cities Surveying, Inc. (Job 04193, 9/30/2004). In October 2004, LynneDee Althouse of Althouse and Meade, Inc. and Ted Elder, Licensed Landscape Architect and Certified Arborist (RLA 1402 and ISA Certified Arborist 2301) looked at all the oaks on the property to assess their health and significance. The condition of each tree was rated from A to D:

2006 Rating	Definition
A	Excellent health and form
В	Good condition, but not excellent form
С	fair condition, not good form
D	poor condition, not good form

Ratings were shown as health/aesthetic value in the 2006 report. The diameter of each tree was measured at 4.5 feet above ground with a diameter tape (Spencer 35'L ProTape). Diameters were measured to the nearest half an inch. Tree tag numbers began with 50 and ran through 101.

The originally proposed project was never constructed. In 2012, Althouse and Meade, Inc. received a request to update the previous tree report in context of the proposed Buena Vista Apartments. We contracted with Michael Bova, certified arborist with Davey Resource Group to assist in completion of this task. Two additional trees were added to the inventory in 2012, and were assigned numbers 48 and 49. Original tag numbers were retained for the 2012 tree report, and new tags were attached to trees where old tags had been removed or become obscured.

A revised database was compiled to summarize tree data and expected impacts resulting from construction of the proposed Buena Vista Apartments project. Trees 48–49, 67–78, 81–89, and 101 were re-assessed in 2012. Tree health, structure and condition were given a rating based on a percentage determined by visual examination of exposed roots, trunk, scaffold limbs, twigs and foliage. Percentage conditions are as follows:

Percentage	Rating
90–100%	Excellent
70–90%	Good
50-70%	Fair
30-50%	Poor
< 30%	Critical or Dead

Tag number, species, updated size, health evaluation, and value for these trees are provided as Tables 6 and 7 in Appendix B. Photographs of these trees are provided in Appendix C for reference. An updated exhibit showing tree locations with preliminary site plans has been provided in Figure 2, Appendix A (Arris Studio, 2012).

Thirty tagged trees (Trees 50–66, 79–80, and 90–100) evaluated in 2004 are not included in the 2012 evaluation. These trees are well outside the footprint of the currently proposed project and thus they were not re-evaluated for the updated report. Locations of these groups of trees are illustrated on Figure 1. Because these trees are well outside the proposed project, they are not

called out by number on the grading plans, but are noted as "Existing oaks, not impacted". Tag number, species ID, and size as of 2006 are provided in Table 8 for these trees.

Replacement tree mitigations are based on the City of Paso Robles requirement of either (a) 25 percent replacement per diameter at breast height (DBH); or, (b) a minimum of two (2) 24-inch box trees 1½-inch minimum trunk caliper measurement trees for each oak tree removed.

Site plan mitigations were recommended based on the location of proposed structures within the critical root zone (CRZ). CRZ is defined as a radius around the tree calculated at a ratio of one foot diameter per inch DBH. Additionally, a Tree Protection Zone (TPZ) larger than the CRZ but still within the tree root zone is defined for each tree. TPZ has a radius in feet defined by DBH in inches times 1.5. Thus, a 10-inch DBH tree would have a 15-foot radius TPZ Activities in the TPZ should be restricted to the minimum necessary to construct the project.

Results

Blue oaks (*Quercus douglasii*) and valley oaks (*Quercus lobata*) are the only native oak trees on site, and they require mitigation if they are removed. There are 17 living blue oaks and 5 living valley oaks within the project impact area. One valley oak (68) reported from the project site in 2006 has since died and been removed—no trace of this tree remained upon our first site visit in 2012. One blue oak (101) had died when the 2006 tree report was issued but was never removed. See Table 1 for summary of oaks in project impact area, and Appendix B for complete evaluations of these twenty-two trees.

Trees surveyed range in size from 6.5 inches to 48 inches in diameter at breast height (DBH). One blue oak proposed for removal is dead.

TABLE 1. 2012 Summary of native oak trees in the project impact area	a.
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Species	Number of Living Trees	Protected	Impacted	Removed
Blue oak (Quercus douglasii)	17	7	10	0
Valley oak (Quercus lobata)	5	0	3	2
Total	22	7	13	2

Twenty-five oaks, 50–66 and 90–97, occur within the Caltrans right-of-way along Highway 46 East, adjacent to the southwestern and southeastern corners of the Property (Figure 1). No impact to the Caltrans trees would occur. Five native oak trees occur along the eastern property boundary, well removed from the proposed project footprint. These trees, 79-80 and 98-100, are blue oaks. No impacts to these trees would occur. See Table 2 for summary of oaks outside project impact areas, and Appendix B for the complete list of oaks.

TABLE 2. 2012 Summary of native oak trees in the vicinity but outside the project impact area.

Species	Number of Living Trees	On Property	On Caltrans ROW	Total Protected (Outside Project Impact Area)
Blue oak	13	5	8	13
Valley oak	17	0	17	17
Total	30	5	25	30

Table 3 provides information for each of the impacted or removed trees in the project footprint area. Assessments are based on preliminary plans.

TABLE 3. Summary 2012 assessment of expected impacts and removals from the proposed project.

Tag #	Common Name	Total DBH (in.)	CRZ Radius (ft.)	TPZ Radius (ft.)	Expected Impacts/Removals
48	Blue Oak	11.5	11.5	17.25	Unlikely to impact
49	Valley Oak	15.5	15.5	N/A	REMOVE
67	Blue Oak	29	29	43.5	Permanent Impacts: • Basketball Court edge is within CRZ
69	Blue Oak	36.5	36.5	54.75	Temporary impacts: • Removal of existing structures
70	Valley Oak	32	32	N/A	REMOVE
71	Valley Oak	31.5	31.5	47.25	Temporary impacts:
72	Valley Oak	17	17	25.5	Temporary impacts: • Remove existing asphalt and built up soil around trunk Permanent Impacts: • Proposed walking path and fence are within CRZ
73	Valley Oak	15	15	22.5	Temporary impacts: • Remove existing asphalt and built up soil around trunk Permanent Impacts: • Proposed walking path and fence are within CRZ
74	Blue Oak	50	50	75	Temporary impacts:

Tag #	Common Name	Total DBH (in.)	CRZ Radius (ft.)	TPZ Radius (ft.)	Expected Impacts/Removals
75	Blue Oak	39	39	58.5	Temporary impacts: • Removal of existing structures Permanent Impacts: • Proposed driveway and foundation of one unit are partially within CRZ
76	Blue Oak	11	11	16.5	Permanent Impacts: • Proposed house foundation is partially within CRZ • Proposed deck would be within CRZ
77	Blue Oak	11	11	16.5	Unlikely to impact
78	Blue Oak	20	20	30	Unlikely to impact
81	Blue Oak	35.5	35.5	53.25	Unlikely to impact, but dependent on final retaining wall design
82	Blue Oak	32	32	48	Unlikely to impact, but dependent on final retaining wall design
83	Blue Oak	11.5	11.5	17.25	Permanent Impacts: • Proposed retaining wall is partially within CRZ • Retaining wall could alter flow patterns, changing water availability for trees 83-86
84	Blue Oak	13.5	13.5	20.25	Permanent Impacts: • Proposed retaining wall is partially within CRZ • Retaining wall could alter flow patterns, changing water availability for trees 83-86
85	Blue Oak	6.5	6.5	9.75	Permanent Impacts: • Proposed retaining wall is partially within CRZ • Retaining wall could alter flow patterns, changing water availability for trees 83-86
86	Blue Oak	15	15	22.5	Permanent Impacts: • Proposed retaining wall is partially within CRZ • Retaining wall could alter flow patterns, changing water availability for trees 83-86
87	Blue Oak	15	15	22.5	Unlikely to impact, but dependent on final retaining wall design
88	Blue Oak	26.5	26.5	39.75	Unlikely to impact, but dependent on final retaining wall design
89	Blue Oak	13	13	19.5	Tot lot is partially within CRZ.
101	DEAD Valley Oak	n/a	n/a	n/a	Dead tree at lot corner to be removed.

Trees to be removed are to be clearly marked in the field with a blue 'x' near the ground (forester's paint). An application for oak tree removal, with appropriate fees and documentation will be submitted after project grading plans are completed.

Alternatives Discussion

The original project was designed to maximize build-out on the parcel and to minimize impacts to trees. The current proposed project, Buena Vista Apartments, has a slightly lower density and bigger open space component than the previous Paso de Vino proposal. The current project also proposes to minimize and avoid impacts to native trees.

Under the previous project proposal, designs for development went through several iterations, including options to include portions of buildings under the trees, and parking spaces encroaching under Tree 69. A second alternative was to put smaller portions of buildings under trees and a corner of a parking space under Tree 69. This alternative also reduced impacts to the group of trees in the southeast corner. A third alternative was to redesign the west side of the project, realign a road, completely move buildings away from the trees, and put Tree 69 between a road and a tot lot (partially shading tot lot). A fourth alternative included avoiding all permanent impacts to Tree 69. The tot lot was relocated, roadways realigned, and a street light was moved.

The currently proposed project proposes fewer units. Significant differences in the two plans include changes to the northwest corner of the Property. Previously, eleven units were proposed southwest of Trees 67 and 69. The new plan would use this area for open space, basketball courts, and stormwater basins. Intensity of use would be reduced in the immediate vicinity of Tree 67. A retaining wall proposed for the southeast corner of the project is realigned to reduce impacts to Trees 81-88. Specifics of wall design and changes in elevation on either side of the wall will determine how effective this approach will be at retaining Trees 81-88 in good condition. The previous project suggested relocation of Tree 89 to make room for another residential unit. The current proposed project would retain Tree 89 in its existing location adjacent to a tot lot.

A residential unit near Trees 76 and 77 could affect their root zones depending how foundations are constructed and what slope stabilization work is needed. Trees on the Caltrans right of way (ROW) would not be affected; this includes Trees 50–66 near an existing stormwater inlet. Although water would continue to move from proposed stormwater basins toward this inlet, post-project storm flows are designed to be lower than existing storm flows (Winslow, pers. comm. 2012), reducing risk of erosion around tree roots on adjacent Caltrans property.

Tree Descriptions and Protection Recommendations

Most native trees in the project vicinity would not be disturbed or impacted, see preliminary Grading Plan in Appendix F. Un-impacted trees (Trees 50–66, 79–80, 90–100) are within Caltrans ROW or on the eastern side of the property (in the proposed open space area).

Trees expected to be impacted or removed are described below. For trees proposed to be impacted but not removed, protective measures are recommended to minimize impacts.

Some protection measures apply to all existing oak trees:

a. Ground disturbance within the CRZ shall be minimized where practicable.

- b. Minimize trimming of the canopy.
 - o If trimming is required during the nesting season (March through August), a qualified biologist shall inspect the tree for nesting birds and shall authorize the trimming in writing.
 - o Trimming shall be supervised and/or conducted by a certified arborist.
- c. Landscape material at the edge of the CRZ must be of native, drought tolerant species. Lawns are prohibited within the CRZ. Landscape plans near oaks shall be reviewed by the arborist for consistency with this measure. (Note: this measure may not apply to oaks planted as part of landscaping for the project.)
- d. An arborist or environmental monitor must monitor demolition and construction activities within the CRZ of oak trees.
- e. Where required, tree protection fencing shall be installed at the outer limit of the Tree Protection Zone (TPZ) wherever possible, and no closer to the tree crown than the outer edge of the Critical Root Zone (CRZ).
- f. Wherever possible, activities shall be avoided within the Tree Protection Zone.

A. Tree 48 (To be Protected):

Tree 48 is a blue oak with 3 trunks, and total DBH of 11.5 inches, located close to Buena Vista Drive on the existing fence line (Photo 6, Appendix C). Tree 48 is in Fair condition (50%). It is unlikely to be impacted by construction of the project provided the following measures are implemented:

- a. Prior to construction, tree protection fencing shall be placed to define the no-work area for crews and construction activities. Tree protection fencing shall be approved by the project arborist or environmental monitor prior to start of work.
- b. Removal of surrounding vegetation (purple leaf plum), if performed, should not include stump grinding or use of heavy equipment. This measure will prevent disruption of the CRZ.

B. Tree 49 (To be Removed):

Tree 49 is a valley oak with 4 trunks and total DBH of 15.5 inches (Photos 1, 2, and 7). This valley oak tree would be removed. This tree has been cut down and re-sprouted multiple times, and has several wounded branches where improper pruning has damaged the tree. This tree would not likely grow into a healthy adult specimen and has a condition rating of Fair (63%).

- a. Tree removal, if approved, shall commence within 30 days of inspection by a qualified biologist to determine the tree is not being used by nesting birds or bats at the time of removal. Mulch produced from this tree may be stockpiled and used under the canopy of oaks to be retained.
- b. Replace this tree with three (3) 24-inch box trees² that have at least a 1.5-inch caliper.

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² Replacement equation is calculated by 15.5 inch DBH * 0.25 = 3.875 inches caliper \div 1.5 inches per 24-inch box tree = 2.58 trees; rounds to 3 trees

C. Tree 67 (To be Protected from Unauthorized Impacts):

This tree is a 29-inch DBH blue oak located in the northwest corner of the project, along Experimental Station Road (Photo 8, 9). The canopy has been heavily trimmed to protect power lines that pass directly over the tree. Despite the trimming, Tree 67 is a large, healthy blue oak with a dense canopy that provides nesting and foraging habitat for birds. No interior pruning of the canopy has been performed for at least five years. The condition rating for this tree is Good (72%). The project has been designed to minimize impacts to this tree. Impacts will occur where a proposed basketball court would encroach into the CRZ, affecting approximately <20% of the canopy and root zone (see Tree Protection Plan, Appendix D).

- a. Removal of stored equipment and debris under the canopy of and within the CRZ of Tree 67 shall be conducted by hand.
- b. Prior to ground breaking or demolition, tree protection fencing shall be installed within the property lines, as close to the outer limit of the Critical Root Zone as practicable for construction operations. The approved deviation from the CRZ is for preparation of the proposed basketball court. Fencing shall be in place throughout the duration of the project, and temporarily relocated only under the direction of the project environmental monitor or arborist if additional access is necessary to construct the basketball court.
- c. Disruption to the TPZ shall be restricted to the basketball court area.
- d. Where possible, power lines will be re-directed away from this tree. Underground utility trenching shall not occur within the CRZ and shall be supervised within the TPZ.
- e. The tree shall be properly pruned by an arborist to facilitate healthy recovery from its poor pruning history. Structural and restoration pruning shall be delayed at least two years after construction.

D. Tree 69 (To be Protected from Unauthorized Impacts):

This tree is a 36.5-inch DBH blue oak located adjacent to the existing residence at the northwest end of the property (Photos 10, 11 and 12). This is a very large blue oak. In 2004, a varnish fungus rot (*Ganoderma* sp.) was noted growing on the trunk of the tree at ground level. This fungus likely indicated a larger problem of rot in the root zone due to previous over-watering from a lawn. The tree was rated "B", in good health in 2004. Ted Elder, Licensed Arborist, examined this tree again on February 9, 2005 and determined the root rot may be extensive and could undermine the structural integrity of the tree in the near future. By 2012, this tree was in poor health, indicating extensive damage from the fungus. Significant decay has advanced at its base and unhealed scars and bark loss on the trunk were observed. The tree was given a Poor condition rating (31%) and survival, even without construction impacts, is unlikely.

Demolition of the existing house will require work within the CRZ of Tree 69. Demolition of existing structures under this tree could stress the tree further. The following measures are required to minimize damage to the tree from demolition and structure removal activities:

a. Ground disturbance within the CRZ shall be minimized where practicable. The contractor shall use the smallest equipment possible that will effectively complete

demolition, in order to reduce compaction to the root zone. Rubber tired vehicles shall be used within the CRZ.

- o An arborist or environmental monitor shall be on site during ground disturbance within the CRZ of this tree.
- b. The trunk of the tree should be protected during the demolition of the house and adjacent storage shed using two-by-fours, 4 feet tall minimum, all the way around the tree with no more than 2 inches between each slat. The slats shall be placed flush against the trunk to protect the trunk from direct impact. Rope or wire shall be used to secure the slats, but must not damage the trunk.
- c. The contractor shall take every precaution to avoid impacts to the trunk and main branches of the tree. Demolition will require substantial hand work to minimize damage to the roots of the tree. A demolition strategy that minimizes root impacts must be approved by the arborist prior to starting work. Foundations, asphalt, and other materials within the CRZ must be removed by hand—equipment can be used to cut or break up these materials into pieces small enough to lift, but contractors may not use equipment to drag materials out from under the tree.
- d. Any roots exposed by demolition shall be treated by a tree care specialist and covered with a layer of soil to match existing topography.
- e. Prior to construction work in the vicinity of Tree 69, tree protection fencing shall be placed to define the work area for crews and construction activities. Tree protection fencing around Tree 69 may be removed only temporarily to allow access for demolition efforts. During construction, tree protection fencing shall remain in place.
- f. The use of water for dust control shall not be used within the TPZ.

Permanent impacts to the canopy and CRZ shall be avoided.

- g. A 6-inch layer of wood mulch will be placed within the CRZ but no closer than 4 inches from the trunk.
- h. No landscaping plants or irrigation shall be used within the CRZ.
- i. Benches and/or tables that are not permanently affixed to the ground may be placed under the canopy of the tree.

E. Tree 70 (To be Removed):

This tree is a 32-inch DBH valley oak located along Experimental Station Road. It is a large, old valley oak that has lost most of its main branches on the south side for power line clearance (Photos 3, 4, 13, and 14). Snags such as this can provide habitat for cavity nesting animals such as woodpeckers, nuthatches, and bats. No woodpecker cavities were observed in this tree. Natural cavities in oak trees caused by broken branches and hollowed limbs can provide roosting habitat for bats. Evidence of use by bats, including guano piles or urine staining, was not observed on this tree. The condition rating for Tree 70 is Poor (38%). The project proposes removal of this tree, and intends to replant 24-inch boxed valley oaks at the appropriate mitigation ratio (Table 4).

a. Tree removal, if approved, shall commence within 30 days of inspection by a qualified biologist to determine the tree is not being used by nesting birds or bats at

the time of removal. Mulch produced from this tree may be stockpiled and used under the canopy of oaks to be retained.

b. Replace this tree with five (5) 24-inch box trees³ that have at least a 1.5-inch caliper.

F. Tree 71 (To be Protected from Unauthorized Impacts):

This tree is a valley oak that has two trunks beginning approximately 4.5 feet above the ground. Total DBH is 31.5 inches. The condition rating for Tree 71 is Fair (63%).

Temporary impacts to Tree 71 are possible during demolition activities. However, adherence to mitigation measures outlined below will eliminate or significantly reduce these impacts.

- a. During demolition, Tree 71 shall be protected using two-by-fours 8 feet tall (minimum), all the way around the tree with no more than 2 inches between each slat. The slats shall be placed flush against the trunk to protect the trunk from direct impact. Rope or wire shall be used to secure the slats, but must not damage the trunk.
- b. Ground disturbance within the CRZ shall be minimized where practicable. The contractor shall use the smallest equipment possible that will effectively do the demolition, in order to reduce compaction to the root zone.
- c. The contractor shall take every precaution to avoid impacts to the trunk and main branches of the tree. A demolition strategy that minimizes root impacts shall be approved by the arborist. Foundations, asphalt, and other materials within the CRZ must be removed by hand equipment can be used to break up these materials into pieces small enough to lift, but contractors may not use equipment to drag materials out from under the tree.

Less than 20 percent of the tree will be impacted by proposed construction of the residential units, walking paths, and planter curb near this tree. The following measures would minimize impacts to Tree 71 during and after construction:

- d. Tree protection fencing shall be installed at the outer limit of the Critical Root Zone (CRZ) at the onset of ground breaking activities. The fencing shall be in place throughout the duration of the project, and temporarily relocated only under the direction of the project environmental monitor or arborist, such as while demolition is in progress.
- e. Soil shall not be excavated during removal of foundations or other solid structures. Demolition shall not result in unnecessary ground disturbance. Any roots exposed by demolition shall be treated (as appropriate) by a tree care specialist and covered by a layer of soil.
- f. Landscape material within the CRZ must be of native, drought tolerant species. Lawns are prohibited within the CRZ.
- g. Fence posts and hardscape such as sidewalks shall be installed under the supervision of an arborist. Post locations shall avoid major roots (over 2 inches in diameter).

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³ Replacement equation is calculated by 32-inch DBH * 0.25 = 8 inches caliper $\div 1.5$ inches per 24-inch box tree = 5.3 trees; rounds to 5 trees

- Prior to hardscape installation, the disturbance area shall be investigated by hand (or with an air spade) and holes/trenches situated to avoid large roots.
- h. Building construction may require tree pruning. Pruning shall be done under permit, by a tree care specialist.
- i. Tot lot construction shall be designed to avoid impacts within the CRZ.
- j. Installation of light pole may require pruning. Pruning shall be done under permit, by a tree care specialist.

G. Trees 72 and 73 (To be Protected from Unauthorized Impacts):

Tree 72 is a 17-inch valley oak, and Tree 73 is a 15-inch valley oak, a pair of trees with condition ratings of Fair (59%). They are located along Experimental Station Road, under utility lines in front of an existing residence (Photos 17 and 18). The existing driveway is within the CRZ, and will be removed as part of the home demolition. A planter has been constructed around these trees, and filled with soil, raising the grade above natural level and piling soil against the trunks of both trees. Tree 72 has grown into a metal post that is now embedded in the trunk. Both of these trees will be impacted by the demolition project. Temporary impacts to Trees 72 and 73 will result from demolition of existing driveways, planters, and landscapes within the CRZ.

- a. Protection fencing shall be in place throughout the duration of the project, and temporarily relocated only under the direction of the project environmental monitor or arborist, while demolition is in progress. Tree protection fencing shall be approved by the project arborist or environmental monitor prior to start of work.
- b. Ground disturbance within the CRZ shall be minimized where practicable. If vehicles or equipment must operate with in CRZ, they shall be the smallest size equipment possible, and have rubber tires only.
- c. The contractor shall take every precaution to avoid impacts to the trunk and main branches of the tree. Demolition may require substantial hand work to minimize damage to the roots of the tree. A demolition strategy that minimizes root impacts must be approved by the arborist prior to starting work. Asphalt and driveway base materials within the CRZ must be removed by hand—equipment can be used to cut or break up these materials into pieces small enough to lift, but contractors may not use equipment to drag materials out from under the tree.
- d. Planter and built up soil around Trees 72 and 73 must be removed by hand, returning soil elevation to natural grade.
- e. Trees 72 and 73 may require treatment within the CRZ to increase aeration following removal of the existing driveway. Treatment shall consist of root collar excavation to expose root flare, vertical mulching and applying a 6-inch layer of wood chips within the CRZ.
- f. The metal stake embedded in the trunk of Tree 72 shall not be removed.
- g. Any roots exposed by demolition shall be treated (as appropriate) by a tree care specialist and covered by a layer of soil.

Trees 72 and 73 will be impacted by the construction of a sidewalk and installation of a fence. Tree 72 will have permanent impacts to less than 25 percent of its canopy and CRZ. An estimated 10 percent of Tree 73 will be impacted by the project.

- h. Sidewalk material shall be pervious, to provide air and flexibility for root growth.
- i. Prior to hardscape installation, the disturbance area shall be investigated by hand (or with an air spade) and holes/trenches situated to avoid large roots.
- j. Site preparation for hardscape installation in the vicinity of Trees 72 and 73 shall be supervised by an arborist or trained environmental monitor.

H. Tree 74 (To be Protected from Unauthorized Impacts):

This tree is the largest on the Property, a 50-inch blue oak located in the front yard of an existing residence on Experimental Station Road (Photos 19 and 20). It has a condition rating of Poor (44%). The rating is low because of cavities in the trunk formed by the loss of primary limbs. Cement has been used to fill these cavities. The canopy is in fair condition, but is lopsided due to loss of primary limbs and competition from a nearby elm tree. The project will demolish the adjacent trailer and driveway, and will impact the root zone of Tree 74. A sidewalk will pass through the CRZ on the north side. A driveway and part of the eastern-most house would also pass through the CRZ on the east side. Construction of the project is expected to cause impacts up to approximately 50 percent of the root zone.

- a. Tree protection fencing shall be installed at the outer limit of the Critical Root Zone (CRZ) at the onset of ground breaking activities. The fencing shall be in place throughout the duration of the project, and temporarily relocated only under the direction of the project environmental monitor or arborist, while demolition is in progress.
- b. The cement in the trunk of the tree shall be evaluated by the project arborist who shall then make recommendations regarding its future. Further inspection may determine if the cement should be removed and the old spar pruned off for aesthetics and trunk healing.
- c. Ground disturbance within the CRZ shall be minimized where practicable. The contractor shall use the smallest equipment possible that will effectively do the demolition, in order to reduce compaction to the root zone. Where equipment must access the CRZ, only rubber tired vehicles shall be used.
- d. The contractor shall take every precaution to avoid impacts to the trunk and main branches of the tree. Demolition may require substantial hand work to minimize damage to the roots of the tree. A demolition strategy that minimizes root impacts must be approved by the arborist prior to starting work. Foundations within the CRZ must be removed by hand—equipment can be used to cut or break up these materials into pieces small enough to lift, but contractors may not use equipment to drag materials out from under the tree.
- e. Demolition shall not result in unnecessary ground disturbance. Any roots exposed by demolition shall be treated (as appropriate) by a tree care specialist and covered by a layer of soil.

- f. An adjacent driveway to the proposed house east of Tree 74 will require paving within the CRZ. Interlocking pavers, permeable pavers, or similar materials shall be used that will allow proper infiltration of water and exchange of oxygen to the root zone of the tree. The project architect and civil engineer will work with the arborist to create a design that is both effective and aesthetically pleasing. In areas requiring paving, pervious surfaces shall be maximized.
- g. The foundations of the adjacent house and residential unit to the east and the south shall be designed and constructed such that CRZ impacts are minimized.

I. Tree 75 (To be Protected from Unauthorized Impacts):

This tree is a 37-inch blue oak located behind the easternmost residence (Photos 21 and 22). It is a large healthy tree with a tall, spreading canopy. The condition rating for this tree is Fair (63%). A metal hoist and a shed with a cement foundation are currently located within the CRZ, adjacent to the trunk of the tree. Demolition activities may impact 10 percent of the root zone. An adjacent residential unit and parking area would impact less than 20 percent of the CRZ on its west side.

- a. Tree protection fencing shall be installed at the outer limit of the Critical Root Zone (CRZ) at the onset of ground breaking activities. The fencing shall be in place throughout the duration of the project, and temporarily relocated only under the direction of the project environmental monitor or arborist, while demolition is in progress.
- b. Ground disturbance within the CRZ shall be minimized where practicable. The contractor shall use the smallest equipment possible that will effectively do the demolition, in order to reduce compaction to the root zone. Rubber tired vehicles shall be used within the CRZ. An environmental monitor will monitor construction activities adjacent to the CRZ of this oak tree.
- c. The contractor shall take every precaution to avoid impacts to the trunk and main branches of the tree. Demolition may require substantial hand work to minimize damage to the roots of the tree. A demolition strategy that minimizes root impacts must be approved by the arborist prior to starting work. Foundations within the CRZ must be removed by hand—equipment can be used to cut or break up these materials into pieces small enough to lift, but contractors may not use equipment to drag materials out from under the tree.
- d. The hoist adjacent to the trunk shall be removed under the supervision of a Certified Arborist or environmental monitor. A welding torch shall be used to cut the hoist into pieces prior to removal. If practicable, the hoist footings shall be cut at, or slightly below, ground level to avoid impacts to the CRZ.
- e. Soil shall not be excavated during removal of foundations or other solid structures. Demolition shall not result in unnecessary ground disturbance. Any roots exposed by demolition of the shed shall be treated (as appropriate) by a tree care specialist and covered by a layer of soil.
- f. Landscaping and building construction would require foundation work and paving within the CRZ.

g. If final field staking indicates that paving will impact the CRZ, interlocking pavers or Aqua Stone shall be used that will allow proper infiltration of water and exchange of oxygen to the root zone of the tree. The project architect will work with the arborist to create a roadway design using pavers that is both effective and aesthetically pleasing.

J. Tree 76 (To be Protected from Unauthorized Impacts):

This tree is an 11-inch DBH blue oak located near the east edge of the project, on the top of the slope east of Tree 74 (Photos 23 and 25). The tree is just south of a proposed home. The condition rating for this tree is Fair (63%). The foundation of the proposed home would encroach slightly into the CRZ for Tree 76. Demolition activities may impact less than 10 percent of the root zone. The following measures are required to minimize impacts to Tree 76:

- a. Tree protection fencing shall be installed at the outer limit of the Critical Root Zone (CRZ) at the onset of ground breaking activities and shall be in place throughout the duration of the project. Fencing may be temporarily relocated only under the direction of the project environmental monitor or arborist while demolition is in progress.
- b. Excess soil from grading shall not be deposited into the CRZ or onto the slope.

K. Trees 77 and 78 (To be Protected):

Tree 77 is a blue oak with total DBH of 11 inches (Photos 24 and 26). This tree located close Tree 76 near the east edge slope of the project area. Tree 78 is a blue oak with total DBH of 20 inches (Photos 27 and 28). Tree 78 is east of Tree 75. Both trees have condition ratings of Fair (63% and 66% respectively). These trees are unlikely to be impacted by construction of the project provided the following measures are implemented:

- a. Prior to construction, tree protection fencing shall be placed to define the no-work area for crews and construction activities. Tree protection fencing shall be approved by the project arborist or environmental monitor prior to start of work.
- b. Excess soil from grading shall not be deposited into the CRZ or onto the slope.

L. Trees 81, 82, 87, and 88 (To be Protected):

These blue oak trees are located near the southeast corner of the proposed Project (Photos 29 and 30). Trees 81 and 82 both have a condition rating of Fair (50) and share a combined canopy. Trees 87 and 88 have a condition rating of Poor (47% and 44% respectively) and present with decay on their trunks. All four trees have heavy end weight in their canopies and soil has built up around the upslope side of their trunks. A retaining wall has been redesigned to minimize impacts to these trees and to Trees 83 through 86. The proposed wall is outside the CRZ of Trees 81 through 82 and 87 through 88. However, retaining walls can affect water movement, influencing future success of trees downslope of the wall. The following design recommendations would help ensure no impacts to these trees:

- a. An arborist shall review and approve final grading, drainage and landscape plans (related to tree impacts) prior to issuance of the grading permit.
- b. Final grade changes and drainage patterns shall not increase erosion onto the slope.

- c. Increase in grade level shall not encroach beyond edge of existing slope and should stay outside the CRZ where possible.
- d. Excess soil from trenching for the retaining wall footing shall not be deposited into the CRZ or onto the slope.

M. Trees 83 through 86 (To be Protected from Unauthorized Impacts):

Trees 83 through 86 are blue oaks, ranging in size from 6.5 to 15 inches DBH (Photos 29 and 30). Condition ratings range from Poor (47%) for Tree 85, Fair (50%) for Tree 86, and Fair (59%) for Trees 83 and 84. All trees have crowded canopies and significant soil build up at their bases. The retaining wall proposed for the southeast corner of the project would directly affect CRZ for Tree 86, and changes in water movement could indirectly affect Trees 83 through 85. The following measures would minimize impacts to these trees:

- a. An arborist shall review and approve final grading and landscape plans (related to tree impacts) prior to issuance of the grading permit.
- b. Tree protection fencing shall be installed at the outer limit of the Critical Root Zone (CRZ) at the onset of ground breaking activities wherever feasible. The fencing shall be in place throughout the duration of the project, and relocated (or removed) only under the direction of the project environmental monitor or arborist, while construction is in progress.
- c. Ground disturbance within the CRZ shall be minimized where practicable. Any roots exposed by project activities shall be treated (as appropriate) by a tree care specialist and covered by a layer of soil. An environmental monitor will monitor construction activities adjacent to the CRZ.
- d. Trenching within the CRZ must be approved by the project arborist, and shall be done by hand. Roots will be treated by the project arborist or approved tree care specialist.
- e. Excess soil from trenching for the retaining wall footing shall not be deposited into the CRZ or onto the slope.
- f. Increase in grade level shall not encroach beyond edge of existing slope and should stay outside the CRZ where possible.

N. Tree 89 (To be Protected from Unauthorized Impacts):

This tree is a small blue oak with total DBH of 13 inches. The condition rating for this tree is Fair (53%). This tree is close to a proposed tot lot, and some activities for construction of the tot lot would encroach on the CRZ. A pedestrian path would encroach slightly on the other side of the CRZ. The retaining wall will encroach into the TPZ for a total disturbance of less than 40 percent. We recommend the following measures to reduce impacts to Tree 89:

- a. A 6-inch layer of mulch shall be placed in the CRZ of Tree 89.
- b. Configure the tot lot play equipment such that no foundations or ground-disturbing work is necessary within the CRZ.
- c. Trenching within the CRZ must be approved by the project arborist, and shall be done by hand. Roots will be treated by the project arborist or approved tree care specialist.

O. Tree 101 (Dead; To be Removed):

This tree is a 30-inch valley oak located at the northeast property corner, along Experimental Station Road (Photo 5). The tree died in June 2006. We recommend removal.

a. Tree removal, if approved, shall commence within 30 days of inspection by a qualified biologist to determine the tree is not being used by nesting birds or bats at the time of removal. Mulch produced from this tree may be stockpiled and used under the canopy of oaks to be retained.

P. Trees 50–66, 79–80, and 90–99 (To be Protected)

These trees are outside the project impact footprint, and updated assessments of these trees were not necessary for the Buena Vista Apartments project (Photo 33). Fencing or flagging the edge of the project area would sufficiently protect these trees.

Tree Protection and Mitigation Measures.

Mitigation 1. Protect and monitor all trees to be impacted and fully protected within 50 feet of disturbance. This includes preparation of a tree fencing plan upon completion of grading plans and prior to issuance of permits.

- Mitigation 2. Monitor all tree impacts and removals.
- **Mitigation 3**. Replace trees that are removed per City Tree Ordinance.
- Mitigation 4. Judiciously prune; treat large wounds and cuts to roots and branches.
- **Mitigation 5**. Prepare and implement an oak tree planting plan to account for mitigation plantings.
- **Mitigation 6.** Use porous pavers when paving is required within the CRZ.
- **Mitigation 7**. Show all tree protection requirements on grading plans.
- Mitigation 8. Tot lot construction shall minimize impacts to Tree 89.

Mitigation 1. Protect and monitor oaks on and adjacent to the Project Impact Area. Provide protection during construction for all trees not proposed for removal. Upon completion of grading plans and prior to issuance of permits, prepare a Tree Protection Plan Sheet illustrating locations of tree protection fencing and calling out specific measures for each tree in the Project Impact Area.

- a. All native trees will be tagged with permanent numbered tags (round aluminum tags, 1.25 inches in diameter). Completed September 2004, checked May 2012.
- b. Any changes in the project referenced in this report will need Project Arborist review to ensure the report is still valid.
- c. Tree protection fencing (orange construction fencing) will be installed at the outer limit of the CRZ or, where feasible, the TPZ with t-posts placed in the ground no further apart than six (6) to eight (8) feet. Construction fencing will be firmly affixed with wire or zip ties. Trees that may be impacted shall be protected with construction fencing, depending on the impacts expected within the dripline (see Appendix D).
 - Protective fencing is required between all construction activities and native trees. Fence locations will be established at the direction and approval of the Project Arborist prior to commencing construction.
 - o Protective fencing shall be installed prior to any site disturbance or construction, and shall remain in place until all construction is complete.
 - O No grading, trenching, materials storage, soil storage, debris or site disturbance shall occur within the protected area. No concrete, plaster, or paint washout shall be allowed within the protected area. No concrete, plaster, or paint washout shall be allowed within the tree protection zone. Under no circumstance shall lack of space be used as reason to remove protective fencing.

o Weather-proof signs shall be permanently posted on protection fences every 50 feet (maximum) with the following information:

Tree protection zone

No personnel, equipment, materials, and vehicles are allowed. Do not remove or replace this fence.

Project Manager [name and phone number].

- d. An environmental monitor or arborist shall conduct a worker education meeting for the contractors and operators prior to ground-breaking activities. The briefing shall include a walk-through to identify each of the trees in the work area: the trees to be protected, and the trees that may be impacted or removed. The project manager shall be responsible for instructing workers about tree protection goals, implementing protection of root zones, dust control, and installing and maintaining protective fencing.
- e. The monitor shall check weekly to determine if the listed trees are being protected.

Mitigation 2. Monitor all tree impacts and removals. Prepare a monitoring program to implement the required mitigation measures.

- a. All impacts and disturbance within the root zone shall be documented and reported to the project manager and to the arborist who must treat and/or assess damaged branches and roots.
- b. Removals will be documented by the monitor who will tabulate mitigation obligations.
- c. The project will be reviewed by the arborist at various times of the development. Meetings with the arborist shall be arranged at least 48 hours in advance. The arborist shall review the project:
 - i. Prior to issuance of a grading permit to ensure proper installation of protective fencing and signage;
 - ii. At the time there is any work within the CRZ of an oak tree;
 - iii. Prior to certificate of occupancy;
 - iv. Any other critical times the arborist deems necessary (i.e., during installation of tot-lot improvements)
 - v. At the time of each monitoring site visit, a field report form (see example in Appendix D) will be filled out and given to the Project Manager and the City of Paso Robles Planning Department.

Mitigation 3. Replace oaks that are removed with eight (8) 24-inch boxed oaks.

- a. The City of Paso Robles Tree Preservation Ordinance⁴ requires mitigation for native trees removed. The sizes protected are six inches (6") DBH or greater, for native deciduous trees. Replacement trees shall be locally grown, native stock (if available) of the same species as the removed tree.
- b. Table 4 provides a summary of the mitigation obligation for removal of Trees 49 and 70. Replacement oak caliper diameter must be equivalent to 25% of the diameter of the removed trees⁵.

TABLE 4. Tree replacement calculated to mitigate for proposed removals⁶. Trees will be replaced with 24-inch box trees with a minimum caliper of 1.5 inches.

Tag #	Common Name	Health/ Aesthetic Rating	DBH (inches)	Mitigation caliper required (inches)	Number of 24" box trees, 1.5" caliper
49	Valley Oak	Fair (63%)	15.5	3.9	3
70	Valley Oak	Poor (38%)	32.0	8.0	5
Totals			47.5	11.9 ⁷	8 trees

- c. If a senescent or decadent tree rated "Poor" proposed for removal dies of natural causes during the planning process, the tree will be removed from the mitigation calculation.
- d. The environmental monitor will keep a running tally of the total number of trees removed during construction of the project. A final mitigation obligation determination will be provided by the environmental monitor to the project manager and to the City of Paso Robles.

Mitigation 4. Pruning and wound care shall be done under the supervision of a Certified Arborist or City approved tree care specialist.

a. All cuts to roots over 1 inch and branches over 3 inches in diameter will be treated, as appropriate, to reduce fungal, bacterial, and insect infections. A Certified Arborist or tree care specialist shall be contracted to care for damaged roots and branches during construction. Appropriate antifungal, antibacterial, and pesticide treatments should

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⁴ City of El Paso de Robles - Ordinance No. 835 N.S.

⁵ For example, the replacement requirement for removal of two trees of 15 inches DBH (30 inches, total) would be 7.5 inches (caliper, measured at the base of the young tree). This requirement could be satisfied by planting five 1.5-inch trees, or three 2.5-inch trees, or any other combination totaling 7.5 inches. A minimum of two 24-inch box, 1.5-inch trees shall be required for each oak tree removed. (City of El Paso de Robles - Ordinance No. 835 N.S., page 5)

⁶ Tree 101 is not included in this table because it is dead.

⁷ Calculation: 47.5 inches * 25% = 11.9 inches mitigation ÷ 1.5 inches/mitigation tree = 7.9 mitigation trees

- be used on cut roots and branches. Black tree paint shall not be used on either roots or branches.
- b. Treat large wounds to roots and branches by cutting perpendicular to the root direction. Cut back to undamaged wood.
- c. Roots exposed during demolition and construction shall be treated, as appropriate, by a tree care specialist and covered by a layer of soil.

Mitigation 5. Prepare and implement a Mitigation Monitoring and Reporting Plan.

- a. The mitigation plan will include tree planting, protection, maintenance, and monitoring for seven (7) years. Success criteria will include tree height and total numbers of live trees at the end of seven years. The final landscape bond amount will not be returned until the success criteria have been met.
- b. The mitigation plantings will be monitored by a City-qualified tree specialist (biologist or arborist).

Mitigation 6. Use porous pavers when paving is required within the CRZ.

a. Trees 71, 74 and 75 are large oaks located near proposed parking, driveways, and sidewalks. These hardscapes encroach within the CRZ of each tree. Any paving within the CRZ shall be done with porous pavers that will allow oxygen and moisture exchange to occur within the root zone. Porous pavers shall be approved by arborist. The pavers shall cover the CRZ at minimum, and should cover the largest possible portion of the paved area surrounding the tree with a minimum amount of base material.

Mitigation 7. Show all tree protection requirements on final grading plans.

- a. All trees to be protected from unauthorized impacts will be clearly shown on grading plans.
- b. Tree protection recommendations approved by the project arborist will be shown on the grading plans.

Mitigation 8. Tot lot construction shall minimize impacts to Tree 89.

- a. A 6-inch layer of mulch shall be placed in the CRZ of Tree 89.
- b. Configure the tot lot play equipment such that no foundations or ground-disturbing work is necessary within the CRZ.
- c. Trenching within the CRZ must be approved by the project arborist, and shall be done by hand. Roots will be treated by the project arborist or approved tree care specialist.

Long Term Impacts

TABLE 5. LONG TERM IMPACT ASSESSMENT FOR TREES IN THE PROJECT IMPACT AREA.

Tree	Location	Immediate Project Impacts	Long-term Impacts	Health Risk
48	Northeast corner of project	N/a	None	n/a
49	Center of project	Removal	Removal of tree; replacement with large container stock.	n/a
67	Northwest corner of the property,	 Demolition of driveway and removal of stored materials Basketball Court edge is within CRZ 	Line clearance pruning unrelated to Project	
69	Northwest portion of the property,	 Demolition of house and removal of stored materials 	Damage to CRZ may occur during foundation removal.	High
70	Northern boundary, along Experimental Station Road.	Removal	Removal of tree; replacement with large container stock.	n/a
71	Adjacent to existing outbuildings; near center of project	 Demolition of adjacent buildings Site preparation Building construction Storm drain construction 	Change in irrigation regime (it has been in a residential landscape)	
72 73	Experimental Station Rd. – in frontage open space	Demolition of existing driveway and removal of built up soil and planter rim	Sidewalk and landscape materials	
74	Experimental Station Rd near northeast corner	 Demolition of existing driveway and structures Proposed sidewalk, walking path, driveway, and foundation of house are partially within CRZ 		

Tree	Location	Immediate Project Impacts	Long-term Impacts	Health Risk
75	East side of project	 Demolition of existing structures Proposed driveway and foundation of one unit are partially within CRZ 		
76	East side of project	 Proposed house foundation is partially within CRZ Proposed deck would be within CRZ 		
77 78	East side of project	No likely project impacts	None	n/a
81- 82, 86- 88	Southeast corner of project	 Unlikely to be impacted, but dependent on final retaining wall design 		
83- 86	Southeast corner of Project	 Proposed retaining wall is partially within CRZ Retaining wall could alter flow patterns, changing water availability for trees 83-86 		
89	Southeast corner of project	• Tot lot is within CRZ		

Conclusion

The project, as revised April 2012, meets the requirements of the City of Paso Robles Oak Tree Ordinance to preserve the oak trees on site, provided arborist recommendations for individual trees are incorporated into final plans. Arborist review of final plans is required prior to issuance of permits.

Two living oaks and one dead oak are proposed to be removed: Tree 49, a young valley oak with poor structure; Tree 70, an old tree on Experimental Station Road, has been abused by pruning and road improvements; and Tree 101 (already dead). Tree 70 is senescent, and in decline. This tree no longer provides an important aesthetic or habitat function. Tree 101 is dead and would be removed.



Photo 1. Tree 49 – Full View, 2012 condition.



Photo 2. Tree 49 – Showing Basal Cuts, 2012 condition.



Photo 3. Tree 70 – View east on Experimental Station Road (2004 condition).



Photo 4. Tree 70 – View west on Experimental Station Road (2012 condition).

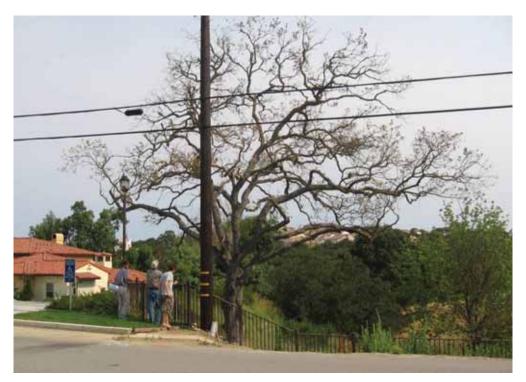


Photo 5. Tree 101 died in June 2006 and would be removed. View south from Experimental Station Road.

APPENDIX A – Figures

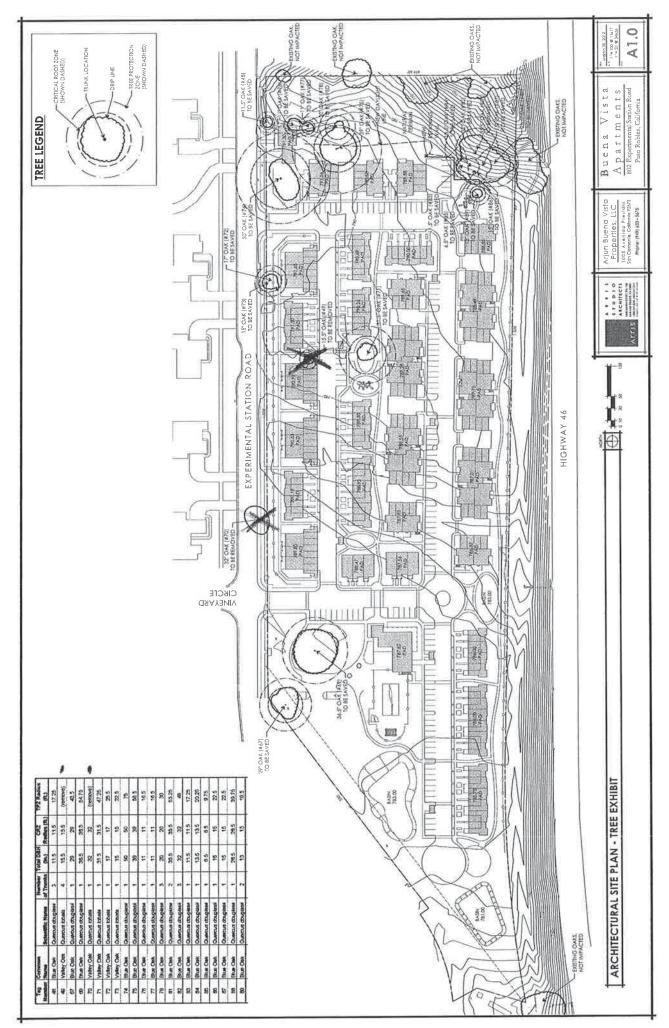
- Figure 1. Aerial Photo with Property Boundary and Tree Numbers (Althouse and Meade, 2012)
- Figure 2. Tree Exhibit over Preliminary Site Plan (Arris Studios, 2012).
- Figure 3. Final Tree Protection Site Plan (to be included after final approved grading plans)
- Figure 4. Tree Protection Action Key (to be included after final approved grading plans)



2010 San Luis Obispo County NAIP Aerial Photography Map Updated: July 02, 2012, 10:41 AM

Althouse and Meade, Inc. 1602 Spring Street Paso Robles, CA 93446

Buena Vista Apartments Experimental Station Road



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APPENDIX B – Oak Trees in the vicinity of Buena Vista Apartments Project Impact Area

- Table 6. Field observations of trees in or near the Project Impact Area.
- Table 7. Tree Valuation.
- Table 8. Other Trees, not re-evaluated in 2012. These include trees on Caltrans property, not to be impacted, and trees along the eastern edge of the Property, well outside the impact area.

TABLE 6. FIELD OBSERVATIONS OF TREES IN OR NEAR THE PROJECT IMPACT AREA.

Althouse and Meade, Inc. - 786.01

Excessive Lean,					×								
Serious Decline,				×									
Overhead Utility,			×		×								
Mechanical Damage,			×	×			×		×				
,eaniV													
Нагdware,													
Stressed,				×	×								
Suppressed,				×	×								
Weak Union,		×				×			×				
Included Bark,													
Broken Limbs,			×	×	×				×				
Вгапсћ Dесау,				×	×				×	×			
Ваѕаі Dесау,				×									
Trunk Decay,	×			×					×				
Кооі				×									
Compacted Soils,					×	×							
Small DW (1-2"),	×		×	×	×	×	×	×	×	×	×	×	×
Large DW (3"+),			×	×	×		×	×	×	×			
,bebi& enO					×				×				
Narrow Crown,													
Full Crown,	×	×	×	×		×	×	×		×	×	×	×
Comments	3 stems, 4th stem cut off, some decay at union, on slope, some soil build up	4 stems, repeated cuts to ground level, all stems are mature suckers	pruned for line clearance, multiple trunk scars, dense unpruned interior, multiple stored items under tree, mistletoe	major stubs, decay at base, sucker growth, girdling roots, storage under canopy, missing unhealed bark, poor tree	poor structure, side pruned for power lines, cavity at 20', poor tree	2 stems at 5' and V-shaped crotch, measured below split	combined canopy with #73, old stake embedded in trunk, unpruned, buried root flare	combined canopy with #72, in raised planter, buried root flare, ground squirrel tunnels	old broken 30" leader with cement, was a lawn area, decay in trunk/leaders, cavities, competes with nearby elm	next to storage shed, some decay in upper leaders/limbs, good root flare, galls present, nice old tree	measured below split @ 4', young tree at bottom of slope	measured at 3' below split, young tree with a lower leader, on slope	3 stems out of base, young tree
Stems*	က	4	~	-	_	7	~	_	-	~	1	~	3
Foliage*	2.0 4	3.0 8	3.0 30	1.0 25	2.0 20	3.0 25	3.0 20	3.0 20	2.0 30	3.0 35	2.0 6	2.0 6	3.0 8
*sgiwT	2.0 2.	3.0 3.	3.0	1.0 1.	2.0 2.	3.0	2.0 3.	2.0 3.	2.0 2.	2.0 3.	2.0 2.	2.0 2.	2.0 3.
Scaffold Branch Structure*	2.0	1.0	3.0	2.0	1.0	3.0	3.0	3.0	2.0	2.0	2.0	2.0	2.0
Scaffold Branch *Health*	2.0	2.0	3.0	1.0	1.0	3.0	2.0	2.0	1.0	3.0	3.0	3.0	3.0
Trunk Structure*	2.0	2.0	3.0	1.0	1.0	2.0	2.0	2.0	1.0	2.0	2.0	2.0	2.0
Trunk Health*	2.0	3.0	2.0	1.0	1.0	2.0	3.0	3.0	2.0	3.0	3.0	3.0	3.0
Root Structure*	0 2.0	3.0	3.0	0 2.0	0 2.0	0 2.0	0 2.0	0 2.0	0 2.0	0 2.0	3.0	3.0	3.0
Foot Health*	5 2.0	5 3.0	3.0	.5 1.0	2.0	5 2.0	2.0	2.0	2.0	3.0	3.0	3.0	3.0
DBH (in.)	11.5	15.4	59	36.	32	31.5	17	15	50	39	11	11	20
Tree	48	49	29	69	70	71	72	73	74	75	9/	77	78

Buena Vista Apartments Oak Tree Evaluation Report and Protection Plan

Excessive Lean,					×	×	×	×	
Serious Decline,									
Overhead Utility,									
Mechanical Damage,								×	
,≳əniV									
Нагамаге,									
Stressed,									×
Suppressed,	×	×	×	×	×	×	×	×	
Weak Union,									
Included Bark,									
Broken Limbs,								×	
Вгапсһ Dесау,								×	
Basal Decay,								×	
Тгипк Dесау,							×	×	
Root Damage/Decay,		×							
Compacted Soils,									
Small DW (1-2"),	×	×	×	×	×	×	×		×
Large DW (3"+),	×	×					×	×	
,babi2 anO									
Marrow Crown,					×	×			
Full Crown,	×	×	×	×			×	×	×
Comments	splits at 5', combined/crowded by #82, soil build up on upslope	3 stems, heavy end weight, combined canopy with #81, suppressed growth	top of slope, soil build up on trunk	soil build up on upslope side of trunk	severe lean, poor structure, soil build up	Severe lean, sparse foliage, deadwood, soil build up	measured above old cut which is not healing, leans heavily away from #88, next to billboard, soil build up	next to billboard, large cavity/wound at base, heavy end weight, significant deadwood, lean	2 stems, buried root crown, sparse foliage, gophers
*smai2	2	က	~	-	~	1	-	~	7
Canopy Radius*) 20) 20	9	8	8	10) 20	30	8
Foliage*	2.0	2.0	2.0	2.0	0 1.0	0 2.0	0 1.0	2.0 2.0	2.0 2.0
*surunue)	0	0					٧.	
	2 2.0	0 2.0	0 2.0	0 2.0	0 2.0	0 2.0	0 2.0		
Scaffold Branch Structure*	2.0	2.0	2.0	2.0	2.0	1.0	1.0	1.0	2.0
	2.0 2.0	2.0 2.0	3.0 2.0	3.0 2.0	2.0 2.0	2.0 1.0	2.0 1.0	2.0 1.0	2.0 2.0
Health* Scaffold Branch	2.0 2.0 2.0	2.0 2.0 2.0	3.0 3.0 2.0	3.0 3.0 2.0	2.0 2.0 2.0	2.0 2.0 1.0	2.0 2.0 1.0	2.0 2.0 1.0	2.0 2.0 2.0
Scaffold Branch Health* Scaffold Branch	2.0 2.0 2.0 2.0	2.0 2.0 2.0 2.0	3.0 3.0 3.0 2.0	3.0 3.0 3.0 2.0	2.0 2.0 2.0 2.0	3.0 2.0 2.0 1.0	3.0 2.0 2.0 1.0	1.0 2.0 2.0 1.0	3.0 2.0 2.0 2.0
Trunk Structure* Scaffold Branch Gealth*	2.0 2.0 2.0	2.0 2.0 2.0	3.0 3.0 2.0	3.0 3.0 2.0	2.0 2.0 2.0	2.0 2.0 1.0	2.0 2.0 1.0	2.0 1.0 2.0 2.0 1.0	2.0 2.0 2.0
Trunk Health* Trunk Bructure* Scaffold Branch Trunk Structure*	2.0 2.0 2.0 2.0	2.0 2.0 2.0 2.0	3.0 3.0 3.0 2.0	3.0 3.0 3.0 2.0	2.0 2.0 2.0 2.0	3.0 2.0 2.0 1.0	3.0 2.0 2.0 1.0	1.0 2.0 2.0 1.0	3.0 2.0 2.0 2.0
Root Structure* Trunk Health* Trunk Structure* Scaffold Branch Health*	2.0 2.0 2.0 2.0 2.0	2.0 2.0 2.0 2.0 2.0	2.0 3.0 3.0 2.0	2.0 3.0 3.0 2.0	2.0 2.0 2.0 2.0 2.0	2.0 3.0 2.0 2.0 1.0	2.0 3.0 2.0 2.0 1.0	2.0 1.0 2.0 2.0 1.0	2.0 3.0 2.0 2.0 2.0

Althouse and Meade, Inc. - 786.01

TABLE 7. TREE VALUATION.

	_		1 — —	FIELD DATA	4								APPRAISAL CALCULATIONS	ULATIONS	
Species (in) DBH Trunk Area (sq in) Adj. Trunk Area (sq in) Adj. Trunk Area (sq in) Site %	Trunk Area (sq in) Adj. Trunk Area (sq in) Condition	(sq in) Adj. Trunk Area (sq in) Condition Site %	(ni p2) noifibno % 9fi2	% əfiZ		% noitudintno0	0/ 11012 = 21 - 11 - 12	Placement %	Location	Species Rating	Appraised Trunk Area (sq in)	Appraised Tree Trunk Increase (sq in)	Basic Tree Cost	Appraised Value \$	Rounded Appraised Value \$
Ouercus douglasii 12 104 104 50 75	104 104 50	104 50	20		75		75	75	75	70	104	6	11,020.83	2,892.97	2,900.00
Ouercus Iobata 16 189 63 60	189 189 63	189 63	63		09		20	20	53	06	189	182	20,020.83	6,006.25	6,000.00
18ii 29 660 660	660 660 72	660 72	72		70		70	30	57	70	099	653	70,083.33	19,981.05	20,000.00
37 1046 996	1046 996 31	996 31	31		30		30	30	30	70	966	686	105,748.01	6,939.71	7,000.00
Quercus lobata 32 804 788 38 30	804 788 38	788 38	38		30		30	10	23	06	788	780	83,605.10	6,583.90	7,000.00
Ouercus Iobata 32 779 764 63 50	779 764 63	764 63	63		20	į	20	20	20	06	764	756	81,055.87	22,796.96	23,000.00
Ouercus Iobata 17 227 227 59 75	227 227 59	227 59	59		75		70	70	72	06	227	220	24,083.33	9,223.16	00.000,6
15 177	177 177 59	177 59	59		75	j	70	70	72	06	177	170	18,750.00	7,180.66	7,000.00
Ouercus douglasii 50 1963 1541 44 70	1963 1541 44	1541 44	44		70		30	30	43	70	1,541	1,533	163,535.03	21,702.46	22,000.00
Quercus douglasii 39 1194 1106 63 80	1194 1106 63	1106 63	63		80		80	80	80	70	1,106	1,099	117,427.28	41,099.55	41,000.00
Quercus douglasii 11 95 95 63 60	95 95 63	95 63	63		09	- 1	09	09	09	70	95	88	10,083.33	2,646.88	2,600.00
Quercus douglasii 11 95 95 63 60	95 95 63	95 63	63		09	ļ	09	09	09	70	95	88	10,083.33	2,646.88	2,600.00
Ouercus douglasii 20 314 314 66 70	314 314 66	314 66	99		70		70	70	70	70	314	307	33,333.33	10,718.75	11,000.00
Ouercus douglasii 36 989 951 50 60	989 951 50	951 50	20		09		0	09	40	70	951	944	100,951.83	14,133.26	14,000.00
804 788	804 788 50	788 50	20		09	į.	09	09	09	70	788	780	83,605.10	17,557.07	18,000.00
Ouercus douglasii 12 104 104 59 70	104 104 59	104 59	26		70		70	70	70	70	104	76	11,020.83	3,206.37	3,200.00
Ouercus douglasii 14 143 59 70	143 143 59	143 59	59	į	70	Ì	70	70	70	70	143	136	15,187.50	4,418.61	4,400.00
i 7	33 47	33 47	47		20		20	20	20	70	33	26	3,520.83	577.64	90.009
Ouercus douglasii 15 177 177 50 60	177 177 50	177 50	. 20		09	j	09	09	09	70	177	170	18,750.00	3,937.50	3,900.00
15	177 177 47	177 47	47		20		20	20	20	70	177	170	18,750.00	3,076.17	3,100.00
Ouercus douglasii 27 551 551 44 40	551 551 44	551 44	44		40		40	40	40	70	551	544	58,520.83	7,168.80	7,000.00
Ouercus douglasii 13 133 53 60	133 133 53	133 53	53		09		09	09	09	70	133	126	14,083.33	3,142.34	3,100.00
TOTAL															218,400.00

Buena Vista Apartments Oak Tree Evaluation Report and Protection Plan

TABLE 8. OTHER TREES, NOT RE-EVALUATED IN 2012. These include trees on Caltrans property, not to be impacted, and trees along the eastern edge of the Property, well outside the impact area.

Tree #	Common Name	Scientific Name	DBH	Heath/ Aesthetic Rating	Location	Impact Remove Protect
50	Valley Oak	Quercus lobata	10	С	W. End, Caltrans	Protect
51	Valley Oak	Quercus lobata	6	D	W. End, Caltrans	Protect
52	Valley Oak	Quercus lobata	13	С	W. End, Caltrans	Protect
53	Valley Oak	Quercus lobata	11	D	W. End, Caltrans	Protect
54	Valley Oak	Quercus lobata	6	D	W. End, Caltrans	Protect
55	Valley Oak	Quercus lobata	20	В	W. End, Caltrans	Protect
56	Valley Oak	Quercus lobata	8	С	W. End, Caltrans	Protect
57	Valley Oak	Quercus lobata	6	С	W. End, Caltrans	Protect
58	Valley Oak	Quercus lobata	7	F	W. End, Caltrans	Protect
59	Valley Oak	Quercus lobata	7	D	W. End, Caltrans	Protect
60	Valley Oak	Quercus lobata	9	С	W. End, Caltrans	Protect
61	Valley Oak	Quercus lobata	5	С	W. End, Caltrans	Protect
62	Valley Oak	Quercus lobata	5	С	W. End, Caltrans	Protect
63	Valley Oak	Quercus lobata	14	В	W. End, Caltrans	Protect
64	Valley Oak	Quercus lobata	20	В	W. End, Caltrans	Protect
65	Valley Oak	Quercus lobata	8	D	W. End, Caltrans	Protect
66	Valley Oak	Quercus lobata	10	D	W. End, Caltrans	Protect
79	Blue Oak	Quercus douglasii	83	A	East edge of Property	Protect
80	Blue Oak	Quercus douglasii	13.5	D	East edge of property	Protect
90	Blue Oak	Quercus douglasii	10	В	E. End, Caltrans	Protect
91	Blue Oak	Quercus douglasii	10.5	В	E. End, Caltrans	Protect
92	Blue Oak	Quercus douglasii	9	В	E. End, Caltrans	Protect
93	Blue Oak	Quercus douglasii	11	В	E. End, Caltrans	Protect
94	Blue Oak	Quercus douglasii	16	В	E. End, Caltrans	Protect
95	Blue Oak	Quercus douglasii	12	В	E. End, Caltrans	Protect
96	Blue Oak	Quercus douglasii	20	В	E. End, Caltrans	Protect
97	Blue Oak	Quercus douglasii	9	D	E. End, Caltrans	Protect
98	Blue Oak	Quercus douglasii	27	A	Bottom of drainage	Protect
	1	1	L	L	1	

Tree #	Common Name	Scientific Name	DBH	Heath/ Aesthetic Rating	Location	Impact Remove Protect
99	Blue Oak	Quercus douglasii	10	С	Bottom of drainage	Protect
100	Blue Oak	Quercus douglasii	12	В	East property line	Protect

APPENDIX C – Photo Essay

Native Trees Evaluated in October 2004. Updated photos of 2012 condition are provided after photos of original condition in 2004.

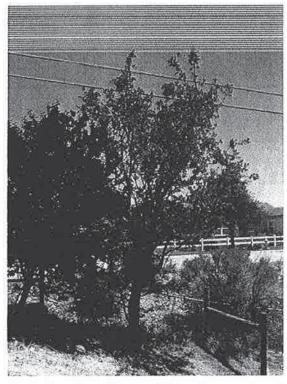


Photo 6. Tree 48 was added to the inventory in 2012.



Photo 7. Tree 49 was added to the inventory in 2012. This valley oak would be removed.

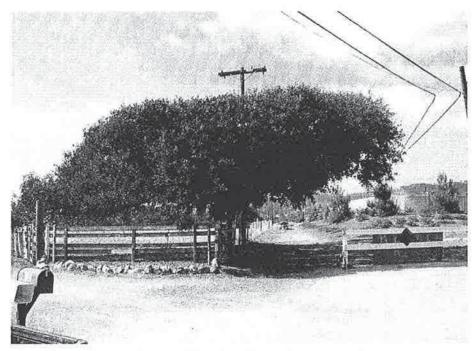


Photo 8. View southwest of Tree 67, a blue oak in the northwestern corner, near Experimental Station Road, in 2004. Street trees were pruned to protect the utility lines. This blue oak was given a "B" rating, good condition, but not excellent form. The development plan was modified to protect this tree. Minor (<20%) root zone impacts will occur.



Photo 9. View of Tree 67 in 2012.

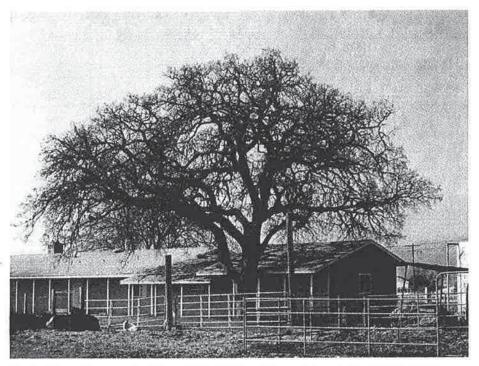


Photo 10. View west of Tree 69 in 2004, a blue oak located adjacent to the existing residence that is proposed for demolition.

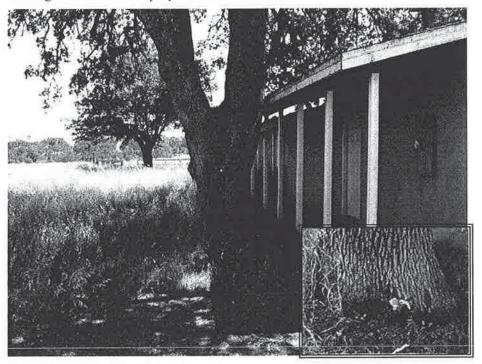


Photo 11. Tree 69 adjacent to existing house, shown in 2004. Inset shows fungus growing near base of trunk.

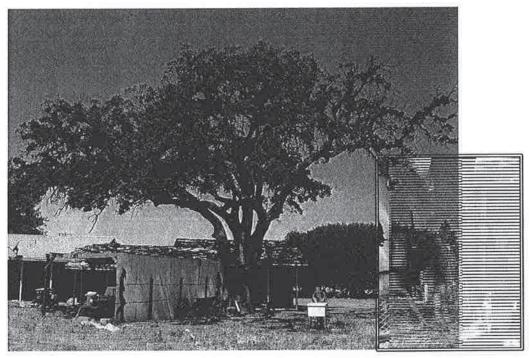


Photo 12. Tree 69 adjacent to existing house, shown in 2012. Health has declined. Inset shows trunk damage.



Photo 13. Tree 70 on Experimental Station Road, proposed for removal. Note dead/dying branch tips. Tree was trimmed for utilities. Ground is compacted on all sides of the root system. View east in 2004.

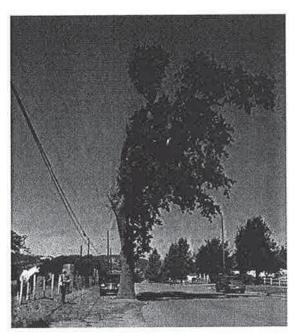


Photo 14. Tree 70 on Experimental Station Road, 2012 condition.

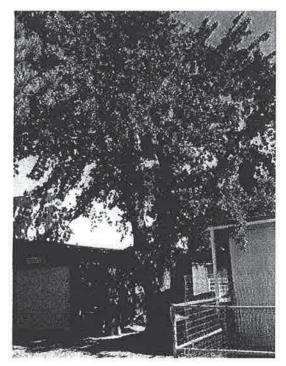


Photo 15. View southwest of Tree 71, located south of an existing residence and adjacent to two outbuildings, in 2004.

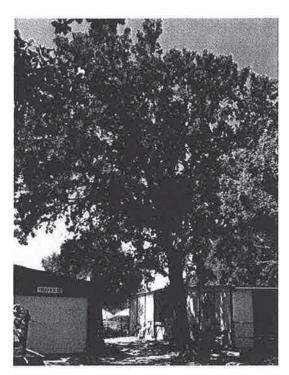


Photo 16. View of Tree 71, 2012 condition.

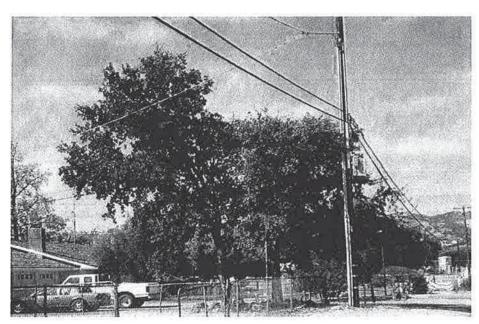


Photo 17. View west in 2004 of two valley oaks (72 and 73) located on Experimental Station Road, adjacent to an easement west of the property.

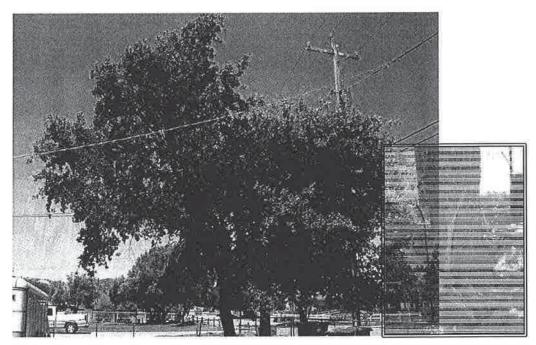


Photo 18. View of two valley oaks (72 and 73), 2012 condition. Insert shows grown over metal stake and soil/rock build-up on Tree 72.

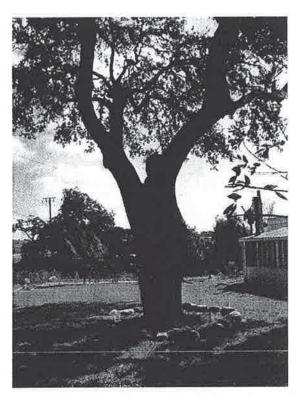


Photo 19. Tree 74 is near an existing trailer and driveway in 2004.

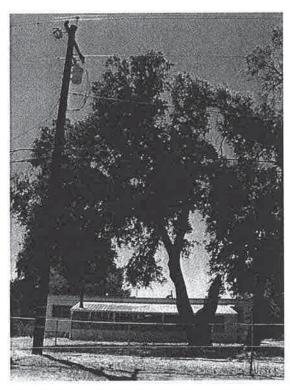


Photo 20. Tree 74 is near an existing trailer and driveway. Photo shows 2012 condition.



Photo 21. View east of Tree 75, located behind (south) of the easternmost existing residence in 2004. A shed and metal hoist are beneath the canopy.



Photo 22. Tree 75 is near the northeast edge of the project, near an existing trailer and driveway. Photo shows 2012 condition.



Photo 23. Tree 76, young tree east of mature tree 75, 2004 condition.

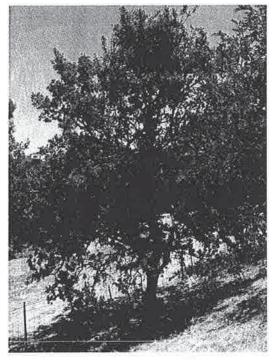


Photo 25. Tree 76, 2012 condition.



Photo 24. Tree 77, young tree east of mature tree 75, 2004 condition.



Photo 26. Tree 77, 2012 condition.

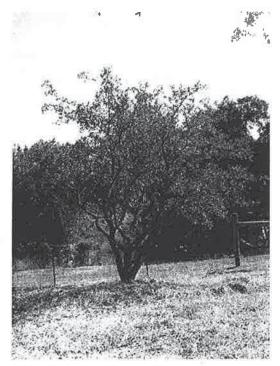


Photo 27. Tree 78, 2004 condition.

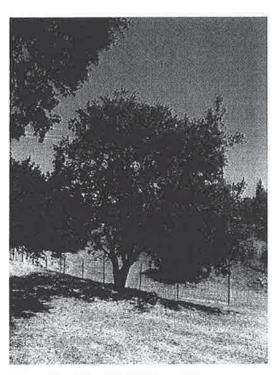


Photo 28. Tree 78, 2012 condition.



Photo 29. View south of a grouping of blue oaks on an east facing slope at the southeastern end of the property (Trees 81-88) in 2004. Tree 88 has a rotting cavity where a second trunk has died.



Photo 30. Trees 81-88, 2012 condition.



Photo 31. Tree 89, a blue oak, shown in 2004.

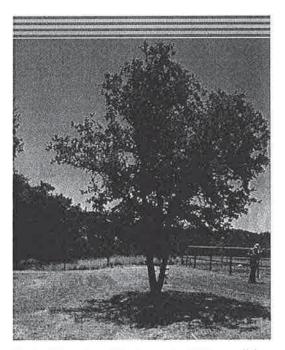


Photo 32. Tree 89, shown in 2012 condition, would be impacted by the proposed tot lot.

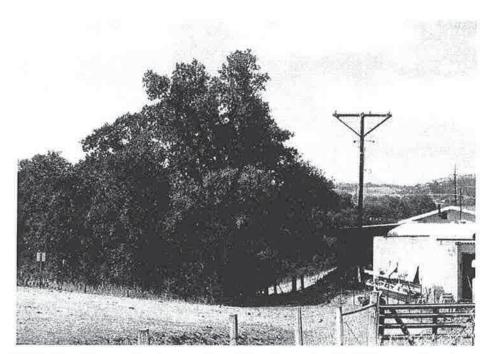


Photo 33. View south of a grouping of 17 valley oaks (50-66) in a small swale near the south-western end of the property, on the Caltrans right-of way in 2004. A culvert in the lower section collects stormwater. The proposed project would not increase flows into the existing culvert.

APPENDIX D – Tree Protection Plan

A tree protection plan exhibit showing locations of protective fencing and tree-specific measures to be incorporated for each tree will be prepared upon completion of the final grading plan. Exact locations of tree protective fencing and some tree-specific measures cannot be fully mapped until grading plans are complete. Development of final grading plans will be in consultation with the project arborist. Measures that can be prescribed based on preliminary plans are described below.

Pre-Construction Tree Protection and Removal

The project manager, construction manager, and equipment operators will be briefed by an environmental monitor. Monitor will describe oak tree protection and removal practices during a morning safety or planning meeting prior to the start of construction.

All trees within 50 feet of the construction zone will be identified, marked and numbered with metal tags. Information about each tree will be collected, including the following: date, species, number of stems, diameter at breast height (DBH) of each stem, critical root zone (CRZ) diameter, canopy diameter (in all four compass directions), tree height, health, habitat notes, and nests observed. Before construction begins, markings will distinguish trees that are to be removed, impacted, or fully protected. Tree removal will be planned to minimize impacts to adjacent trees. Tree impacts include any activity under the canopy or within the CRZ (CRZ = one foot of radius from trunk for every inch DBH of tree). The site will be checked for compliance by the environmental monitor. Grading, cutting and filling on property that has oak trees but which is planned to occur at least five feet beyond the CRZ of any oak trees of six inches or greater DBH shall not occur unless there is a monitor present to insure that grading occurs in accordance with approved plans and without encroachment into areas within five feet of the CRZ of any oak tree(s) of six inches or greater DBH.

Trees to Remove

- Mark each of the oaks to be removed with a blue "X" at approximately 4.5 feet above ground. Alternatively, trees to be removed may be marked with blue flagging.
- Number each of the oaks to be removed with blue paint (if not already tagged).
- Trees to be removed will be verified by the project manager and the environmental monitor or arborist.
- Trees will be removed with minimal impact to adjacent trees.

Trees to Impact

- Impacts are any disturbance within the diameter of the tree canopy or CRZ, including pruning, grading, parking, driving under or near, trenching, storing material, or adding fill.
- Tag each of the trees with two permanent numbered metal tags on two sides of the tree placed approximately 4.5 feet above ground. Flag with green flagging.

• Install orange construction fencing between the construction zone and the tree to indicate limits of disturbance planned for each tree (Tree Protection Fencing Figure, next page).

The environmental monitor will document pre-construction tree protection activities. An oak tree database will be maintained throughout the construction period that will contain all information related to oak tree impacts and removals.

Construction Tree Protection

- Orange construction fencing will be maintained weekly when heavy equipment is within 50 feet of oak trees.
- If any fully protected oak trees are impacted, the trees will be tagged with two writeon or permanent metal tags on two sides of the tree placed approximately 4.5 feet above ground (if not already tagged). An environmental monitor will note the type and severity of the impact.
- Branch and root pruning shall leave clean cuts. Branch pruning shall be at an angle to shed rain water. Torn roots shall be properly trimmed so that all torn sections are removed and the cut is clean.
- Any impacts to trees that involve cut roots over one inch and branches over three inches in diameter shall be treated by a Certified Arborist or City approved tree care specialist qualified to apply fungicides and pesticides to damaged tissue.
- No vehicles, fill soil, rocks, or construction materials shall be placed within the dripline or CRZ of any oak trees.
- Trenching under the tree canopy shall be avoided. Any trenching required within the dripline or CRZ of an oak tree shall be approved by a Certified Arborist, and done by hand. The arborist may recommend boring within the CRZ to reduce root impacts.
- The only plant species which shall be located within the dripline or CRZ of oak trees are plants that are indigenous to the Paso Robles area. No permanent irrigation shall occur within the CRZ of any mature oak tree.
- The environmental monitor and/or a Certified Arborist shall be present during construction that impacts oak tree root zones.

The environmental monitor will document tree removal and/or construction impacts on each tree. Replacement oaks must be equivalent to one quarter of the diameter of the removed tree(s). (For example, the replacement requirement for removal of two trees of 15 inches DBH (30 total diameter inches), would be 7.5 inches (30 inches removed x 0.25 replacement factor). This requirement could be satisfied by planting five 1.5-inch trees, or three 2.5-inch trees, or any other combination totaling 7.5 inches. A minimum of two 24-inch boxed, 1.5-inch trees shall be required for each oak tree removed. (City of El Paso de Robles-Ordinance No. 835 N.S.)

TREE PROTECTION FENCING

For Trees That May Otherwise Be Impacted



Set T-posts 6 to 8 feet apart, and as far away from tree trunk as practical during construction.

Use barrier fencing or chain-link fencing

Provide buffer between fence and construction zone of 5 feet, or more, if possible

Construction/Disturbance Zone

©Althouse and Meade, Inc.

Tree Protection Fencing Figure. Orange barrier fencing shall be used to protect oak trees near construction and disturbance zones. Construction fencing shall be placed at dripline or CRZ, whichever is greater.

APPENDIX E – Monitor's Field Report Form

Telephone (805) 237-9626





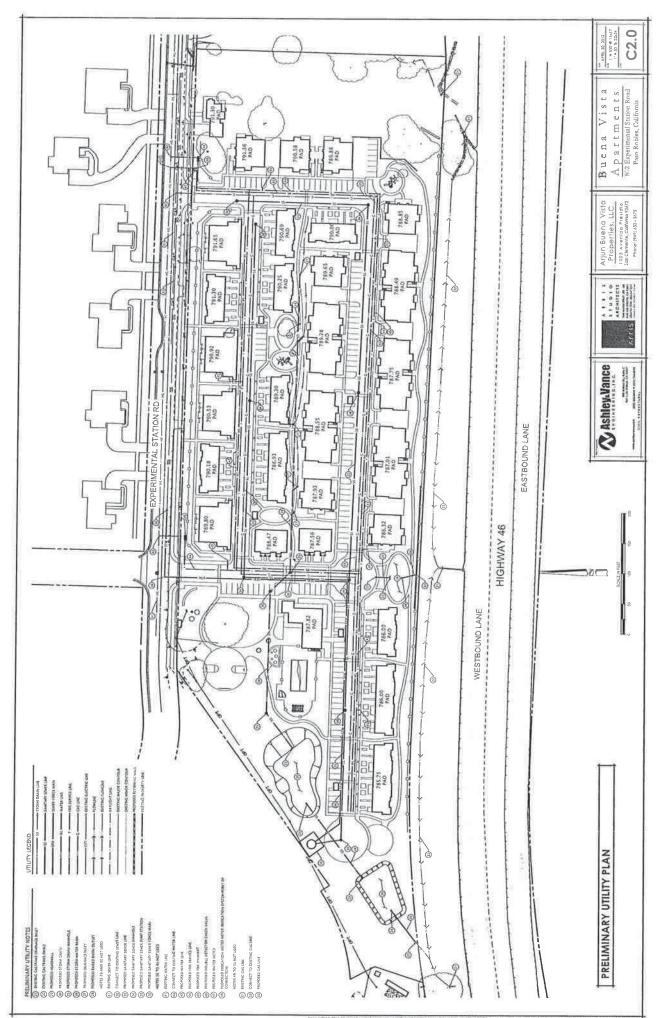
(Page 1)

Project		Monitor's name	
Date	Time on site	e	Time off site
Work Activities in progress			,
1.			
2.			
3.			
4.			
5.			
Locations inspected			
1.			
2			
2.			
3.			
Observations Observations			
Observations			
1.			
1.			
2.			
3.			

Project		Monitor's name	
Date	Time on site	e	Time off site
Compliance issues			
1.			
2.			
3.			
Personnel contacted on site			
1 crsonner contacted on site			
Weather conditions	Dust control	1	Water truck in use
Additional Notes:			

(Page 2)

APPENDIX F – Preliminary Grading and Drainage Plans



AFFIDAVIT

OF MAIL NOTICES

PLANNING COMMISSION/CITY COUNCIL PROJECT NOTICING

I, <u>Theresa Variano</u>, employee of the City of El Paso de Robles, California, do hereby certify that the mail notices have been processed as required for <u>Planned Development 12-005</u>
(Buena Vista Apartments) on this 27th day of December, <u>2012</u>.

City of El Paso de Robles

Community Development Department

Planning Division

Signed:

Theresa Variano

AFFIDAVIT

OF MAIL NOTICES

PLANNING COMMISSION/CITY COUNCIL PROJECT NOTICING

I, <u>Theresa Variano</u>, employee of the City of El Paso de Robles, California, do hereby certify that the mail notices have been processed as required for <u>Planned Development 12-005</u>
(Buena Vista Apartments) on this 11th day of January, <u>2013.</u>

City of El Paso de Robles Community Development Department Planning Division

Signed.

Theresa Variano

PROOF OF PUBLICATION

LEGAL NEWSPAPER NOTICES

PLANNING COMMISSION/CITY COUNCIL PROJECT NOTICING

Newspaper:	Tribune
Date of Publication:	January 2, 2013
Hearing Date:	January 22, 2013 (Planning Commission)
Project:	Planned Development 12-005, Rezone 12-003, Specific Plan Amendment 12-003 and Recommendation to adopt a Mitigated Negative Declaration (Buena Vista Apartments)
I, Theresa V	variano, employee of the Community
Development	Department, Planning Division, of the City
of El Paso de	Robles, do hereby certify that this notice is
a true copy of	a published legal newspaper notice for the
above named	project.
Signed:	briand
	Theresa Variano

CITY OF EL PASO DE ROBLES
NOTICE OF PUBLIC HEARING

NOTICE OF INTENT TO ADOPT A
MITIGATED NEGATIVE
DECLARATION AND PLANNED
DEVELOPMENT 12-005,
REZONE 12-003 & SPECIFIC PLAN
AMENDMENT 12-003

NOTICE IS HEREBY GIVEN that the Planning Commission of the City of El Paso de Robles will hold a Public Hearing on Tuesday, January 22; 2013. The meeting will be held at 7:30 p.m. at the City of El Paso de Robles, 1000 Spring Street, Paso Robles, California, in the City Council Chambers, to consider making recommendations to the City Council to adopt the following applications:

- Rezone: to change the existing R1-B4 (Residential Single-Family, 1 acre lot) zoning designation to R3 (Residential Multifamily 12 units per acre). The rezone to R3 would bring the zoning designation into compliance with the existing General Plantarid Use designation (RMF-12).
- Specific Plan Amendment: to amend the Borkey Area Specific Plan to accommodate the multi-family residential project, and establish updated Specific Plan fees;
- Development Plan: development plan to review the request to establish 142 residential units with a club house, swimming poot, play areas and other amenities.
- Mitigated Negative Declaration: the Planning Commission will consider recommending that the City Council adopt a Mitgated Negative Declaration, (potential environmental impacts can be mitigated to a less than significant level).

The project has been filed by Don Benson on behalf of Arjun Buena Vista Properties, LLC. The site is located at 908 Experimental Station Road (APN: 025-541-021, 025-391-006, 007, 080 & 081).

Questions about this application may be directed to the Community Development Department at (805) 237-3970 or via email at planning@pretty.com. Comments on the proposed Project may be mailed to the Community Development Department, 1000 Spring Street, Pase Robles, CA 93446 or emailed to planning@pretty.com provided that such comments are received prior to the time of the hearing.

If you challenge the applications in court, you may be limited to raising only those issues you or someone else raised at the public hearing described in this notice, or in written correspondence delivered to the Planning Commission at or prior to the public hearing.

Darren Nash, Associate Planner January 8, 2013 700