## B. APPLICANT/AGENT

| Commenter and Address | Code | Letter Date | Page |
|---|---|---|---|
| **Kronick, Moskovitz, Tiedemann & Girard [a]**<br>1432 Higuera Street<br>San Luis Obispo, CA 93401<br>Contact: Kenneth Bornholdt | LV-1 | October 10, 2008 | X.B.-2 |
| **Kronick, Moskovitz, Tiedemann & Girard [b]**<br>1432 Higuera Street<br>San Luis Obispo, CA 93401<br>Contact: Kenneth Bornholdt | LV-2 | October 10, 2008 | X.B.-6 |
| **Environmental Science Associates (ESA)**<br>***Laetitia Vineyard Agricultural Cluster Technical Studies (June 2007)***<br>707 Wilshire Boulevard Suite 1450<br>Los Angeles, CA 90017 | LV-3 | October 15, 2008 | X.B.-9 |
| **John C. Janneck**<br>1116 Cory Avenue<br>Los Angeles, CA 90069 | LV-4 | October 31, 2008 | X.B.-183 |
| **Kronick, Moskovitz, Tiedemann & Girard [c]**<br>1432 Higuera Street<br>San Luis Obispo, CA 93401<br>Contact: Kenneth Bornholdt | LV-5 | November 6, 2008 | X.B.-193 |
| **John C. Janneck**<br>1116 Cory Avenue<br>Los Angeles, CA 90069 | LV-6 | November 6, 2008 | X.B.-207 |
| **RRM Design Group**<br>3765 South Higuera Street, Suite 102<br>San Luis Obispo, CA 93401<br>Contact: Victor Montgomery and Allison Donatello | LV-7 | November 6, 2008 | X.B.-561 |

KRONICK MOSKOVITZ TIEDEMANN & GIRARD
A LAW CORPORATION

KENNETH C. BORNHOLDT
kbornholdt@kmtg.com

October 10, 2008

**HAND DELIVERED**

Mr. Brian Pedrotti
Project Manager
County Planning and Building Department
976 Osos Street, Room 300
San Luis Obispo, California 93408-2040

***Re: Laetitia Agricultural Cluster Subdivision DEIR***
***SUB2003-00001 (Tract 2606)***
***SCH # 2005041094***

Dear Mr. Pedrotti:

This letter will summarize the results of our review of the County Planning Department and Agriculture Commissioner's Office records to date in response to our request letters dated August, 16, 2007, copies of which are enclosed with this letter ("Requests"). The comments made in these letters are in response to the comments made in the above-referenced Draft EIR on the same matters. LV-1-1

These Requests were made to obtain whatever documents these County Departments had to support the list of eight (8) issues with agricultural cluster developments ("Ag Clusters") identified in the James Caruso memorandum dated August 13, 2007, a copy of which is enclosed with this letter. We also requested copies of any public complaints received by the Department regarding the same issues. We will refer to all of these issues collectively herein as "Issues".

**Planning Department Records**

The Department presented several boxes of files and microfiche relating to the 13 Ag Cluster projects identified in Mr. Caruso's memorandum. We were advised that these files were all of the files the Department had in response to our Requests. We were further advised that if any public complaints had been received by the Department related to the same issues, that they would be located in these same files.

We did not find any record of any public complaints received concerning any of the Issues arising from past Ag Clusters.

LV-1

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Mr. Brian Pedrotti
October 10, 2008
Page 2 of 3

We did not find any record that past Ag Clusters had caused or created any of the Issues. **LV-1-1 (cont'd)**

In the Edna Valley and Varian files, the County found the CC&Rs and Ranch Management plans reduced all conflicts with agriculture to a level of environmental insignificance.

We did find information in these other Ag Clusters files that appears to conflict with the positions taken to date by the Planning Department and its consultants with regard to the potential environmental impacts of the Laetitia project. In fact, some of the information appears to support the rationale of Laetitia's consultants in how the same environmental impacts were viewed by the County on these other Ag Cluster projects. The County's viewpoint in these other projects appears to be different than how these same impacts are viewed on the Laetitia project. **LV-1-2**

For example, in the Huer Huero cluster project, the aesthetic impacts were found to be Class III but could be mitigated to insignificance. The mitigation measures included tree screening, tract landscaping, house landscaping, vegetation on all walls, roof styles and colors, building colors, custom lighting and reduction in structure heights. Similar mitigation measures were used in other projects reviewed. Land use conflicts by converting agricultural land into cluster residential was a Class II impact that could be mitigated to an insignificant level. The mitigation was that the project was allowable pursuant to Agricultural Policy #22 in the General Plan. Therefore, any impacts to visual character of the site and surrounding area had already been anticipated. As to the cumulative impact of loss of agricultural lands (Class I), the Planning Commission made findings of overriding considerations including creation of permanent open space, payment of traffic fees and buffers. The County Planner was James Caruso. **LV-1-3**

In the Jesperson project, fencing surrounding the houses would mitigate against many potential incompatibilities with agricultural operations. Noise insulation and ventilation systems would adequately mitigate against agricultural operations and dust. Notification to future owners of the Right to Farm Ordinance and existing and future agricultural operations would mitigate against potential complaints. The County Planner was Brian Pedrotti. **LV-1-4**

In the Linthicum project, the visual impacts were mitigated by not having building envelopes at the highest elevations, reduction in height of structures, and 50% screening of structures seen from Orcutt Road and surrounding local roads like Biddle Ranch Road. The County Planner was Stephanie Fuhs. **LV-1-5**

In the Morabito project, the potential visual impact from homes was minimized because vehicles on Highway 101 would only see part of the site for only "8-10 seconds". In addition, the HCD standards would be protected by avoiding silhouetting, minimizing grading, colors and materials and landscaping. On one parcel, the Ag Commissioner's office recommended buffers from 120-180 feet due to the existing topography and prevailing wind patterns would reduce potential incompatibilities. Vegetative screening could be used to reduce dust or other potential nuisance complaints. The County Planner was Brian Pedrotti. **LV-1-6**

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Mr. Brian Pedrotti
October 10, 2008
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In the OCW project approval, the County found that the placement of homes on lands in historical agricultural production as not inconsistent with the County General Plan Policies due to mitigation measures and unique circumstances. The County Planner was Martha Neder. LV-1-7

**Agricultural Commissioner's Office Records**

We obtained copies of the last five years of the complaint log maintained by this Office for all public complaints received related to agricultural operations in the County. We confirmed by letter dated October 1, 2007, that all complaints received that related to Ag Cluster developments which had been built were not kept in the logs. Those complaints are routinely referred to the Ag Cluster Home Owners Associations to address. The experience of the Office is that these Associations address these complaints internally. LV-1-8

We reviewed the Office logs of all complaints received for 2006. It did not appear from these records that past Ag Clusters had caused or created any of the Issues.

In addition, there were several issues listed in the Caruso Memorandum that were not mentioned anywhere in the logs.

If you have any questions, please do not hesitate to contact us.

Very truly yours,
KRONICK, MOSKOVITZ, TIEDEMANN & GIRARD
A Law Corporation

Kenneth C. Bornholdt

KCB:acb

cc: John Janneck
Victor Montgomery
Robert Lilley, Ag Commissioner's Office

901371.5 11929.006

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## Responses to Kronick, Moskovitz, Tiedemann & Girard's Comments (LV-1)

| Comment No. | Comment |
|---|---|
| LV-1-1 | Comment noted. No changes to the EIR are necessary. |
| LV-1-2 | Please note that CEQA requires independent analysis of each project. Factors that affect environmental analysis include the environmental setting and conditions of the specific site. No changes to the EIR are necessary. |
| LV-1-3 | Regarding impact determinations, and specifically assessment of visual resources, the environmental analysis is based on the environmental setting of the Laetitia site, not the setting of other sites. As noted, in order to approve a project with identified Class I impacts, a statement of overriding considerations must be adopted. No changes to the EIR are necessary. |
| LV-1-4 | As noted in LV-1-3 above, each project is assessed, pursuant to CEQA, based on the environmental setting of each site, and analysis of a specific project's effects on the environment. Mitigation is identified based on the level of impact, and is specific to the project and project site. No changes to the EIR are necessary. |
| LV-1-5 | Refer to response to comment LV-1-4 above. |
| LV-1-6 | Refer to response to comment LV-1-4 above. |
| LV-1-7 | Refer to response to comment LV-1-4 above. |
| LV-1-8 | Comment noted. No changes to the EIR are necessary. |

KRONICK MOSKOVITZ TIEDEMANN & GIRARD
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KENNETH C. BORNHOLDT
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October 10, 2008

***HAND DELIVERED***

Mr. Brian Pedrotti
Project Manager
County Planning & Building Department
976 Osos Street, Room 300
San Luis Obispo, California 93408-2040

***Re: Laetitia Agricultural Cluster Subdivision DEIR***
***SUB2003-00001 (Tract 2606)***
***SCH# 2005041094***

Dear Mr. Pedrotti:

We represent the Project Applicant and Laetitia Vineyard and Winery, Inc. in connection with the property described in the applications filed with the San Luis Obispo County ("County") for the proposed Laetitia Agricultural Cluster Project ("Project") which has been analyzed in the above-referenced Draft Environmental Impact Report ("DEIR"). We have spent years in the process with the County since the application was complete in February 2004 going over all details of this Project. We were surprised and shocked that even some of the most simple and basic aspects of this Project were not even mentioned or addressed in the DEIR. As a result, there are serious flaws in the DEIR. LV-2-1

We request that the County immediately issue an errata to correct them so that the public will not be mislead in making comments to the DEIR.

**1. The DEIR is incomplete and inadequate because it does not address the policies, ordinances and standards in effect when the Project application for a Vesting Tentative Map was found complete.** The Project applications, including a Vesting Tentative Map ("VTM") application, were filed on January 5, 2004. The VTM application was not mentioned in the DEIR. The VTM application was deemed complete on February 4, 2004. Once the VTM application was accepted as complete, our clients acquired the vested right to proceed with a development in substantial compliance with the ordinances, policies and standards in effect at the time the application was complete. Gov't. Code Sec. 66498.1(b). Many of the standards applied to this Project in the DEIR to find it inconsistent were not in effect at the LV-2-2

LV-2

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Mr. Pedrotti
October 10, 2008
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time the VTM application was complete. One example is the buffer guidelines used in the DEIR were not in effect (November 2005) at the time the application was complete (February 2004). LV-2-3

**2. The DEIR is incomplete and inadequate when it concluded that a cluster residential development on the Project site was inconsistent with County Policies.** This conclusion ignored the General Plan Policy in the Agricultural and Open Space Element that authorize such cluster developments on agricultural land ***precisely*** like the Project site (AGP22). LV-2-4 It also ignored the fact that the Highway Corridor Standards in the County Land Use Ordinance for the South County Area Plan specifically state that cluster residential projects are to be "encouraged" ***specifically*** on the Project site (§2.112.040.A.3.f.(1)). LV-2-5

**3. The DEIR is incomplete and inadequate when it concluded that the number of dwellings allowed on Rural Lands is not determined by allowable dwellings but only parcel size.** Land Use Ordinance Section 22.22.150 sets out standards for clustering on agricultural lands for both the "Agricultural or Rural Lands categories." Sec. 22.22.150.B. LV-2-6 Section 22.22.150.I.1 contains the standard for calculating the number of parcels is to use the number of dwellings. The DEIR is incorrect because Section 22.22.140 is not the correct section to use to calculate the number of parcels for "agricultural land clustering." LV-2-7

We will be submitting additional comments to the DEIR on behalf of the applicant prior to November 8, 2008. Please have these comments addressed in the Final EIR, if you do not issue an errata. LV-2-8

Very truly yours,
KRONICK, MOSKOVITZ, TIEDEMANN & GIRARD
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Victor Montgomery

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## Responses to Kronick, Moskovitz, Tiedemann & Girard's Comments (LV-2)

| Comment No. | Comment |
|---|---|
| LV-2-1 | Comment noted. Please refer to responses below. |
| LV-2-2 | Please refer to Section IV.C.2.b Environmental Setting, Consistency with Land Use Plans and Policies, Relevant Land Use Plans, San Luis Obispo County Land Use Ordinance. This section of the EIR identifies that the project qualifies for the grandfather provision of Section 7 of Ordinance No. 3038 because the original application was on file prior to August 10, 2004 and was continuously maintained as an active application; therefore, the Land Use Ordinance dated January 1, 2003 is applicable. |
| LV-2-3 | Regarding agricultural land use buffers, please refer to Final EIR Section V.B.5.a.2 Agricultural Resources, Project-specific Impacts and Mitigation Measures, Location of Development and Inadequate Land Use Buffers. This section of the EIR notes the 2005 buffer policy (200 to 600-foot buffers) and states that the 2002 policy that was in place when the project was accepted for processing recommends 400-800-foot buffers. These statements notify the public of the applicable buffer policy (which recommends a greater distance) while acknowledging that the more recent policy accepts a lesser buffer distance. The policy standards allow the Agriculture Department to provide recommendations for buffers; in this case, the recommended distance is 500 feet, as noted in the EIR. No changes to the EIR are necessary. |
| LV-2-4 | The EIR does not state that a cluster residential development on the project site is inconsistent with County policies; the EIR notes that the project as proposed is inconsistent with County policies (refer to Table IV-2 Consistency with Land Use Ordinance and IV-4 Consistency with Agriculture and Open Space Element). |
| LV-2-5 | LUO Section 22.112.040.A.3.f.1 states: "Residential land divisions are encouraged to be clustered in compliance with Section 22.22.140, unless standard subdivision design can include clustered residential building sites that will be in equal conformity with Subsection A.3.e. Application review shall determine whether the proposed parcels or building sites are designed so that residential buildings, accessory buildings and roads will comply with Subsection A.3.e, in addition to other applicable standards. Guideline: Retain land in open space in new land divisions that will preserve existing views of land subject to the Highway 101 corridor design standards". This is noted in Table IV-2 Consistency with Land Use Ordinance. No changes to the EIR are necessary. |
| LV-2-6 | The EIR cites Section 22.22.150 (refer to Table IV-2 Consistency with Land Use Ordinance). The number of allowable dwellings is determined by tests, such as the "use test" to determine minimum parcel size, which then allows for calculation of allowable dwelling units. No changes to the EIR are necessary. |
| LV-2-7 | As noted in the EIR (Section VI.C.3.a.1.b Alternatives Analysis, Alternatives Analysis, Reduced Project A – Ordinance and General Plan Consistency Alternative, Consistency with Plans and Policies, Land Use Ordinance, Determining Density of Land Use Category) and LUO Section 22.22.150 (Agricultural Lands Clustering), "the maximum number of residential parcels allowed in a major agricultural cluster project shall be equivalent to the number of primary dwellings normally allowed on the parcels that would result from a conventional land division in the Agriculture land use category based on the minimum parcel size criteria in Section 22.22.040". In order to determine the number of allowable units within the Rural Lands land use category, Section 22.22.140 (Cluster Subdivision) must be used. No changes to the EIR are necessary. |
| LV-2-8 | The additional comments were received, and responses are provided. |

# LAETITIA VINEYARD AGRICULTURE CLUSTER TECHNICAL STUDIES

June 2007

# LAETITIA VINEYARD AGRICULTURE CLUSTER TECHNICAL STUDIES

June 2007

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| Section 5 | Hazards |
| Section 6 | Agricultural Clusters |
| Section 7 | Visual Quality |

# INTRODUCTION

## Laetitia Agriculture Cluster Technical Studies

The attached Laetitia Agriculture Cluster Technical Studies were prepared by Environmental Science Associates (ESA) for the County of San Luis Obispo's consideration. These studies are intended to provide independent third-party assessment of potential Class I environmental impacts identified by San Luis Obispo County under the California Environmental Quality Act (CEQA). These studies address traffic, noise, agricultural clusters, and visual quality. Additional comments are made on other issues areas that have been resolved are also included.

The matrix summary of Class I impacts prepared by the Morro Group identifies 33 Class I impacts. However, the matrix only looks at seven separate issue areas (visual quality could be parsed into impacts to views and impacts to visual quality, which would make eight impact areas). For each issue areas, there is the question of potential cumulative impacts, especially if there is no project-specific impact.

The Morro Group matrix identifies Class I impacts by lot rather than by issue area for the project as a whole. We understand that the goal of identifying impacts by lot was to help the applicant focus on lots that could be re-designed to avoid impacts. However, in identifying such an unusually large number of Class I impacts for a relatively small project, the matrix served to unnecessarily exaggerate the potential impacts of the project, potentially confusing the process.

The following provides a summary of ESA's findings:

### *Waste Water Treatment*

The proposed project, as described in the *Laetitia Agriculture Cluster Application* (January 5, 2004, as revised November 5, 2004) included a proposed septic system. Since that time, however, the project applicant has identified a private wastewater treatment system for the residential clusters that would provide treatment on-site, without the use of a septic system. This wastewater treatment system is currently under review by the County.

The proposed wastewater treatment facility therefore eliminates eight Class I impacts associated with soil percolation issues.

### *Cultural Resources*

Following submission of the *Laetitia Agriculture Application* (January 5, 2004, last revised on November 5, 2004), the applicant and the County contracted with an outside consultant to prepare a Phase 2 archaeological survey that included borings at select locations on the project site. These

locations were on or near proposed building sites. County staff and the EIR consultant, Morro Group, Inc., have indicated that the project would not result in significant and unavoidable impacts to potential cultural resources.

### *Traffic*

The proposed project would provide one entrance to the project site from Los Berros Road. Two emergency entry points would be also provided – one from Laetitia Drive and the other from US 101.

The proposed project would result in no significant project-specific impacts to traffic and circulation. All intersections would operate at LOS C or better. However, under the cumulative plus project scenario, the project would contribute to a cumulative impact at the Los Berros Road / US 101 interchange. As identified in the South County Traffic Model Update, the interchange would require improvement to accommodate future traffic loads. These improvements include widening Los Berros Road to provide left-turn lanes at the intersections and wider shoulders. Traffic signals are also planned for the Los Berros Road/US 101 northbound and southbound intersections. To fund these improvements, the County has developed a Road Improvement Fee Program that includes other improvements in the area, as well as improvement to the Los Berros Road / US 101 interchange. Payment of traffic fees by the project applicant would offset the contribution of the project to cumulative impacts in the area as well as to the Los Berros Road/US 101 interchange. As a result, the project would result in a less than significant contribution to cumulative impacts.

### *Noise*

All potential impacts related to noise from agricultural operations or the exposure of new residents to project construction and project operations can be mitigated to a less than significant level. ESA visited the site and took noise measurements of operating farm equipment and noise from traffic along US 101. Mitigation measures are provided in this study to reduce all potential impacts from exposure to farm equipment noise, and noise from traffic to less than significant levels.

### *Hazards*

The project applicant has agreed to install crash gates at the project site. These crash gates would allow one entrance to the site from Laetitia Vineyard Drive and one entrance from US 101. These gates will be installed in accordance with all County and California Department of Forestry standards for emergency use only.

All roadways at the site will be constructed in accordance with County standards for Agriculture Clusters.

As a result, the proposed project would result in no significant impacts regarding potential hazards related to emergency access to the site, or roadway widths and/or turnaround space for emergency vehicles.

### *Agriculture Buffers*

The proposed project is subject to the policies and regulations in effect at the time the project application was deemed complete. As a result, the proposed project is subject to the Agricultural Buffer Policies established in 2002, which emphasize that buffers are established on a case-by-case basis. A rationale for the buffers has been established by the architect that takes into consideration the variety of factors noted in the 2002 policies.

The project site is also subject to the Highway 101 Corridor Standards.

The proposed project, with mitigation measure incorporated, would result in a less than significant impact to agricultural resources. These mitigation measures include mitigation measures used for similar projects for which environmental documents have been certified and/or use other standards established by the Highway 101 Corridor Standards, as well as policies for agriculture clusters.

### *Visual Quality*

This section provides analyses and mitigation measures used in the CEQA-required analysis of potential impacts to visual resources for projects similar to the proposed project and for two dissimilar projects located in visually sensitive areas. Unlike adjacent development, the Laetitia Agriculture Cluster leaves most of its land as open space for agricultural cultivation. Based on mitigation measures used in other certified EIRs for the similar projects, all potentially significant impacts of the Laetitia Agriculture Cluster can be reduced to a less than significant level.

# SECTION 1
# Wastewater Treatment

The proposed project, as described in the *Laetitia Agriculture Cluster Application* (January 5, 2004, as revised November 5, 2004) included a proposed septic system. Since that time, however, the project applicant has identified a private wastewater treatment system for the residential clusters that would provide treatment on-site, without the use of a septic system. This wastewater treatment system is currently under review by the County.

The proposed wastewater treatment facility therefore eliminates eight Class I impacts associated with soil percolation issues.

# SECTION 2
# Cultural Resources

Following submission of the *Laetitia Agriculture Application* (January 5, 2004, last revised on November 5, 2004), the applicant and the County contracted with an outside consultant to prepare a Phase 2 archaeological survey that included borings at select locations on the project site. These locations were on or near proposed building sites. County staff and the EIR consultant, Morro Group, Inc., have indicated that the project would not result in significant and unavoidable impacts to potential cultural resources.

# SECTION 3
# Traffic and Circulation Study

## Summary

The proposed project would provide one entrance to the project site from Los Berros Road. Two emergency entry points would be also provided – one from Laetitia Drive and the other from US 101.

The proposed project would result in no significant project-specific impacts to traffic and circulation. All intersections would operate at LOS C or better. However, under the cumulative plus project scenario, the project would contribute to a cumulative impact at the Los Berros Road / US 101 interchange. As identified in the South County Traffic Model Update, the interchange would require improvement to accommodate future traffic loads. These improvements include widening Los Berros Road to provide left-turn lanes at the intersections and wider shoulders. Traffic signals are also planned for the Los Berros Road/US 101 northbound and southbound intersections. To fund these improvements, the County has developed a Road Improvement Fee Program that includes other improvements in the area, as well as improvement to the Los Berros Road / US 101 interchange. Payment of traffic fees by the project applicant would offset the contribution of the project to cumulative impacts in the area as well as to the Los Berros Road/US 101 interchange. As a result, the project would result in a less than significant contribution to cumulative impacts.

# LAETITIA AGRICULTURAL CLUSTER PROJECT
# COUNTY OF SAN LUIS OBISPO

# TRAFFIC AND CIRCULATION STUDY

**January 3, 2007** **ATE #06092**

**Prepared for:**

**ESA**
**707 Wilshire Blvd. Suite 1450**
**Los Angeles, California 90017**


## ASSOCIATED TRANSPORTATION ENGINEERS

100 N. Hope Avenue, Suite 4, Santa Barbara, CA 93110-1686 ! (805) 687-4418 ! FAX (805) 682-8509

January 3, 2007 06092R04.WP

Deborah Kirtman
ESA
707 Wilshire Blvd. Suite 1450
Los Angeles, California 90017

***TRAFFIC AND CIRCULATION STUDY FOR THE***
***LAETITIA AGRICULTURAL CLUSTER PROJECT, COUNTY OF SAN LUIS OBISPO***

Associated Transportation Engineers (ATE) is pleased to submit this traffic and circulation report for the Laetitia Agricultural Cluster Project, proposed in the Nipomo area of the County of San Luis Obispo.

It has been our pleasure to assist you with the project.

Associated Transportation Engineers

By:Scott A. Schell, AICP
Principal Transportation Planner

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## INTRODUCTION

The following study contains an analysis of the potential traffic and circulation impacts associated with the Laetitia Agricultural Cluster Project, proposed in the Nipomo area of County of San Luis Obispo County. The report provides information relative to existing and future traffic conditions within the project study-area and identifies project-specific and cumulative impacts based on County thresholds.

## PROJECT DESCRIPTION

The Laetitia Agricultural Cluster Project is proposing a Vesting Tentative Tract Map that includes subdividing the Laetitia property to provide 102 home sites and four open space lots. The property is located northeast of the Highway 101/Los Berros Road interchange in the Nipomo area. Figure 1 illustrates the general location of the project site. The main access for the residential project is proposed via one connection to Upper Los Berros Road. Emergency access would be provided at the existing Highway 101 connection to the Laetitia Winery and at two locations on Upper Los Berros Road north of the main access. Access to the existing Laetitia Winery is provided by an existing driveway connection on Highway 101. Visitors access the tasting room and winery at this location. This existing connection to Highway 101 would serve as one of the emergency access points for the proposed residential units and would be controlled by a gate to restrict this access to emergency use only. Figure 2 shows the layout of the subdivision.

## STUDY AREA & TRAFFIC SCENARIOS

The traffic scenarios and transportation facilities analyzed in this study include:

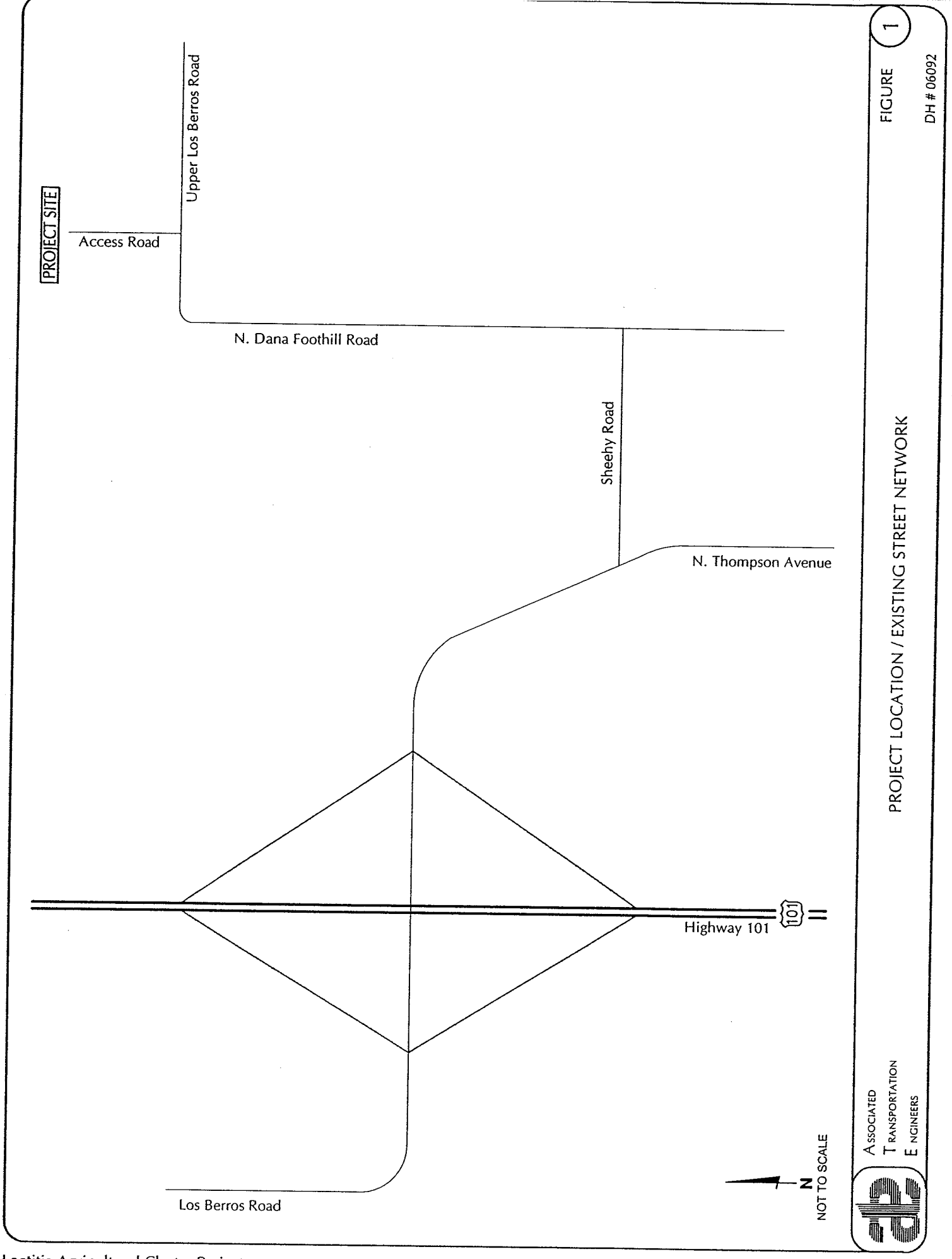
<u>Traffic Scenarios</u>
<Existing Conditions
<Existing + Project Conditions
<Cumulative Conditions
<Cumulative + Project Conditions

<u>Transportation Facilities</u>
<Los Berros Road/Highway 101 SB Ramps
<Los Berros Road/Highway 101 NB Ramps
<Highway 101

## EXISTING CONDITIONS

### Street Network

The project site is served by Highway 101 and network of County roadways, as illustrated in Figure 1. The major components of the street network are briefly described below.


PROJECT SITE
Access Road
Upper Los Berros Road
N. Dana Foothill Road
Sheehy Road
N. Thompson Avenue
Highway 101
101
Los Berros Road
N
NOT TO SCALE
ASSOCIATED
TRANSPORTATION
ENGINEERS
PROJECT LOCATION / EXISTING STREET NETWORK
FIGURE 1
DH # 06092

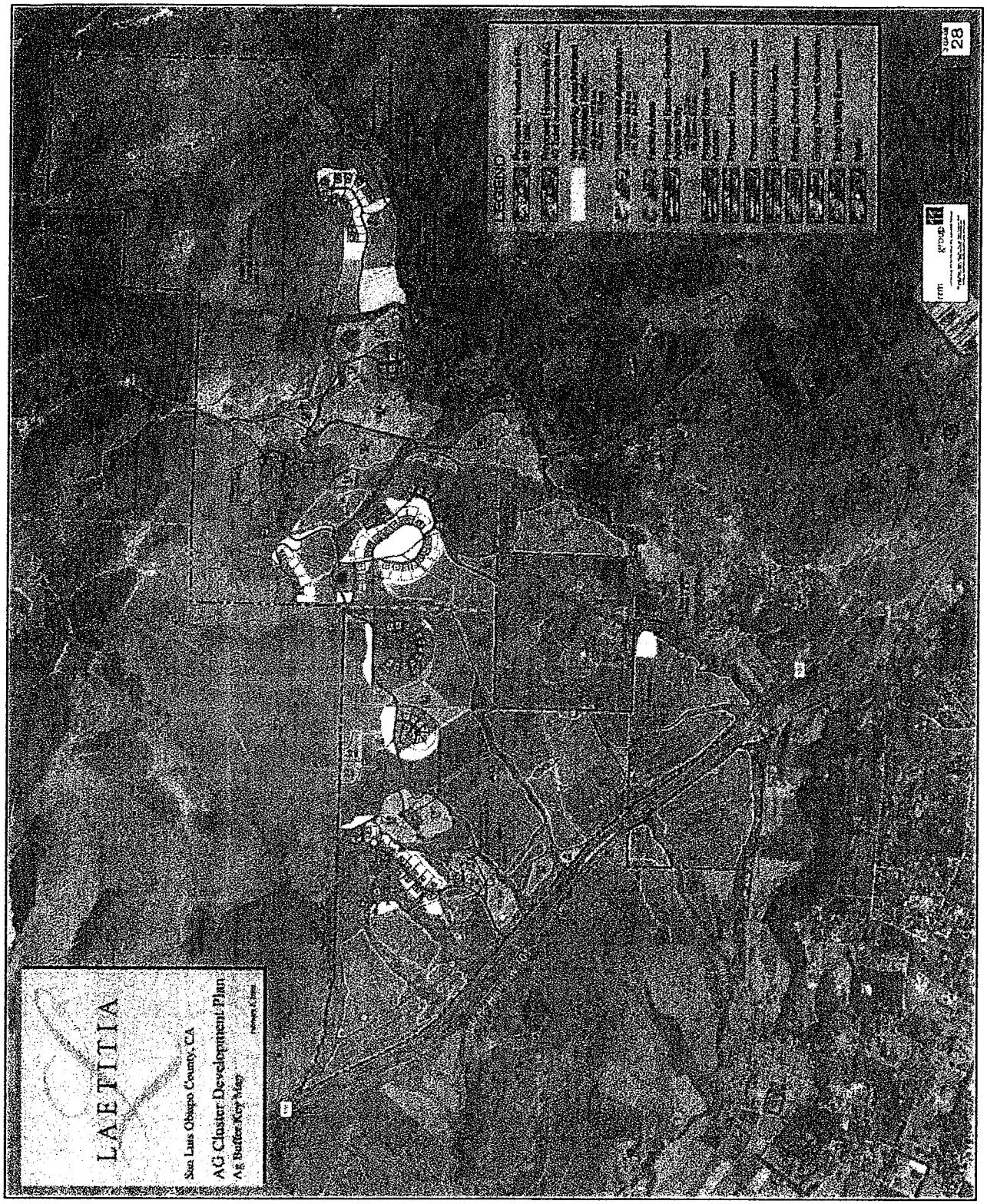



FIGURE 2

SITE LAYOUT

DH # 06092

ASSOCIATED TRANSPORTATION ENGINEERS

**Highway 101**, located west of site, is the principal inter-city route along the Pacific Coast and is the major north-south link in San Luis Obispo County. Highway 101 is a four-lane freeway in the Nipomo area. Highway 101 provides regional access to the project site via the Los Berros Road interchange. Stop signs control the Highway 101 ramps at the interchange.

**Los Berros Road-North Thompson Avenue** is a two-lane arterial that extends east and west of the Los Berros Road/Highway 101 interchange. West of the interchange, Los Berros Road extends in a northwest direction to Valley Road just south of Arroyo Grande. East of the interchange, North Thompson Avenue extends in a southeast direction through Nipomo to its connection at the Highway 101/Route 166 interchange.

**Sheehy Road** is a 2-lane road that extends between North Thompson Avenue and North Dana Foothill Road. Sheehy Road is ∀22 feet in width with dirt shoulders.

**North Dana Foothill Road** is a 2-lane road that extends from Highland Hill Avenue on the south to Upper Los Berros Road on the north. North Dana Foothill Road is ∀20 feet in width with dirt shoulders.

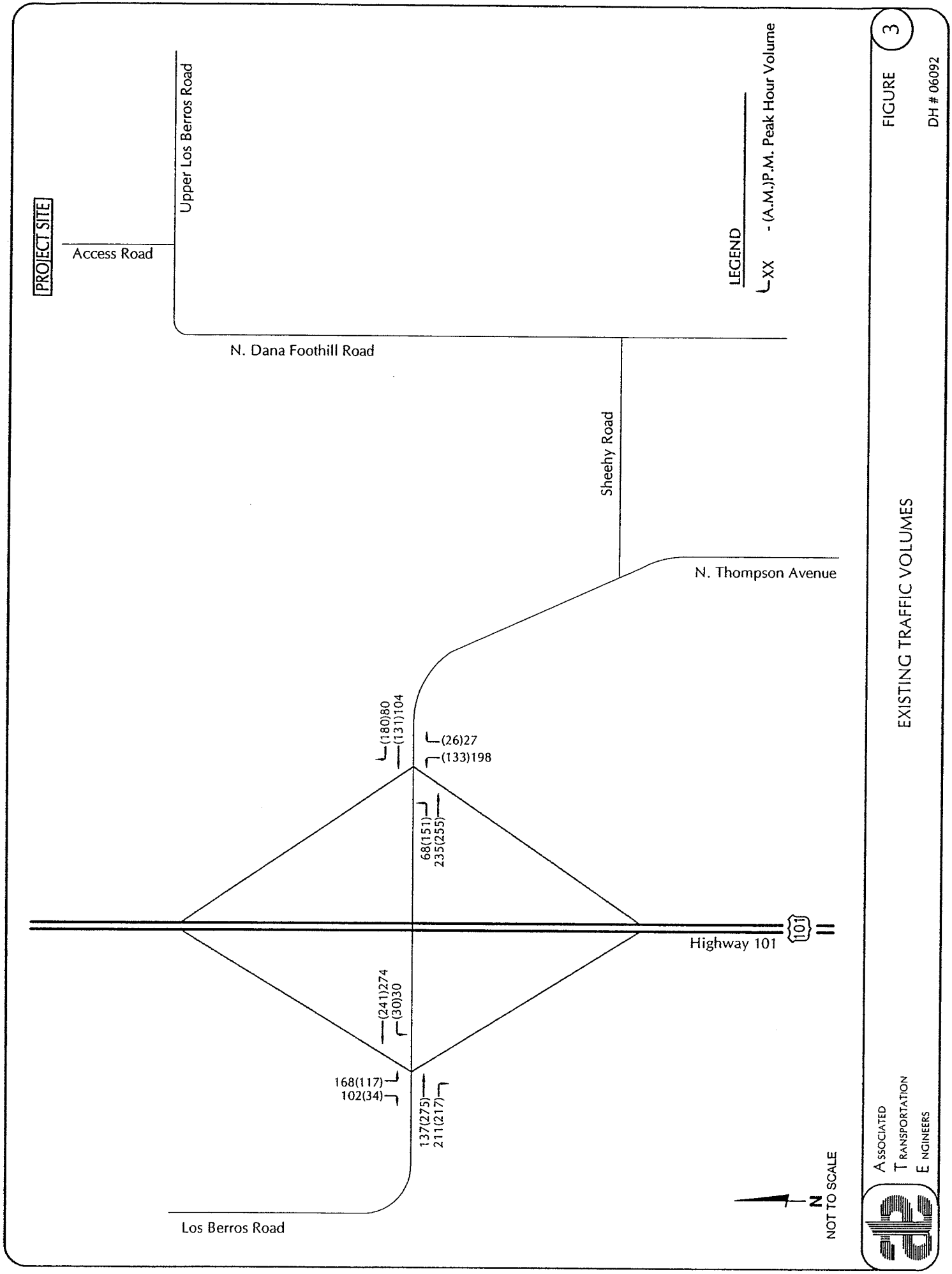
**Upper Los Berros Road** is a 2-lane road that extends northeasterly from North Dana Foothill Road. Upper Los Berros Road is ∀20 feet in width with dirt shoulders. The main access and secondary access connections for the Laetitia Agricultural Cluster Project are proposed along this roadway.

**Traffic Volume Data**

Figure 3 shows the existing A.M. and P.M. peak hour turning volumes for the key intersections in the study area that were identified for analyses. The traffic counts were performed in September 2006 after the local schools began their Fall session (count data contained in the Technical Appendix for reference). Vehicle delays were also measured for each approach at each intersection during the count periods to calibrate the level of service modeling.

**Levels of Service**

"Levels of Service" (LOS) "A" through "F" are used to rate traffic operations, with LOS "A" indicating little or no congestion and LOS "F" indicating severe congestion. A more detailed description of levels of service is contained in the Technical Appendix. The County of San Luis Obispo has adopted LOS C as the minimum standard for rural areas. The County's LOS standard applies to each of the constrained movements at an intersection (movements that are required to stop and wait for a gap in the opposing traffic streams). Thus, each constrained movement at the intersection has a level of service rating and there is an overall level of service rating for the intersection.


PROJECT SITE
Access Road
Upper Los Berros Road
N. Dana Foothill Road
LEGEND
XX - (A.M.)P.M. Peak Hour Volume
Sheehy Road
N. Thompson Avenue
(180)80
(131)104
(26)27
(133)198
68(151)
235(255)
Highway 101
101
(241)274
(30)30
168(117)
102(34)
137(275)
211(217)
Los Berros Road
N
NOT TO SCALE
ASSOCIATED TRANSPORTATION ENGINEERS
FIGURE 3
DH # 06092
EXISTING TRAFFIC VOLUMES

The Highway Capacity Manual (HCM) methodology for unsignalized intersections was used to calculate levels of service at the Los Berros Road/Highway 101 intersections. Table 1 lists the existing levels of service for the intersections. As shown, all movements at the key intersections operate at LOS C or better during the peak hour periods.

**Table 1**
**Existing Levels of Service**

| Intersection | Delay/LOS | |
|---|---|---|
| | **A.M. Peak Hour** | **P.M. Peak Hour** |
| **Los Berros Rd/Hwy 101 SB** | | |
| Westbound Los Berros | 8.5 Sec/LOS A | 8.1 Sec/LOS A |
| Southbound Off-Ramp | 15.9 Sec/LOS C | 14.6 Sec/LOS B |
| **Intersection LOS** | **14.7 Sec/LOS B** | **14.0 Sec/LOS B** |
| **Los Berros Rd/Hwy 101 NB** | | |
| Eastbound Los Berros | 8.3 Sec/LOS A | 7.7 Sec/LOS A |
| Northbound Off-Ramp | 21.9 Sec/LOS C | 16.3 Sec/LOS C |
| **Intersection LOS** | **15.3 Sec/LOS C** | **14.3 Sec/LOS B** |

## SIGNIFICANCE THRESHOLDS

The County's impact thresholds were used to assess the significance of project traffic. The County has adopted a minimum standard of LOS C for the Nipomo area. Mitigation measures are required for locations which exceed the LOS C standard.

## PROJECT-SPECIFIC ANALYSIS

### Project Trip Generation

Trip generation estimates were calculated for the project using rates contained in the Institute of Transportation Engineers (ITE) trip generation manual.[1] The rates for Single Family Detached Housing (ITE Code 210) were used to calculate the trip generation estimates for the 102 homes that would be developed on the site, as shown in Table 2. The project is expected to generate 976 average daily trips (ADT), with 77 trips occurring during the A.M. peak hour period and 103 trips occurring during the P.M. peak hour period.

[1] Trip Generation, Institute of Transportation Engineers, 7th Edition, 2003.

**Table 2**
**Project Trip Generation**

| Land Use | Size | Average Daily | | A.M. Peak Hour | | P.M. Peak Hour | |
|---|---|---|---|---|---|---|---|
| | | Rate | Trips | Rate | Trips | Rate | Trips |
| Single Family Detached | 102 Units | 9.57 | 976 | 0.75 | 77 | 1.01 | 103 |

## Project Trip Distribution

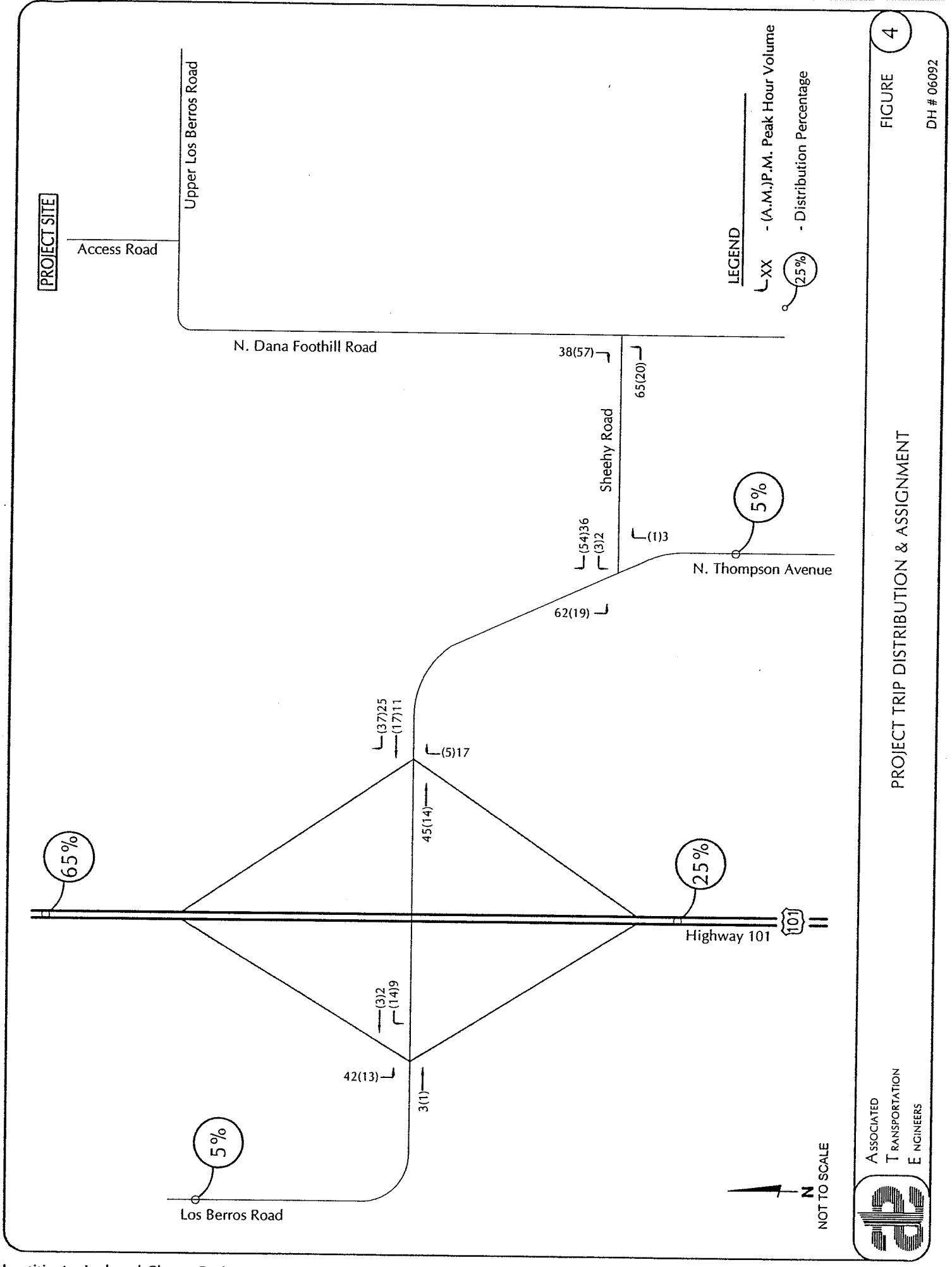
Project-generated traffic was distributed and assigned to study-area street system according to the percentages listed in Table 3 and illustrated in Figure 4. The distribution pattern was formulated based on the existing traffic and land use patterns in the vicinity of the project site and consideration of the type of trips that would be generated by the residential project.

**Table 3**
**Project Trip Distribution**

| Origin/Destination | Direction | Percentage |
|---|---|---|
| Highway 101 | North | 65% |
| Highway 101 | South | 25% |
| Los Berros Road | West | 5% |
| N. Thompson Avenue | South | 5% |
| **Total** | | **100%** |

## Existing + Project Levels of Service

Figure 5 shows the Existing + Project peak hour traffic volumes at the Los Berros Road/Highway 101 interchange. Table 4 compares the Existing and Existing + Project levels of service for the intersections.


PROJECT SITE
Access Road
Upper Los Berros Road
N. Dana Foothill Road
LEGEND
XX - (A.M.)P.M. Peak Hour Volume
25% - Distribution Percentage
38(57)
65(20)
Sheehy Road
5%
(54)36
(3)2
(1)3
N. Thompson Avenue
62(19)
(37)25
(17)11
(5)17
45(14)
65%
25%
Highway 101
101
(3)2
(14)9
42(13)
3(1)
5%
Los Berros Road
N
NOT TO SCALE
ASSOCIATED TRANSPORTATION ENGINEERS
FIGURE 4
DH # 06092
PROJECT TRIP DISTRIBUTION & ASSIGNMENT

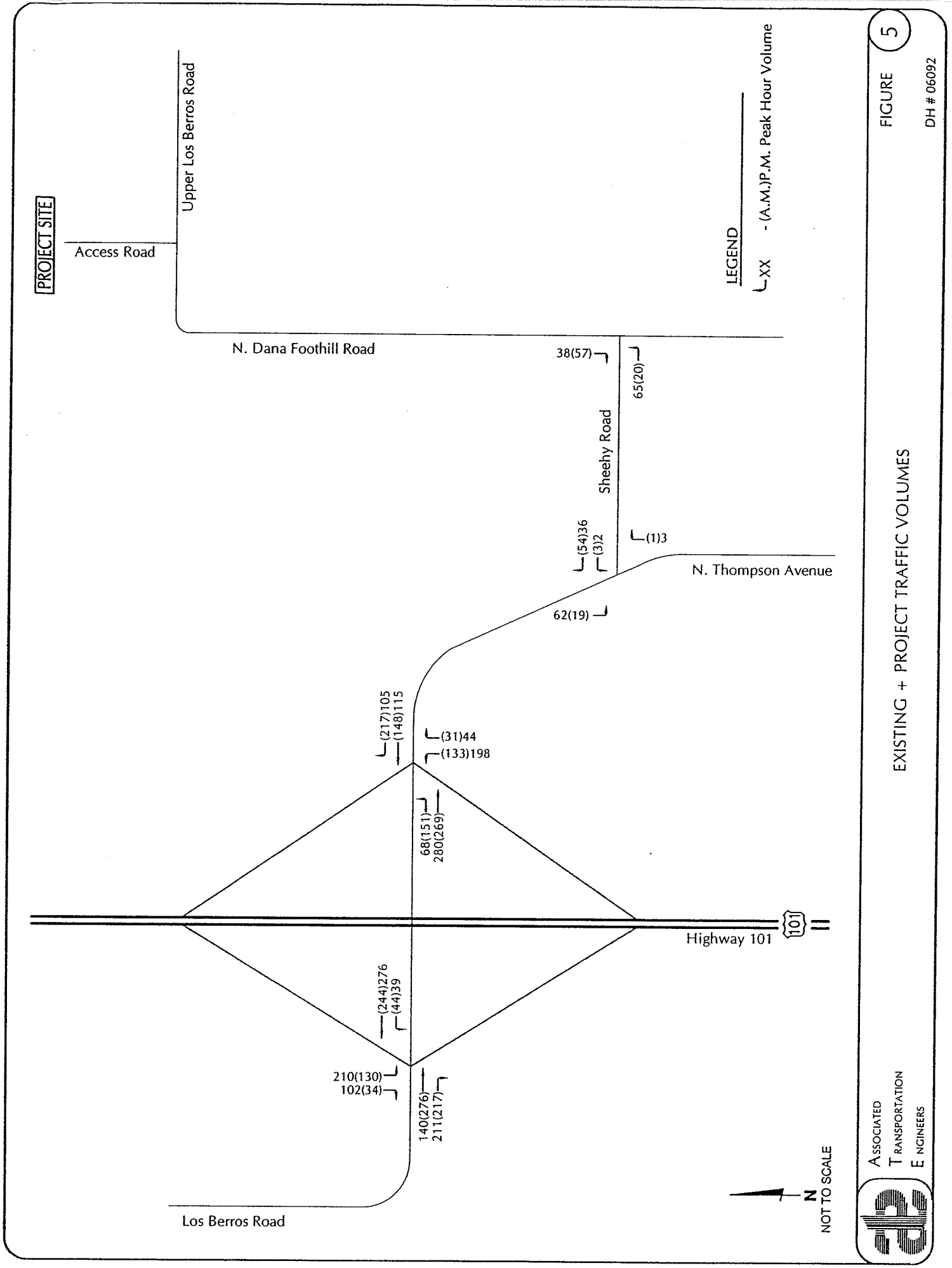

PROJECT SITE
Access Road
Upper Los Berros Road
N. Dana Foothill Road
LEGEND
XX - (A.M.)P.M. Peak Hour Volume
38(57)
65(20)
Sheehy Road
(54)36
(3)2
(1)3
N. Thompson Avenue
62(19)
(217)105
(148)115
(31)44
(133)198
68(151)
280(269)
Highway 101
101
(244)276
(44)39
210(130)
102(34)
140(276)
211(217)
Los Berros Road
N
NOT TO SCALE
ASSOCIATED
TRANSPORTATION
ENGINEERS
FIGURE 5
DH # 06092
EXISTING + PROJECT TRAFFIC VOLUMES

**Table 4**
**Existing + Project Levels of Service**

| Intersection | Delay/LOS | | | |
|---|---|---|---|---|
| | A.M. Peak Hour | | P.M. Peak Hour | |
| | Existing | Existing + Project | Existing | Existing + Project |
| **Los Berros Rd/Hwy 101 SB** | | | | |
| Westbound Los Berros | 8.5 Sec/LOS A | 8.5 Sec/LOS A | 8.1 Sec/LOS A | 8.1 Sec/LOS A |
| Southbound Off-Ramp | 15.9 Sec/LOS C | 17.4 Sec/LOS C | 14.6 Sec/LOS B | 16.9 Sec/LOS C |
| **Intersection LOS** | **14.7 Sec/LOS B** | **15.5 Sec/LOS C** | **14.0 Sec/LOS B** | **15.9 Sec/LOS C** |
| **Los Berros Rd/Hwy 101 NB** | | | | |
| Eastbound Los Berros | 8.3 Sec/LOS A | 8.5 Sec/LOS A | 7.7 Sec/LOS A | 7.8 Sec/LOS A |
| Northbound Off-Ramp | 21.9 Sec/LOS C | 23.5 Sec/LOS C | 16.3 Sec/LOS C | 17.6 Sec/LOS C |
| **Intersection LOS** | **15.3 Sec/LOS C** | **16.3 Sec/LOS C** | **14.3 Sec/LOS B** | **15.5 Sec/LOS C** |

As shown in Table 4, the project would not change the levels of service at the Los Berros Road/Highway 101 interchange. All movements at the intersections are forecast to operate at LOS C or better with Existing + Project traffic. These service levels meet the County LOS C standard. The traffic added to the interchange by the Laetitia Agricultural Cluster Project is considered a less than significant impact based on County standards.

## Site Access

Primary access to the site is proposed via one main entry on Upper Los Berros Road. The roads leading to the access are two-lane County roads. Sheehy Road is ∀22 feet in width with dirt shoulders. Similarly, North Dana Foothill Road and Upper Los Berros Road are ∀20 feet in width with dirt shoulders. Sheehy Road carries about 1,900 ADT and volumes decline on North Dana Foothill Road and Upper Los Berros Road leading to the site access. Upper Los Berros Road carries 200-300 ADT in the vicinity of the proposed site access road. The Laetitia Agricultural Cluster Project would add 976 ADT to these roadways, which would not significantly impact traffic operations. Existing + Project volumes would be less than 3,000 ADT on Sheehy Road and less than 2,000 on North Dana Foothill Road and Upper Los Berros Road. The forecasted volumes are within the carrying capacities of these two-lane County roads.

Emergency access would be provided by the existing Highway 101 connection to the Laetitia Winery and at two locations on Upper Los Berros Road north of the main access. Access to the existing Laetitia Winery is provided by an existing driveway connection on Highway 101. The emergency access connection for the proposed residential units would be controlled by a gate to restrict the access for emergencies only.

## CUMULATIVE ANALYSIS

### Traffic Forecasts

Cumulative volumes were obtained from the South County Traffic Model Update[2]. The Cumulative analysis assumes buildout of the Nipomo area to Year 2025. Several key roadway improvements that are projected to be in place by Year 2025 are included in the Cumulative traffic model, as listed below.

1. Willow Road Extension to Thompson Avenue. This project would extend Willow Road easterly from it current terminus on the west side of Highway 101 to Thompson Avenue on the east side of Highway 101.

2. Highway 101/Willow Road Interchange. This project includes construction of a full-access interchange at the Highway 101/Willow Road junction.

3. Highway 1 Connections. New connections to serve the Woodlands development will be provided at Highway 1/Dawn Road, Highway 1/Mesa Road, and Highway 1/Eucalyptus Road.

The Willow Road Extension and Highway 101/Willow Road interchange is located about midway between Los Berros Road on the north and Tefft Street on the south. As demonstrated by the traffic model forecasts, the new roadway and interchange will relieve loading at the Highway 101/Los Berros Road and Highway 101/Tefft Street interchanges.

The Cumulative traffic model volumes were adjusted to include the traffic that will be generated by the future Dude Ranch that is proposed at the eastern portion of the Laetitia site. The rates for Resort Hotel (ITE Code 330) were used to calculate the trip generation for the 75-room Dude Ranch. Figures 6 and 7 show the Cumulative and Cumulative + Project traffic forecasts for the study-area intersections.

### Levels of Service

Table 6 displays the Cumulative and Cumulative + Project levels of service for the Los Berros Road/Highway 101 interchange. The interchange is forecast to operate at LOS D-F during the peak hour periods under the cumulative scenarios, which exceeds the County standard of LOS C. Traffic generated by the Laetitia Agricultural Cluster Project would contribute to the cumulative impact at the interchange. Improvements required to meet the County's LOS C standard are presented in the Improvement Recommendations section of this report.

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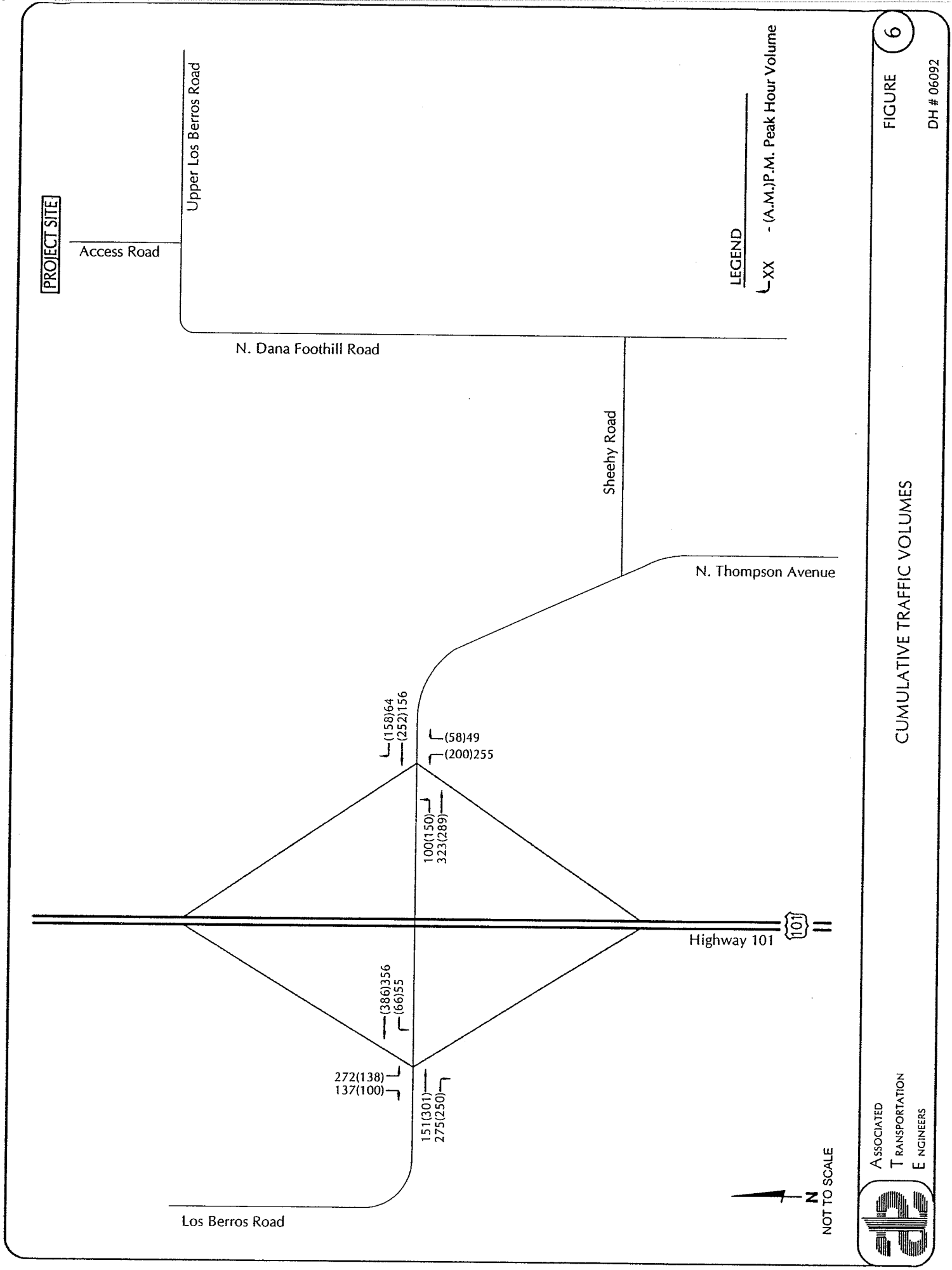
[2] South County Traffic Model Update - 2006 Annual Report and Fifth Year Update, Draft Final Report, Omni-Means, 2006.


PROJECT SITE
Access Road
Upper Los Berros Road
N. Dana Foothill Road
Sheehy Road
N. Thompson Avenue
Highway 101
101
Los Berros Road
(158)64
(252)156
(58)49
(200)255
100(150)
323(289)
(386)356
(66)55
272(138)
137(100)
151(301)
275(250)
LEGEND
XX - (A.M.)P.M. Peak Hour Volume
N
NOT TO SCALE
FIGURE 6
DH # 06092
CUMULATIVE TRAFFIC VOLUMES
ASSOCIATED TRANSPORTATION ENGINEERS

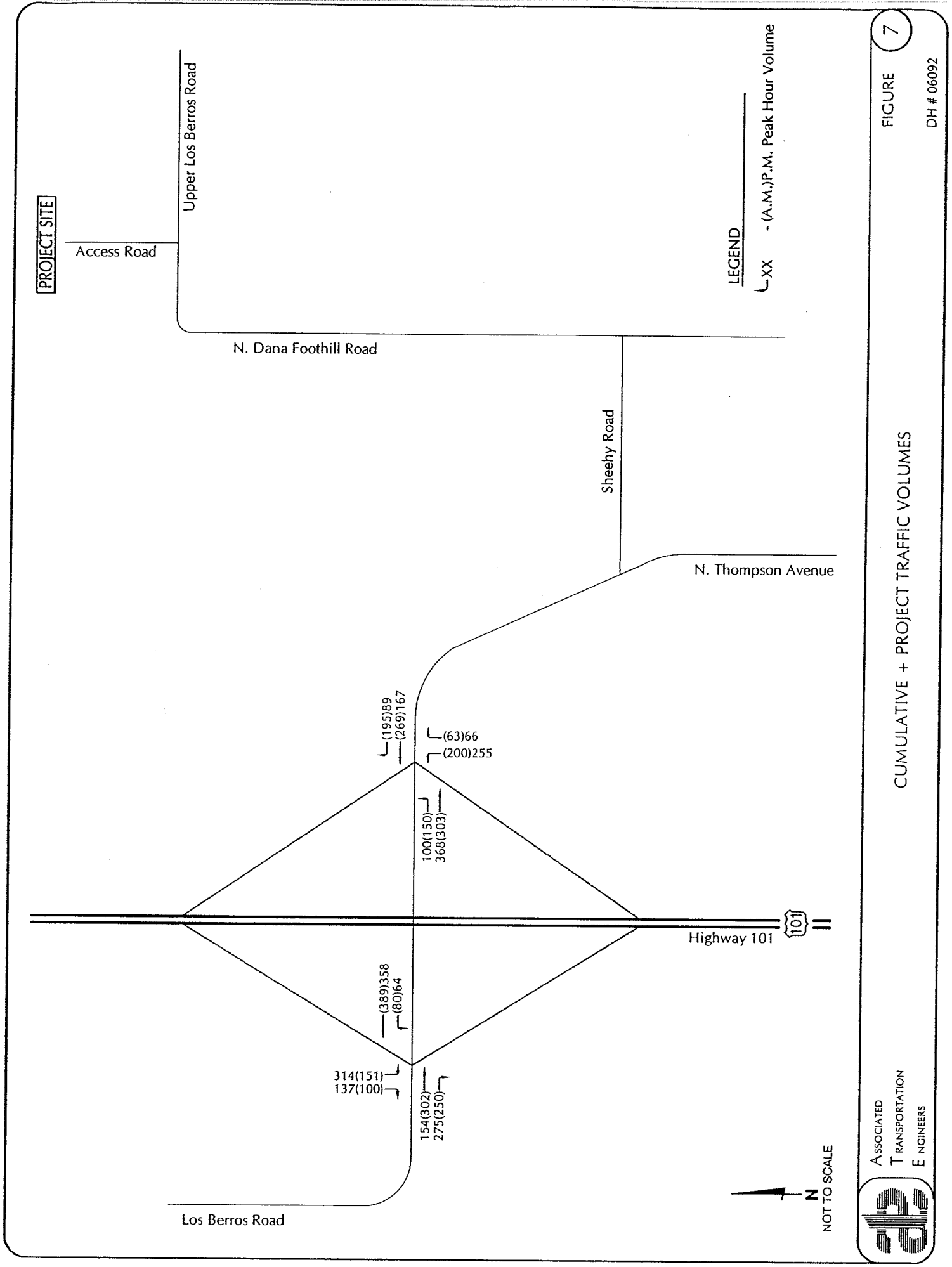

PROJECT SITE
Access Road
Upper Los Berros Road
N. Dana Foothill Road
Sheehy Road
N. Thompson Avenue
Highway 101
101
Los Berros Road
(195)89
(269)167
(63)66
(200)255
100(150)
368(303)
(389)358
(80)64
314(151)
137(100)
154(302)
275(250)
LEGEND
XX - (A.M.)P.M. Peak Hour Volume
N
NOT TO SCALE
ASSOCIATED TRANSPORTATION ENGINEERS
FIGURE 7
DH # 06092
CUMULATIVE + PROJECT TRAFFIC VOLUMES

**Table 6**
**Cumulative Levels of Service**

| Intersection | Delay/LOS | | | |
|---|---|---|---|---|
| | A.M. Peak Hour | | P.M. Peak Hour | |
| | Cumulative | Cumulative + Project | Cumulative | Cumulative + Project |
| **Los Berros Rd/Hwy 101 SB** | | | | |
| Westbound Los Berros | 8.8 Sec/LOS A | 8.9 Sec/LOS A | 8.4 Sec/LOS A | 8.4 Sec/LOS A |
| Southbound Off-Ramp | 23.1 Sec/LOS C | 29.0 Sec/LOS D | 42.3 Sec/LOS E | >50 Sec/LOS F |
| **Intersection LOS** | **20.0 Sec/LOS C** | **24.1 Sec/LOS C** | **38.3 Sec/LOS E** | **>50 Sec/LOS F** |
| **Los Berros Rd/Hwy 101 NB** | | | | |
| Eastbound Los Berros | 8.6 Sec/LOS A | 8.8 Sec/LOS A | 7.9 Sec/LOS A | 8.0 Sec/LOS A |
| Northbound Off-Ramp | >50 Sec/LOS F | >50 Sec/LOS F | 32.1 Sec/LOS D | 43.1 Sec/LOS E |
| **Intersection LOS** | **35.1 Sec/LOS E** | **44.5 Sec/LOS E** | **26.1 Sec/LOS D** | **34.8 Sec/LOS D** |

## HIGHWAY 101 OPERATIONS

Potential impacts to Highway 101 were assessed using 2006 count data provided by Caltrans. The count data shows that Highway 101 in the vicinity of the Los Berros Road interchange carries the highest hourly traffic volume during the P.M. peak commute period. The HCM methodology was used to calculate the peak hour levels of service for the segment of Highway 101 north of the Los Berros Road interchange. The freeway segment north of the interchange was selected for the analysis since more of the traffic generated by the Laetitia Agricultural Cluster Project would use this segment than the freeway segment south of the interchange.

Year 2016, 10 years from 2006, was selected as the horizon period for developing the Cumulative traffic forecasts for Highway 101 since the Laetitia Agricultural Cluster Project is anticipated to be fully developed and occupied by that time. The Cumulative traffic forecasts assume a 1.5% per year growth rate for Highway 101. The growth factor was derived from the historical growth of traffic, as shown in the Caltrans count data for the past five-year period.

Table 7 shows the Existing, Existing + Project, Cumulative and Cumulative + Project peak hour levels of service for Highway 101 north of the Los Berros Road interchange.

**Table 7**
**Highway 101 Peak Hour Operations**

| Segment | Direction | Existing | Existing + Project | Cumulative | Cumulative + Project |
|---|---|---|---|---|---|
| Hwy 101 n/o Los Berros Rd | Northbound<br>Southbound | LOS C<br>LOS C | LOS C<br>LOS C | LOS C<br>LOS D | LOS C<br>LOS D |

Notes: Cumulative forecasts for Year 2016.

As shown, the segment of Highway 101 north of the Los Berros Road interchange operates at LOS C during the peak hour period with Existing traffic and is forecast to continue to operate at LOS C with traffic added by the Laetitia Agricultural Cluster Project (Existing + Project scenario). The proposed project would not significant impact Highway 101 operations. The Cumulative and Cumulative + Project analysis show that Highway 101 is forecast to operate at LOS C in the northbound direction and LOS D in the southbound direction. According to the Transportation Concept Report published by Caltrans, the target level of service for this segment of Highway 101 is LOS D.[3] Thus, the Year 2016 levels of service forecasted for Highway 101 meet the Caltrans target.

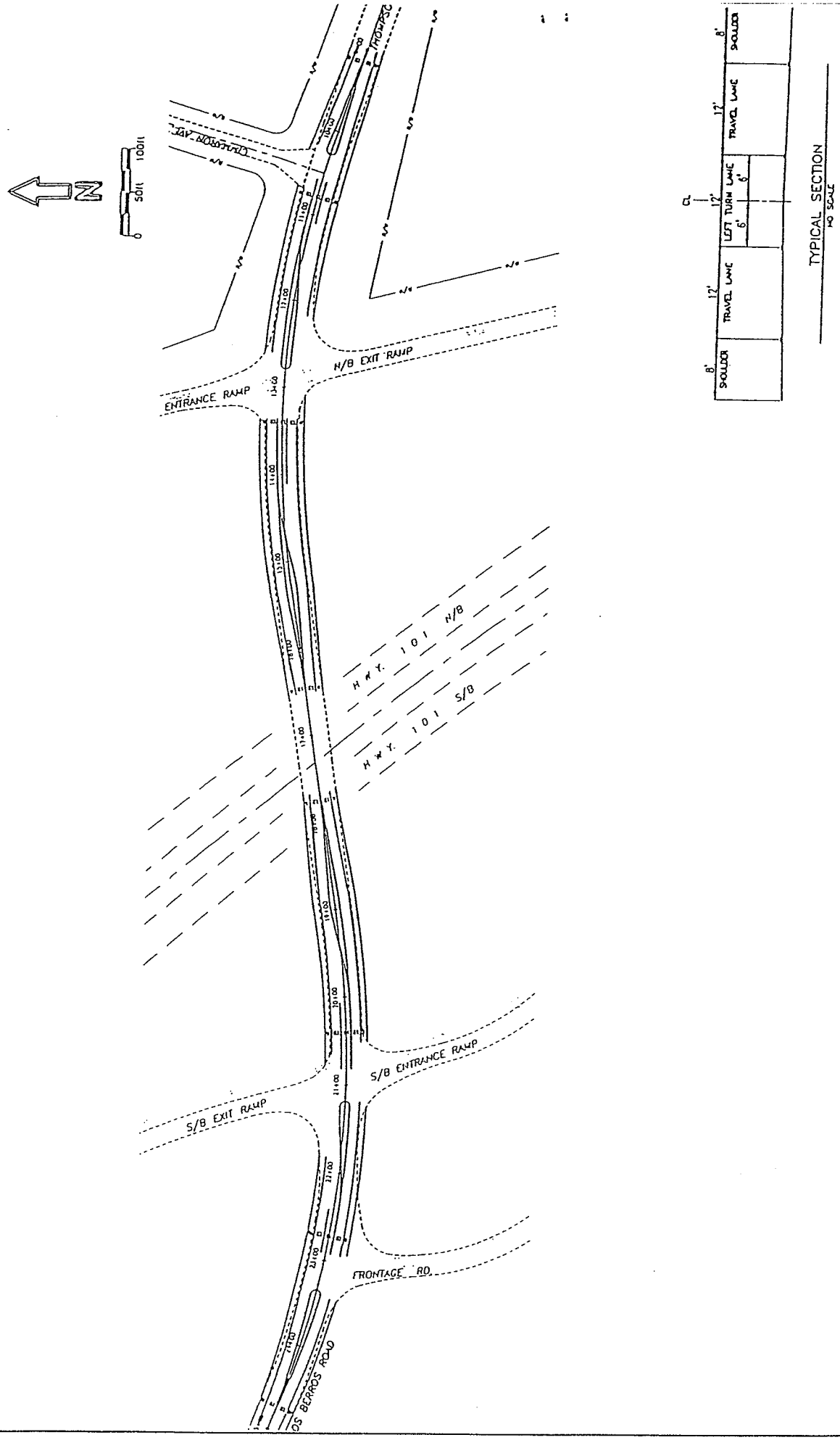
## IMPROVEMENT RECOMMENDATIONS

### Los Berros Road/Highway 101 Interchange

The cumulative analysis found that the Los Berros Road/Highway 101 interchange is forecast to operate at LOS D-F during the peak hour periods under cumulative conditions, which exceeds the County's LOS C standard. The Laetitia Agricultural Cluster Project would contribute to the cumulative impact at the interchange.

As identified in the South County Traffic Model Update, the interchange will require improvements to accommodate the future traffic loads. Figure 8 illustrates the improvement plans that the County has developed for the interchange.

[3] Transportation Concept Report for U.S. Route 101 in Caltrans District 5, Caltrans District 5 Advanced System Planning Branch, October 2001.


N
0
50ft
100ft
CHAMPION WAY
THOMPSO
N/B EXIT RAMP
ENTRANCE RAMP
HWY. 101 N/B
HWY. 101 S/B
S/B ENTRANCE RAMP
S/B EXIT RAMP
FRONTAGE RD.
LOS BERROS ROAD
8'
SHOULDER
12'
TRAVEL LANE
12'
LEFT TURN LANE
6'
6'
CL
12'
TRAVEL LANE
8'
SHOULDER
TYPICAL SECTION
NO SCALE
FIGURE 8
DH # 06092
LOS BERROS ROAD/HIGHWAY 101 PAVEMENT DELINEATION PLAN
ASSOCIATED
TRANSPORTATION
ENGINEERS

As shown, the improvements include widening Los Berros Road to provide left-turn lanes at the intersections and wider shoulders throughout the corridor. Traffic signals are planned for the Los Berros Road/Highway 101 Northbound and Southbound Ramp intersections.

Levels of service were calculated assuming the Cumulative + Project traffic with the planned improvements in place (worksheets are contained in the Technical Appendix). The results show that the interchange is forecast to operate at LOS B-C during the A.M. and P.M. peak hour periods with the planned improvements under the Cumulative + Project scenario.

The County has developed a Road Improvement Fee Program for funding the future improvements needed in the Nipomo area, including the improvements planned for the Los Berros Road/Highway 101 interchange. The Laetitia Agricultural Cluster Project is located within the fee area and will therefore be subject to the traffic fees. Payment of traffic fees by the project would offset its contribution to cumulative impacts in the area, including cumulative impacts at Los Berros Road/Highway 101 interchange.

# # #

## REFERENCES

Highway Capacity Manual, Transportation Research Board, Fourth Edition, 2000.

South County Traffic Model Update 2006 Annual Report and Fifth Year Update, Draft Final Report, Omni-Means 2006.

Trip Generation, Institute of Transportation Engineers, 7th Edition, 2003.

## TECHNICAL APPENDIX

**CONTENTS:**

LEVEL OF SERVICE DEFINITIONS

LEVEL OF SERVICE CALCULATION WORKSHEETS

Reference 1 Los Berros Road/Highway 101 SB
Reference 2 Los Berros Road/Highway 101 NB
Reference 3 Highway 101

TRAFFIC COUNT DATA

# INTERSECTION LEVEL OF SERVICE DEFINITIONS

The ability of a roadway system to carry traffic is most often expressed in terms of "Levels of Service" (LOS) at intersections. LOS A through F are used, with LOS A indicating very good operations and LOS F indicating poor operations. More complete level of service definitions for intersections are listed in the following table.

| LOS | Definition |
|---|---|
| A | Conditions of free unobstructed flow, no delays and all signal phases sufficient in duration to clear all approaching vehicles. |
| B | Conditions of stable flow, very little delay, a few phases are unable to handle all approaching vehicles. |
| C | Conditions of stable flow, delays are low to moderate, full use of peak direction signal phases is experienced. |
| D | Conditions approaching unstable flow, delays are moderate to heavy, significant signal time deficiencies are experienced for short durations during the peak traffic period. |
| E | Conditions of unstable flow, delays are significant, signal phase timing is generally insufficient, congestion exists for extended duration throughout the peak period. |
| F | Conditions of forced flow, travel speeds are low and volumes are well above capacity. This condition is often caused when vehicles released by an upstream signal are unable to proceed because of back-ups from a downstream signal. |

LOS based on average control delay per vehicle in seconds.
Source: Highway Capacity Manual, December 2000.

**LEVEL OF SERVICE CALCULATION WORKSHEETS**

**Reference 1 Los Berros Road/Highway 101 SB**
**Reference 2 Los Berros Road/Highway 101 NB**
**Reference 3 Highway 101**

**TRAFFIC COUNT DATA**

# TWO-WAY STOP CONTROL SUMMARY

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | DH | Intersection | US 101 SB/LOS BERROS |
| Agency/Co. | ATE | Jurisdiction | SLO COUNTY |
| Date Performed | 9/18/2006 | Analysis Year | EXISTING + PROJECT |
| Analysis Time Period | AM PEAK | | |

Project Description #06092

| | |
|---|---|
| East/West Street: LOS BERROS RD. | North/South Street: US 101 SB |
| Intersection Orientation: East-West | Study Period (hrs): 0.25 |

## Vehicle Volumes and Adjustments

| Major Street | Eastbound | | | Westbound | | |
|---|---|---|---|---|---|---|
| Movement | 1 | 2 | 3 | 4 | 5 | 6 |
| | L | T | R | L | T | R |
| Volume (veh/h) | | 276 | 217 | 44 | 244 | |
| Peak-Hour Factor, PHF | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Hourly Flow Rate, HFR (veh/h) | 0 | 276 | 217 | 44 | 244 | 0 |
| Percent Heavy Vehicles | 0 | -- | -- | 4 | -- | -- |
| Median Type | Undivided | | | | | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 1 | 0 | 0 | 1 | 0 |
| Configuration | | | TR | LT | | |
| Upstream Signal | | 0 | | | 0 | |

| Minor Street | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|
| Movement | 7 | 8 | 9 | 10 | 11 | 12 |
| | L | T | R | L | T | R |
| Volume (veh/h) | | | | 130 | 0 | 34 |
| Peak-Hour Factor, PHF | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Hourly Flow Rate, HFR (veh/h) | 0 | 0 | 0 | 130 | 0 | 34 |
| Percent Heavy Vehicles | 0 | 0 | 0 | 4 | 4 | 4 |
| Percent Grade (%) | 0 | | | 0 | | |
| Flared Approach | | N | | | Y | |
| Storage | | 0 | | | 2 | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 0 | 0 | 0 | 1 | 0 |
| Configuration | | | | | LTR | |

## Delay, Queue Length, and Level of Service

| Approach | Eastbound | Westbound | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 |
| Lane Configuration | | LT | | | | | LTR | |
| v (veh/h) | | 44 | | | | | 164 | |
| C (m) (veh/h) | | 1060 | | | | | 477 | |
| v/c | | 0.04 | | | | | 0.34 | |
| 95% queue length | | 0.13 | | | | | 1.51 | |
| Control Delay (s/veh) | | 8.5 | | | | | 17.4 | |
| LOS | | A | | | | | C | |
| Approach Delay (s/veh) | -- | -- | | | | 17.4 | | |
| Approach LOS | -- | -- | | | | C | | |

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HCS+TM Version 5.2 Generated: 9/18/2006 1:45 PM

TWD = 15.5 SEC = LOS C

# TWO-WAY STOP CONTROL SUMMARY

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | DH | Intersection | US 101 SB/LOS BERROS |
| Agency/Co. | ATE | Jurisdiction | SLO COUNTY |
| Date Performed | 9/22/2006 | Analysis Year | CUMULATIVE CONDITIONS |
| Analysis Time Period | AM PEAK | | |

Project Description #06092

| | |
|---|---|
| East/West Street: LOS BERROS RD. | North/South Street: US 101 SB |
| Intersection Orientation: East-West | Study Period (hrs): 0.25 |

## Vehicle Volumes and Adjustments

| Major Street | Eastbound | | | Westbound | | |
|---|---|---|---|---|---|---|
| Movement | 1 | 2 | 3 | 4 | 5 | 6 |
| | L | T | R | L | T | R |
| Volume (veh/h) | | 301 | 250 | 66 | 386 | |
| Peak-Hour Factor, PHF | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Hourly Flow Rate, HFR (veh/h) | 0 | 301 | 250 | 66 | 386 | 0 |
| Percent Heavy Vehicles | 0 | -- | -- | 4 | -- | -- |
| Median Type | Undivided | | | | | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 1 | 0 | 0 | 1 | 0 |
| Configuration | | | TR | LT | | |
| Upstream Signal | | 0 | | | 0 | |

| Minor Street | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|
| Movement | 7 | 8 | 9 | 10 | 11 | 12 |
| | L | T | R | L | T | R |
| Volume (veh/h) | | | | 138 | 0 | 100 |
| Peak-Hour Factor, PHF | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Hourly Flow Rate, HFR (veh/h) | 0 | 0 | 0 | 138 | 0 | 100 |
| Percent Heavy Vehicles | 0 | 0 | 0 | 4 | 4 | 4 |
| Percent Grade (%) | 0 | | | 0 | | |
| Flared Approach | | N | | | Y | |
| Storage | | 0 | | | 2 | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 0 | 0 | 0 | 1 | 0 |
| Configuration | | | | | LTR | |

## Delay, Queue Length, and Level of Service

| Approach | Eastbound | Westbound | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 |
| Lane Configuration | | LT | | | | | LTR | |
| v (veh/h) | | 66 | | | | | 238 | |
| C (m) (veh/h) | | 1009 | | | | | 466 | |
| v/c | | 0.07 | | | | | 0.51 | |
| 95% queue length | | 0.21 | | | | | 2.85 | |
| Control Delay (s/veh) | | 8.8 | | | | | 23.1 | |
| LOS | | A | | | | | C | |
| Approach Delay (s/veh) | -- | -- | | | | 23.1 | | |
| Approach LOS | -- | -- | | | | C | | |

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AWD = 20 SEC = LOS C

2

# TWO-WAY STOP CONTROL SUMMARY

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | DH | Intersection | US 101 SB/LOS BERROS |
| Agency/Co. | ATE | Jurisdiction | SLO COUNTY |
| Date Performed | 9/22/2006 | Analysis Year | CUMULATIVE + PROJECT |
| Analysis Time Period | AM PEAK | | |

Project Description #06092

| | |
|---|---|
| East/West Street: LOS BERROS RD. | North/South Street: US 101 SB |
| Intersection Orientation: East-West | Study Period (hrs): 0.25 |

## Vehicle Volumes and Adjustments

| Major Street | Eastbound | | | Westbound | | |
|---|---|---|---|---|---|---|
| Movement | 1 | 2 | 3 | 4 | 5 | 6 |
| | L | T | R | L | T | R |
| Volume (veh/h) | | 302 | 250 | 80 | 389 | |
| Peak-Hour Factor, PHF | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Hourly Flow Rate, HFR (veh/h) | 0 | 302 | 250 | 80 | 389 | 0 |
| Percent Heavy Vehicles | 0 | -- | -- | 4 | -- | -- |
| Median Type | Undivided | | | | | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 1 | 0 | 0 | 1 | 0 |
| Configuration | | | TR | LT | | |
| Upstream Signal | | 0 | | | 0 | |

| Minor Street | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|
| Movement | 7 | 8 | 9 | 10 | 11 | 12 |
| | L | T | R | L | T | R |
| Volume (veh/h) | | | | 151 | 0 | 100 |
| Peak-Hour Factor, PHF | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Hourly Flow Rate, HFR (veh/h) | 0 | 0 | 0 | 151 | 0 | 100 |
| Percent Heavy Vehicles | 0 | 0 | 0 | 4 | 4 | 4 |
| Percent Grade (%) | | 0 | | | 0 | |
| Flared Approach | | N | | | Y | |
| Storage | | 0 | | | 2 | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 0 | 0 | 0 | 1 | 0 |
| Configuration | | | | | LTR | |

## Delay, Queue Length, and Level of Service

| Approach | Eastbound | Westbound | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 |
| Lane Configuration | | LT | | | | | LTR | |
| v (veh/h) | | 80 | | | | | 251 | |
| C (m) (veh/h) | | 1008 | | | | | 393 | |
| v/c | | 0.08 | | | | | 0.64 | |
| 95% queue length | | 0.26 | | | | | 4.27 | |
| Control Delay (s/veh) | | 8.9 | | | | | 29.0 | |
| LOS | | A | | | | | D | |
| Approach Delay (s/veh) | -- | -- | | | | 29.0 | | |
| Approach LOS | -- | -- | | | | D | | |

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AWD = 24.1 SEC = LOS C

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | | 4.0 | | 4.0 | 4.0 | | | | | | 4.0 | |
| Lane Util. Factor | | 1.00 | | 1.00 | 1.00 | | | | | | 1.00 | |
| Frt | | 0.94 | | 1.00 | 1.00 | | | | | | 0.95 | |
| Flt Protected | | 1.00 | | 0.95 | 1.00 | | | | | | 0.97 | |
| Satd. Flow (prot) | | 1715 | | 1736 | 1827 | | | | | | 1678 | |
| Flt Permitted | | 1.00 | | 0.95 | 1.00 | | | | | | 0.97 | |
| Satd. Flow (perm) | | 1715 | | 1736 | 1827 | | | | | | 1678 | |
| Volume (vph) | 0 | 302 | 250 | 80 | 389 | 0 | 0 | 0 | 0 | 151 | 0 | 100 |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 0 | 328 | 272 | 87 | 423 | 0 | 0 | 0 | 0 | 164 | 0 | 109 |
| RTOR Reduction (vph) | 0 | 55 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 37 | 0 |
| Lane Group Flow (vph) | 0 | 545 | 0 | 87 | 423 | 0 | 0 | 0 | 0 | 0 | 236 | 0 |
| Turn Type | | | | Prot | | | | | | Perm | | |
| Protected Phases | | 4 | | 3 | 8 | | | | | | 6 | |
| Permitted Phases | | | | | | | | | | 6 | | |
| Actuated Green, G (s) | | 22.2 | | 5.2 | 31.4 | | | | | | 20.6 | |
| Effective Green, g (s) | | 22.2 | | 5.2 | 31.4 | | | | | | 20.6 | |
| Actuated g/C Ratio | | 0.37 | | 0.09 | 0.52 | | | | | | 0.34 | |
| Clearance Time (s) | | 4.0 | | 4.0 | 4.0 | | | | | | 4.0 | |
| Vehicle Extension (s) | | 3.0 | | 3.0 | 3.0 | | | | | | 3.0 | |
| Lane Grp Cap (vph) | | 635 | | 150 | 956 | | | | | | 576 | |
| v/s Ratio Prot | | c0.32 | | 0.05 | c0.23 | | | | | | | |
| v/s Ratio Perm | | | | | | | | | | | 0.14 | |
| v/c Ratio | | 0.86 | | 0.58 | 0.44 | | | | | | 0.41 | |
| Uniform Delay, d1 | | 17.4 | | 26.3 | 8.9 | | | | | | 15.1 | |
| Progression Factor | | 1.00 | | 0.73 | 0.65 | | | | | | 1.00 | |
| Incremental Delay, d2 | | 11.1 | | 3.9 | 0.2 | | | | | | 2.2 | |
| Delay (s) | | 28.5 | | 23.2 | 6.0 | | | | | | 17.2 | |
| Level of Service | | C | | C | A | | | | | | B | |
| Approach Delay (s) | | 28.5 | | | 9.0 | | | 0.0 | | | 17.2 | |
| Approach LOS | | C | | | A | | | A | | | B | |

**Intersection Summary**

| | | | |
|---|---|---|---|
| HCM Average Control Delay | 19.1 | HCM Level of Service | B |
| HCM Volume to Capacity ratio | 0.59 | | |
| Actuated Cycle Length (s) | 60.0 | Sum of lost time (s) | 8.0 |
| Intersection Capacity Utilization | 60.1% | ICU Level of Service | B |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

# TWO-WAY STOP CONTROL SUMMARY

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | DH | Intersection | US 101 SB/LOS BERROS |
| Agency/Co. | ATE | Jurisdiction | SLO COUNTY |
| Date Performed | 9/18/2006 | Analysis Year | EXISTING CONDITIONS |
| Analysis Time Period | PM PEAK | | |

Project Description #06092

| | |
|---|---|
| East/West Street: LOS BERROS RD. | North/South Street: US 101 SB |
| Intersection Orientation: East-West | Study Period (hrs): 0.25 |

## Vehicle Volumes and Adjustments

| Major Street | Eastbound | | | Westbound | | |
|---|---|---|---|---|---|---|
| Movement | 1 | 2 | 3 | 4 | 5 | 6 |
| | L | T | R | L | T | R |
| Volume (veh/h) | | 137 | 211 | 30 | 274 | |
| Peak-Hour Factor, PHF | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Hourly Flow Rate, HFR (veh/h) | 0 | 137 | 211 | 30 | 274 | 0 |
| Percent Heavy Vehicles | 0 | -- | -- | 4 | -- | -- |
| Median Type | Undivided | | | | | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 1 | 0 | 0 | 1 | 0 |
| Configuration | | | TR | LT | | |
| Upstream Signal | | 0 | | | 0 | |

| Minor Street | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|
| Movement | 7 | 8 | 9 | 10 | 11 | 12 |
| | L | T | R | L | T | R |
| Volume (veh/h) | | | | 168 | 0 | 102 |
| Peak-Hour Factor, PHF | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Hourly Flow Rate, HFR (veh/h) | 0 | 0 | 0 | 168 | 0 | 102 |
| Percent Heavy Vehicles | 0 | 0 | 0 | 4 | 4 | 4 |
| Percent Grade (%) | | 0 | | | 0 | |
| Flared Approach | | N | | | Y | |
| Storage | | 0 | | | 2 | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 0 | 0 | 0 | 1 | 0 |
| Configuration | | | | | LTR | |

## Delay, Queue Length, and Level of Service

| Approach | Eastbound | Westbound | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 |
| Lane Configuration | | LT | | | | | LTR | |
| v (veh/h) | | 30 | | | | | 270 | |
| C (m) (veh/h) | | 1200 | | | | | 746 | |
| v/c | | 0.03 | | | | | 0.36 | |
| 95% queue length | | 0.08 | | | | | 1.66 | |
| Control Delay (s/veh) | | 8.1 | | | | | 14.6 | |
| LOS | | A | | | | | B | |
| Approach Delay (s/veh) | -- | -- | | | | 14.6 | | |
| Approach LOS | -- | -- | | | | B | | |

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AWD = 14.0 SEC = LOS B

# TWO-WAY STOP CONTROL SUMMARY

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | DH | Intersection | US 101 SB/LOS BERROS |
| Agency/Co. | ATE | Jurisdiction | SLO COUNTY |
| Date Performed | 9/18/2006 | Analysis Year | EXISTING + PROJECT |
| Analysis Time Period | PM PEAK | | |

Project Description #06092

| | |
|---|---|
| East/West Street: LOS BERROS RD. | North/South Street: US 101 SB |
| Intersection Orientation: East-West | Study Period (hrs): 0.25 |

## Vehicle Volumes and Adjustments

| Major Street | Eastbound | | | Westbound | | |
|---|---|---|---|---|---|---|
| Movement | 1 | 2 | 3 | 4 | 5 | 6 |
| | L | T | R | L | T | R |
| Volume (veh/h) | | 140 | 211 | 39 | 276 | |
| Peak-Hour Factor, PHF | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Hourly Flow Rate, HFR (veh/h) | 0 | 140 | 211 | 39 | 276 | 0 |
| Percent Heavy Vehicles | 0 | -- | -- | 4 | -- | -- |
| Median Type | Undivided | | | | | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 1 | 0 | 0 | 1 | 0 |
| Configuration | | | TR | LT | | |
| Upstream Signal | | 0 | | | 0 | |

| Minor Street | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|
| Movement | 7 | 8 | 9 | 10 | 11 | 12 |
| | L | T | R | L | T | R |
| Volume (veh/h) | | | | 210 | 0 | 102 |
| Peak-Hour Factor, PHF | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Hourly Flow Rate, HFR (veh/h) | 0 | 0 | 0 | 210 | 0 | 102 |
| Percent Heavy Vehicles | 0 | 0 | 0 | 4 | 4 | 4 |
| Percent Grade (%) | | 0 | | | 0 | |
| Flared Approach | | N | | | Y | |
| Storage | | 0 | | | 2 | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 0 | 0 | 0 | 1 | 0 |
| Configuration | | | | | LTR | |

## Delay, Queue Length, and Level of Service

| Approach | Eastbound | Westbound | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 |
| Lane Configuration | | LT | | | | | LTR | |
| v (veh/h) | | 39 | | | | | 312 | |
| C (m) (veh/h) | | 1197 | | | | | 663 | |
| v/c | | 0.03 | | | | | 0.47 | |
| 95% queue length | | 0.10 | | | | | 2.52 | |
| Control Delay (s/veh) | | 8.1 | | | | | 16.9 | |
| LOS | | A | | | | | C | |
| Approach Delay (s/veh) | -- | -- | | | | 16.9 | | |
| Approach LOS | -- | -- | | | | C | | |

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AWD = 15.9 SEC = LOS C

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# TWO-WAY STOP CONTROL SUMMARY

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | *DH* | Intersection | *US 101 SB/LOS BERROS* |
| Agency/Co. | *ATE* | Jurisdiction | *SLO COUNTY* |
| Date Performed | | Analysis Year | *CUMULATIVE CONDITIONS* |
| Analysis Time Period | *PM PEAK* | | |

Project Description *#06092*

| | |
|---|---|
| East/West Street: *LOS BERROS RD.* | North/South Street: *US 101 SB* |
| Intersection Orientation: *East-West* | Study Period (hrs): *0.25* |

## Vehicle Volumes and Adjustments

| **Major Street** | Eastbound | | | Westbound | | |
|---|---|---|---|---|---|---|
| Movement | 1 | 2 | 3 | 4 | 5 | 6 |
| | L | T | R | L | T | R |
| Volume (veh/h) | | *151* | *275* | *55* | *356* | |
| Peak-Hour Factor, PHF | *1.00* | *1.00* | *1.00* | *1.00* | *1.00* | *1.00* |
| Hourly Flow Rate, HFR (veh/h) | *0* | *151* | *275* | *55* | *356* | *0* |
| Percent Heavy Vehicles | *0* | -- | -- | *4* | -- | -- |
| Median Type | *Undivided* | | | | | |
| RT Channelized | | | *0* | | | *0* |
| Lanes | *0* | *1* | *0* | *0* | *1* | *0* |
| Configuration | | | *TR* | *LT* | | |
| Upstream Signal | | *0* | | | *0* | |

| **Minor Street** | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|
| Movement | 7 | 8 | 9 | 10 | 11 | 12 |
| | L | T | R | L | T | R |
| Volume (veh/h) | | | | *272* | *0* | *137* |
| Peak-Hour Factor, PHF | *1.00* | *1.00* | *1.00* | *1.00* | *1.00* | *1.00* |
| Hourly Flow Rate, HFR (veh/h) | *0* | *0* | *0* | *272* | *0* | *137* |
| Percent Heavy Vehicles | *0* | *0* | *0* | *4* | *4* | *4* |
| Percent Grade (%) | | *0* | | | *0* | |
| Flared Approach | | *N* | | | *Y* | |
| Storage | | *0* | | | *2* | |
| RT Channelized | | | *0* | | | *0* |
| Lanes | *0* | *0* | *0* | *0* | *1* | *0* |
| Configuration | | | | | *LTR* | |

## Delay, Queue Length, and Level of Service

| Approach | Eastbound | Westbound | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 |
| Lane Configuration | | *LT* | | | | | *LTR* | |
| v (veh/h) | | *55* | | | | | *409* | |
| C (m) (veh/h) | | *1123* | | | | | *480* | |
| v/c | | *0.05* | | | | | *0.85* | |
| 95% queue length | | *0.15* | | | | | *8.72* | |
| Control Delay (s/veh) | | *8.4* | | | | | *42.3* | |
| LOS | | *A* | | | | | *E* | |
| Approach Delay (s/veh) | -- | -- | | | | *42.3* | | |
| Approach LOS | -- | -- | | | | *E* | | |

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AWD = 38.3 SEC = LOS E

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# TWO-WAY STOP CONTROL SUMMARY

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | *DH* | Intersection | *US 101 SB/LOS BERROS* |
| Agency/Co. | *ATE* | Jurisdiction | *SLO COUNTY* |
| Date Performed | *9/22/2006* | Analysis Year | *CUMULATIVE + PROJECT* |
| Analysis Time Period | *PM PEAK* | | |

Project Description *#06092*

| | |
|---|---|
| East/West Street: *LOS BERROS RD.* | North/South Street: *US 101 SB* |
| Intersection Orientation: *East-West* | Study Period (hrs): *0.25* |

## Vehicle Volumes and Adjustments

| **Major Street** | Eastbound | | | Westbound | | |
|---|---|---|---|---|---|---|
| Movement | 1 | 2 | 3 | 4 | 5 | 6 |
| | L | T | R | L | T | R |
| Volume (veh/h) | | *154* | *275* | *64* | *358* | |
| Peak-Hour Factor, PHF | *1.00* | *1.00* | *1.00* | *1.00* | *1.00* | *1.00* |
| Hourly Flow Rate, HFR (veh/h) | *0* | *154* | *275* | *64* | *358* | *0* |
| Percent Heavy Vehicles | *0* | -- | -- | *4* | -- | -- |
| Median Type | *Undivided* | | | | | |
| RT Channelized | | | *0* | | | *0* |
| Lanes | *0* | *1* | *0* | *0* | *1* | *0* |
| Configuration | | | *TR* | *LT* | | |
| Upstream Signal | | *0* | | | *0* | |

| **Minor Street** | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|
| Movement | 7 | 8 | 9 | 10 | 11 | 12 |
| | L | T | R | L | T | R |
| Volume (veh/h) | | | | *314* | *0* | *137* |
| Peak-Hour Factor, PHF | *1.00* | *1.00* | *1.00* | *1.00* | *1.00* | *1.00* |
| Hourly Flow Rate, HFR (veh/h) | *0* | *0* | *0* | *314* | *0* | *137* |
| Percent Heavy Vehicles | *0* | *0* | *0* | *4* | *4* | *4* |
| Percent Grade (%) | | *0* | | | *0* | |
| Flared Approach | | *N* | | | *Y* | |
| Storage | | *0* | | | *2* | |
| RT Channelized | | | *0* | | | *0* |
| Lanes | *0* | *0* | *0* | *0* | *1* | *0* |
| Configuration | | | | | *LTR* | |

## Delay, Queue Length, and Level of Service

| Approach | Eastbound | Westbound | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 |
| Lane Configuration | | *LT* | | | | | *LTR* | |
| v (veh/h) | | *64* | | | | | *451* | |
| C (m) (veh/h) | | *1120* | | | | | *427* | |
| v/c | | *0.06* | | | | | *1.06* | |
| 95% queue length | | *0.18* | | | | | *14.59* | |
| Control Delay (s/veh) | | *8.4* | | | | | *90.6* | |
| LOS | | *A* | | | | | *F* | |
| Approach Delay (s/veh) | -- | -- | | | | *90.6* | | |
| Approach LOS | -- | -- | | | | *F* | | |

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AND > 50 SEC = LOS F

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| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | | 4.0 | | 4.0 | 4.0 | | | | | | 4.0 | |
| Lane Util. Factor | | 1.00 | | 1.00 | 1.00 | | | | | | 1.00 | |
| Frt | | 0.94 | | 1.00 | 1.00 | | | | | | 0.95 | |
| Flt Protected | | 1.00 | | 0.95 | 1.00 | | | | | | 0.97 | |
| Satd. Flow (prot) | | 1715 | | 1736 | 1827 | | | | | | 1678 | |
| Flt Permitted | | 1.00 | | 0.95 | 1.00 | | | | | | 0.97 | |
| Satd. Flow (perm) | | 1715 | | 1736 | 1827 | | | | | | 1678 | |
| Volume (vph) | 0 | 302 | 250 | 80 | 389 | 0 | 0 | 0 | 0 | 151 | 0 | 100 |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 0 | 328 | 272 | 87 | 423 | 0 | 0 | 0 | 0 | 164 | 0 | 109 |
| RTOR Reduction (vph) | 0 | 55 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 37 | 0 |
| Lane Group Flow (vph) | 0 | 545 | 0 | 87 | 423 | 0 | 0 | 0 | 0 | 0 | 236 | 0 |
| Turn Type | | | | Prot | | | | | | Perm | | |
| Protected Phases | | 4 | | 3 | 8 | | | | | | 6 | |
| Permitted Phases | | | | | | | | | | 6 | | |
| Actuated Green, G (s) | | 22.2 | | 5.2 | 31.4 | | | | | | 20.6 | |
| Effective Green, g (s) | | 22.2 | | 5.2 | 31.4 | | | | | | 20.6 | |
| Actuated g/C Ratio | | 0.37 | | 0.09 | 0.52 | | | | | | 0.34 | |
| Clearance Time (s) | | 4.0 | | 4.0 | 4.0 | | | | | | 4.0 | |
| Vehicle Extension (s) | | 3.0 | | 3.0 | 3.0 | | | | | | 3.0 | |
| Lane Grp Cap (vph) | | 635 | | 150 | 956 | | | | | | 576 | |
| v/s Ratio Prot | | c0.32 | | 0.05 | c0.23 | | | | | | | |
| v/s Ratio Perm | | | | | | | | | | | 0.14 | |
| v/c Ratio | | 0.86 | | 0.58 | 0.44 | | | | | | 0.41 | |
| Uniform Delay, d1 | | 17.4 | | 26.3 | 8.9 | | | | | | 15.1 | |
| Progression Factor | | 1.00 | | 0.83 | 0.64 | | | | | | 1.00 | |
| Incremental Delay, d2 | | 11.1 | | 4.8 | 0.3 | | | | | | 2.2 | |
| Delay (s) | | 28.5 | | 26.7 | 6.0 | | | | | | 17.2 | |
| Level of Service | | C | | C | A | | | | | | B | |
| Approach Delay (s) | | 28.5 | | | 9.5 | | | 0.0 | | | 17.2 | |
| Approach LOS | | C | | | A | | | A | | | B | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM Average Control Delay | 19.3 | HCM Level of Service | B |
| HCM Volume to Capacity ratio | 0.59 | | |
| Actuated Cycle Length (s) | 60.0 | Sum of lost time (s) | 8.0 |
| Intersection Capacity Utilization | 60.1% | ICU Level of Service | B |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

# TWO-WAY STOP CONTROL SUMMARY

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | *DH* | Intersection | *US 101 NB/LOS BERROS* |
| Agency/Co. | *ATE* | Jurisdiction | *SLO COUNTY* |
| Date Performed | *9/18/2006* | Analysis Year | *EXISTING CONDITIONS* |
| Analysis Time Period | *AM PEAK* | | |

Project Description *#06092*

| | |
|---|---|
| East/West Street: *LOS BERROS* | North/South Street: *US 101 NB* |
| Intersection Orientation: *East-West* | Study Period (hrs): *0.25* |

## Vehicle Volumes and Adjustments

| **Major Street** | Eastbound | | | Westbound | | |
|---|---|---|---|---|---|---|
| Movement | 1 | 2 | 3 | 4 | 5 | 6 |
| | L | T | R | L | T | R |
| Volume (veh/h) | *151* | *255* | | | *131* | *180* |
| Peak-Hour Factor, PHF | *1.00* | *1.00* | *1.00* | *1.00* | *1.00* | *1.00* |
| Hourly Flow Rate, HFR (veh/h) | *151* | *255* | *0* | *0* | *131* | *180* |
| Percent Heavy Vehicles | *4* | -- | -- | *0* | -- | -- |
| Median Type | *Undivided* | | | | | |
| RT Channelized | | | *0* | | | *0* |
| Lanes | *0* | *1* | *0* | *0* | *1* | *0* |
| Configuration | *LT* | | | | | *TR* |
| Upstream Signal | | *0* | | | *0* | |

| **Minor Street** | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|
| Movement | 7 | 8 | 9 | 10 | 11 | 12 |
| | L | T | R | L | T | R |
| Volume (veh/h) | *133* | *0* | *26* | | | |
| Peak-Hour Factor, PHF | *1.00* | *1.00* | *1.00* | *1.00* | *1.00* | *1.00* |
| Hourly Flow Rate, HFR (veh/h) | *133* | *0* | *26* | *0* | *0* | *0* |
| Percent Heavy Vehicles | *4* | *4* | *4* | *0* | *0* | *0* |
| Percent Grade (%) | | *0* | | | *0* | |
| Flared Approach | | *Y* | | | *N* | |
| Storage | | *2* | | | *0* | |
| RT Channelized | | | *0* | | | *0* |
| Lanes | *0* | *1* | *0* | *0* | *0* | *0* |
| Configuration | | *LTR* | | | | |

## Delay, Queue Length, and Level of Service

| Approach | Eastbound | Westbound | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 |
| Lane Configuration | *LT* | | | *LTR* | | | | |
| v (veh/h) | *151* | | | *159* | | | | |
| C (m) (veh/h) | *1238* | | | *380* | | | | |
| v/c | *0.12* | | | *0.42* | | | | |
| 95% queue length | *0.42* | | | *2.01* | | | | |
| Control Delay (s/veh) | *8.3* | | | *21.9* | | | | |
| LOS | *A* | | | *C* | | | | |
| Approach Delay (s/veh) | -- | -- | *21.9* | | | | | |
| Approach LOS | -- | -- | *C* | | | | | |

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AWD = 15.3 SEC = LOS C

# TWO-WAY STOP CONTROL SUMMARY

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | *DH* | Intersection | *US 101 NB/LOS BERROS* |
| Agency/Co. | *ATE* | Jurisdiction | *SLO COUNTY* |
| Date Performed | *9/18/2006* | Analysis Year | *EXISTING + PROJECT* |
| Analysis Time Period | *AM PEAK* | | |

Project Description *#06092*

| | |
|---|---|
| East/West Street: *LOS BERROS* | North/South Street: *US 101 NB* |
| Intersection Orientation: *East-West* | Study Period (hrs): *0.25* |

## Vehicle Volumes and Adjustments

| **Major Street** | Eastbound | | | Westbound | | |
|---|---|---|---|---|---|---|
| Movement | 1 | 2 | 3 | 4 | 5 | 6 |
| | L | T | R | L | T | R |
| Volume (veh/h) | *151* | *269* | | | *148* | *217* |
| Peak-Hour Factor, PHF | *1.00* | *1.00* | *1.00* | *1.00* | *1.00* | *1.00* |
| Hourly Flow Rate, HFR (veh/h) | *151* | *269* | *0* | *0* | *148* | *217* |
| Percent Heavy Vehicles | *4* | -- | -- | *0* | -- | -- |
| Median Type | *Undivided* | | | | | |
| RT Channelized | | | *0* | | | *0* |
| Lanes | *0* | *1* | *0* | *0* | *1* | *0* |
| Configuration | *LT* | | | | | *TR* |
| Upstream Signal | | *0* | | | *0* | |

| **Minor Street** | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|
| Movement | 7 | 8 | 9 | 10 | 11 | 12 |
| | L | T | R | L | T | R |
| Volume (veh/h) | *133* | *0* | *31* | | | |
| Peak-Hour Factor, PHF | *1.00* | *1.00* | *1.00* | *1.00* | *1.00* | *1.00* |
| Hourly Flow Rate, HFR (veh/h) | *133* | *0* | *31* | *0* | *0* | *0* |
| Percent Heavy Vehicles | *4* | *4* | *4* | *0* | *0* | *0* |
| Percent Grade (%) | | *0* | | | *0* | |
| Flared Approach | | *Y* | | | *N* | |
| Storage | | *2* | | | *0* | |
| RT Channelized | | | *0* | | | *0* |
| Lanes | *0* | *1* | *0* | *0* | *0* | *0* |
| Configuration | | *LTR* | | | | |

## Delay, Queue Length, and Level of Service

| Approach | Eastbound | Westbound | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 |
| Lane Configuration | *LT* | | | *LTR* | | | | |
| v (veh/h) | *151* | | | *164* | | | | |
| C (m) (veh/h) | *1183* | | | *365* | | | | |
| v/c | *0.13* | | | *0.45* | | | | |
| 95% queue length | *0.44* | | | *2.25* | | | | |
| Control Delay (s/veh) | *8.5* | | | *23.5* | | | | |
| LOS | *A* | | | *C* | | | | |
| Approach Delay (s/veh) | -- | -- | *23.5* | | | | | |
| Approach LOS | -- | -- | *C* | | | | | |

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AWD = 16.3 SEC = LOS C

# TWO-WAY STOP CONTROL SUMMARY

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | *DH* | Intersection | *US 101 NB/LOS BERROS* |
| Agency/Co. | *ATE* | Jurisdiction | *SLO COUNTY* |
| Date Performed | *9/22/2006* | Analysis Year | *CUMULATIVE CONDITIONS* |
| Analysis Time Period | *AM PEAK* | | |

Project Description *#06092*

| | |
|---|---|
| East/West Street: *LOS BERROS* | North/South Street: *US 101 NB* |
| Intersection Orientation: *East-West* | Study Period (hrs): *0.25* |

## Vehicle Volumes and Adjustments

| **Major Street** | Eastbound | | | Westbound | | |
|---|---|---|---|---|---|---|
| Movement | 1 | 2 | 3 | 4 | 5 | 6 |
| | L | T | R | L | T | R |
| Volume (veh/h) | *150* | *289* | | | *252* | *158* |
| Peak-Hour Factor, PHF | *1.00* | *1.00* | *1.00* | *1.00* | *1.00* | *1.00* |
| Hourly Flow Rate, HFR (veh/h) | *150* | *289* | *0* | *0* | *252* | *158* |
| Percent Heavy Vehicles | *4* | -- | -- | *0* | -- | -- |
| Median Type | *Undivided* | | | | | |
| RT Channelized | | | *0* | | | *0* |
| Lanes | *0* | *1* | *0* | *0* | *1* | *0* |
| Configuration | *LT* | | | | | *TR* |
| Upstream Signal | | *0* | | | *0* | |

| **Minor Street** | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|
| Movement | 7 | 8 | 9 | 10 | 11 | 12 |
| | L | T | R | L | T | R |
| Volume (veh/h) | *200* | *0* | *58* | | | |
| Peak-Hour Factor, PHF | *1.00* | *1.00* | *1.00* | *1.00* | *1.00* | *1.00* |
| Hourly Flow Rate, HFR (veh/h) | *200* | *0* | *58* | *0* | *0* | *0* |
| Percent Heavy Vehicles | *4* | *4* | *4* | *0* | *0* | *0* |
| Percent Grade (%) | | *0* | | | *0* | |
| Flared Approach | | *Y* | | | *N* | |
| Storage | | *2* | | | *0* | |
| RT Channelized | | | *0* | | | *0* |
| Lanes | *0* | *1* | *0* | *0* | *0* | *0* |
| Configuration | | *LTR* | | | | |

## Delay, Queue Length, and Level of Service

| Approach | Eastbound | Westbound | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 |
| Lane Configuration | *LT* | | | *LTR* | | | | |
| v (veh/h) | *150* | | | *258* | | | | |
| C (m) (veh/h) | *1138* | | | *319* | | | | |
| v/c | *0.13* | | | *0.81* | | | | |
| 95% queue length | *0.45* | | | *6.74* | | | | |
| Control Delay (s/veh) | *8.6* | | | *50.5* | | | | |
| LOS | *A* | | | *F* | | | | |
| Approach Delay (s/veh) | -- | -- | *50.5* | | | | | |
| Approach LOS | -- | -- | *F* | | | | | |

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AWD = 35.1 SEC = LOS E

# TWO-WAY STOP CONTROL SUMMARY

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | *DH* | Intersection | *US 101 NB/LOS BERROS* |
| Agency/Co. | *ATE* | Jurisdiction | *SLO COUNTY* |
| Date Performed | | Analysis Year | *CUMULATIVE + PROJECT* |
| Analysis Time Period | *AM PEAK* | | |

Project Description *#06092*

| | |
|---|---|
| East/West Street: *LOS BERROS* | North/South Street: *US 101 NB* |
| Intersection Orientation: *East-West* | Study Period (hrs): *0.25* |

## Vehicle Volumes and Adjustments

| **Major Street** | Eastbound | | | Westbound | | |
|---|---|---|---|---|---|---|
| Movement | 1 | 2 | 3 | 4 | 5 | 6 |
| | L | T | R | L | T | R |
| Volume (veh/h) | *150* | *303* | | | *269* | *195* |
| Peak-Hour Factor, PHF | *1.00* | *1.00* | *1.00* | *1.00* | *1.00* | *1.00* |
| Hourly Flow Rate, HFR (veh/h) | *150* | *303* | *0* | *0* | *269* | *195* |
| Percent Heavy Vehicles | *4* | -- | -- | *0* | -- | -- |
| Median Type | *Undivided* | | | | | |
| RT Channelized | | | *0* | | | *0* |
| Lanes | *0* | *1* | *0* | *0* | *1* | *0* |
| Configuration | *LT* | | | | | *TR* |
| Upstream Signal | | *0* | | | *0* | |

| **Minor Street** | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|
| Movement | 7 | 8 | 9 | 10 | 11 | 12 |
| | L | T | R | L | T | R |
| Volume (veh/h) | *200* | *0* | *63* | | | |
| Peak-Hour Factor, PHF | *1.00* | *1.00* | *1.00* | *1.00* | *1.00* | *1.00* |
| Hourly Flow Rate, HFR (veh/h) | *200* | *0* | *63* | *0* | *0* | *0* |
| Percent Heavy Vehicles | *4* | *4* | *4* | *0* | *0* | *0* |
| Percent Grade (%) | | *0* | | | *0* | |
| Flared Approach | | *Y* | | | *N* | |
| Storage | | *2* | | | *0* | |
| RT Channelized | | | *0* | | | *0* |
| Lanes | *0* | *1* | *0* | *0* | *0* | *0* |
| Configuration | | *LTR* | | | | |

## Delay, Queue Length, and Level of Service

| Approach | Eastbound | Westbound | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 |
| Lane Configuration | *LT* | | | *LTR* | | | | |
| v (veh/h) | *150* | | | *263* | | | | |
| C (m) (veh/h) | *1087* | | | *298* | | | | |
| v/c | *0.14* | | | *0.88* | | | | |
| 95% queue length | *0.48* | | | *7.98* | | | | |
| Control Delay (s/veh) | *8.8* | | | *64.8* | | | | |
| LOS | *A* | | | *F* | | | | |
| Approach Delay (s/veh) | -- | -- | *64.8* | | | | | |
| Approach LOS | -- | -- | *F* | | | | | |

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AWD = 44.5 SEC = LOS E

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 4.0 | | | 4.0 | | | 4.0 | | | | |
| Lane Util. Factor | 1.00 | 1.00 | | | 1.00 | | | 1.00 | | | | |
| Frt | 1.00 | 1.00 | | | 0.94 | | | 0.97 | | | | |
| Flt Protected | 0.95 | 1.00 | | | 1.00 | | | 0.96 | | | | |
| Satd. Flow (prot) | 1736 | 1827 | | | 1723 | | | 1703 | | | | |
| Flt Permitted | 0.95 | 1.00 | | | 1.00 | | | 0.96 | | | | |
| Satd. Flow (perm) | 1736 | 1827 | | | 1723 | | | 1703 | | | | |
| Volume (vph) | 150 | 303 | 0 | 0 | 269 | 195 | 200 | 0 | 63 | 0 | 0 | 0 |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 163 | 329 | 0 | 0 | 292 | 212 | 217 | 0 | 68 | 0 | 0 | 0 |
| RTOR Reduction (vph) | 0 | 0 | 0 | 0 | 47 | 0 | 0 | 17 | 0 | 0 | 0 | 0 |
| Lane Group Flow (vph) | 163 | 329 | 0 | 0 | 457 | 0 | 0 | 268 | 0 | 0 | 0 | 0 |
| Turn Type | Prot | | | | | | Perm | | | | | |
| Protected Phases | 7 | 4 | | | 8 | | | 2 | | | | |
| Permitted Phases | | | | | | | 2 | | | | | |
| Actuated Green, G (s) | 7.7 | 30.7 | | | 19.0 | | | 21.3 | | | | |
| Effective Green, g (s) | 7.7 | 30.7 | | | 19.0 | | | 21.3 | | | | |
| Actuated g/C Ratio | 0.13 | 0.51 | | | 0.32 | | | 0.36 | | | | |
| Clearance Time (s) | 4.0 | 4.0 | | | 4.0 | | | 4.0 | | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | | | 3.0 | | | 3.0 | | | | |
| Lane Grp Cap (vph) | 223 | 935 | | | 546 | | | 605 | | | | |
| v/s Ratio Prot | c0.09 | 0.18 | | | c0.27 | | | | | | | |
| v/s Ratio Perm | | | | | | | | 0.16 | | | | |
| v/c Ratio | 0.73 | 0.35 | | | 0.84 | | | 0.44 | | | | |
| Uniform Delay, d1 | 25.2 | 8.7 | | | 19.1 | | | 14.8 | | | | |
| Progression Factor | 0.76 | 0.81 | | | 1.00 | | | 1.00 | | | | |
| Incremental Delay, d2 | 8.1 | 0.2 | | | 10.7 | | | 2.3 | | | | |
| Delay (s) | 27.2 | 7.2 | | | 29.8 | | | 17.2 | | | | |
| Level of Service | C | A | | | C | | | B | | | | |
| Approach Delay (s) | | 13.8 | | | 29.8 | | | 17.2 | | | 0.0 | |
| Approach LOS | | B | | | C | | | B | | | A | |

| Intersection Summary | | | |
|---|---|---|---|
| HCM Average Control Delay | 20.9 | HCM Level of Service | C |
| HCM Volume to Capacity ratio | 0.65 | | |
| Actuated Cycle Length (s) | 60.0 | Sum of lost time (s) | 12.0 |
| Intersection Capacity Utilization | 60.1% | ICU Level of Service | B |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

# TWO-WAY STOP CONTROL SUMMARY

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | DH | Intersection | US 101 NB/LOS BERROS |
| Agency/Co. | ATE | Jurisdiction | SLO COUNTY |
| Date Performed | 9/18/2006 | Analysis Year | EXISTING CONDITIONS |
| Analysis Time Period | PM PEAK | | |

Project Description #06092

| | |
|---|---|
| East/West Street: LOS BERROS | North/South Street: US 101 NB |
| Intersection Orientation: East-West | Study Period (hrs): 0.25 |

## Vehicle Volumes and Adjustments

| Major Street | Eastbound | | | Westbound | | |
|---|---|---|---|---|---|---|
| Movement | 1 | 2 | 3 | 4 | 5 | 6 |
| | L | T | R | L | T | R |
| Volume (veh/h) | 68 | 235 | | | 104 | 80 |
| Peak-Hour Factor, PHF | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Hourly Flow Rate, HFR (veh/h) | 68 | 235 | 0 | 0 | 104 | 80 |
| Percent Heavy Vehicles | 4 | -- | -- | 0 | -- | -- |
| Median Type | Undivided | | | | | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 1 | 0 | 0 | 1 | 0 |
| Configuration | LT | | | | | TR |
| Upstream Signal | | 0 | | | 0 | |

| Minor Street | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|
| Movement | 7 | 8 | 9 | 10 | 11 | 12 |
| | L | T | R | L | T | R |
| Volume (veh/h) | 198 | 0 | 27 | | | |
| Peak-Hour Factor, PHF | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Hourly Flow Rate, HFR (veh/h) | 198 | 0 | 27 | 0 | 0 | 0 |
| Percent Heavy Vehicles | 4 | 4 | 4 | 0 | 0 | 0 |
| Percent Grade (%) | | 0 | | | 0 | |
| Flared Approach | | Y | | | N | |
| Storage | | 2 | | | 0 | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 1 | 0 | 0 | 0 | 0 |
| Configuration | | LTR | | | | |

## Delay, Queue Length, and Level of Service

| Approach | Eastbound | Westbound | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 |
| Lane Configuration | LT | | | LTR | | | | |
| v (veh/h) | 68 | | | 225 | | | | |
| C (m) (veh/h) | 1379 | | | 558 | | | | |
| v/c | 0.05 | | | 0.40 | | | | |
| 95% queue length | 0.16 | | | 1.94 | | | | |
| Control Delay (s/veh) | 7.7 | | | 16.3 | | | | |
| LOS | A | | | C | | | | |
| Approach Delay (s/veh) | -- | -- | 16.3 | | | | | |
| Approach LOS | -- | -- | C | | | | | |

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AWD = 14.3 SEC = LOS B

# TWO-WAY STOP CONTROL SUMMARY

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | DH | Intersection | US 101 NB/LOS BERROS |
| Agency/Co. | ATE | Jurisdiction | SLO COUNTY |
| Date Performed | 9/18/2006 | Analysis Year | EXISTING + PROJECT |
| Analysis Time Period | PM PEAK | | |

Project Description #06092

| | |
|---|---|
| East/West Street: LOS BERROS | North/South Street: US 101 NB |
| Intersection Orientation: East-West | Study Period (hrs): 0.25 |

## Vehicle Volumes and Adjustments

| Major Street | Eastbound | | | Westbound | | |
|---|---|---|---|---|---|---|
| Movement | 1 | 2 | 3 | 4 | 5 | 6 |
| | L | T | R | L | T | R |
| Volume (veh/h) | 68 | 280 | | | 115 | 105 |
| Peak-Hour Factor, PHF | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Hourly Flow Rate, HFR (veh/h) | 68 | 280 | 0 | 0 | 115 | 105 |
| Percent Heavy Vehicles | 4 | -- | -- | 0 | -- | -- |
| Median Type | Undivided | | | | | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 1 | 0 | 0 | 1 | 0 |
| Configuration | LT | | | | | TR |
| Upstream Signal | | 0 | | | 0 | |

| Minor Street | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|
| Movement | 7 | 8 | 9 | 10 | 11 | 12 |
| | L | T | R | L | T | R |
| Volume (veh/h) | 198 | 0 | 44 | | | |
| Peak-Hour Factor, PHF | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Hourly Flow Rate, HFR (veh/h) | 198 | 0 | 44 | 0 | 0 | 0 |
| Percent Heavy Vehicles | 4 | 4 | 4 | 0 | 0 | 0 |
| Percent Grade (%) | | 0 | | | 0 | |
| Flared Approach | | Y | | | N | |
| Storage | | 2 | | | 0 | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 1 | 0 | 0 | 0 | 0 |
| Configuration | | LTR | | | | |

## Delay, Queue Length, and Level of Service

| Approach | Eastbound | Westbound | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 |
| Lane Configuration | LT | | | LTR | | | | |
| v (veh/h) | 68 | | | 242 | | | | |
| C (m) (veh/h) | 1337 | | | 546 | | | | |
| v/c | 0.05 | | | 0.44 | | | | |
| 95% queue length | 0.16 | | | 2.25 | | | | |
| Control Delay (s/veh) | 7.8 | | | 17.6 | | | | |
| LOS | A | | | C | | | | |
| Approach Delay (s/veh) | -- | -- | 17.6 | | | | | |
| Approach LOS | -- | -- | C | | | | | |

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AWD = 15.5 SEC = LOS C

# TWO-WAY STOP CONTROL SUMMARY

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | DH | Intersection | US 101 NB/LOS BERROS |
| Agency/Co. | ATE | Jurisdiction | SLO COUNTY |
| Date Performed | 9/22/2006 | Analysis Year | CUMULATIVE CONDITIONS |
| Analysis Time Period | PM PEAK | | |

Project Description #06092

| | |
|---|---|
| East/West Street: LOS BERROS | North/South Street: US 101 NB |
| Intersection Orientation: East-West | Study Period (hrs): 0.25 |

## Vehicle Volumes and Adjustments

| Major Street | Eastbound | | | Westbound | | |
|---|---|---|---|---|---|---|
| Movement | 1 | 2 | 3 | 4 | 5 | 6 |
| | L | T | R | L | T | R |
| Volume (veh/h) | 100 | 323 | | | 156 | 64 |
| Peak-Hour Factor, PHF | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Hourly Flow Rate, HFR (veh/h) | 100 | 323 | 0 | 0 | 156 | 64 |
| Percent Heavy Vehicles | 4 | -- | -- | 0 | -- | -- |
| Median Type | Undivided | | | | | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 1 | 0 | 0 | 1 | 0 |
| Configuration | LT | | | | | TR |
| Upstream Signal | | 0 | | | 0 | |

| Minor Street | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|
| Movement | 7 | 8 | 9 | 10 | 11 | 12 |
| | L | T | R | L | T | R |
| Volume (veh/h) | 255 | 0 | 49 | | | |
| Peak-Hour Factor, PHF | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Hourly Flow Rate, HFR (veh/h) | 255 | 0 | 49 | 0 | 0 | 0 |
| Percent Heavy Vehicles | 4 | 4 | 4 | 0 | 0 | 0 |
| Percent Grade (%) | | 0 | | | 0 | |
| Flared Approach | | Y | | | N | |
| Storage | | 2 | | | 0 | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 1 | 0 | 0 | 0 | 0 |
| Configuration | | LTR | | | | |

## Delay, Queue Length, and Level of Service

| Approach | Eastbound | Westbound | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 |
| Lane Configuration | LT | | | LTR | | | | |
| v (veh/h) | 100 | | | 304 | | | | |
| C (m) (veh/h) | 1337 | | | 425 | | | | |
| v/c | 0.07 | | | 0.72 | | | | |
| 95% queue length | 0.24 | | | 5.52 | | | | |
| Control Delay (s/veh) | 7.9 | | | 32.1 | | | | |
| LOS | A | | | D | | | | |
| Approach Delay (s/veh) | -- | -- | 32.1 | | | | | |
| Approach LOS | -- | -- | D | | | | | |

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HCS+™ Version 5.2 Generated: 9/22/2006 11:30 AM

AWD = 26.1 SEC = LOS D

# TWO-WAY STOP CONTROL SUMMARY

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | DH | Intersection | US 101 NB/LOS BERROS |
| Agency/Co. | ATE | Jurisdiction | SLO COUNTY |
| Date Performed | 9/22/2006 | Analysis Year | CUMULATIVE + PROJECT |
| Analysis Time Period | PM PEAK | | |

Project Description #06092

| | |
|---|---|
| East/West Street: LOS BERROS | North/South Street: US 101 NB |
| Intersection Orientation: East-West | Study Period (hrs): 0.25 |

## Vehicle Volumes and Adjustments

| Major Street | Eastbound | | | Westbound | | |
|---|---|---|---|---|---|---|
| Movement | 1 | 2 | 3 | 4 | 5 | 6 |
| | L | T | R | L | T | R |
| Volume (veh/h) | 100 | 368 | | | 167 | 89 |
| Peak-Hour Factor, PHF | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Hourly Flow Rate, HFR (veh/h) | 100 | 368 | 0 | 0 | 167 | 89 |
| Percent Heavy Vehicles | 4 | -- | -- | 0 | -- | -- |
| Median Type | Undivided | | | | | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 1 | 0 | 0 | 1 | 0 |
| Configuration | LT | | | | | TR |
| Upstream Signal | | 0 | | | 0 | |

| Minor Street | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|
| Movement | 7 | 8 | 9 | 10 | 11 | 12 |
| | L | T | R | L | T | R |
| Volume (veh/h) | 255 | 0 | 66 | | | |
| Peak-Hour Factor, PHF | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Hourly Flow Rate, HFR (veh/h) | 255 | 0 | 66 | 0 | 0 | 0 |
| Percent Heavy Vehicles | 4 | 4 | 4 | 0 | 0 | 0 |
| Percent Grade (%) | | 0 | | | 0 | |
| Flared Approach | | Y | | | N | |
| Storage | | 2 | | | 0 | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 1 | 0 | 0 | 0 | 0 |
| Configuration | | LTR | | | | |

## Delay, Queue Length, and Level of Service

| Approach | Eastbound | Westbound | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 |
| Lane Configuration | LT | | | LTR | | | | |
| v (veh/h) | 100 | | | 321 | | | | |
| C (m) (veh/h) | 1297 | | | 396 | | | | |
| v/c | 0.08 | | | 0.81 | | | | |
| 95% queue length | 0.25 | | | 7.24 | | | | |
| Control Delay (s/veh) | 8.0 | | | 43.1 | | | | |
| LOS | A | | | E | | | | |
| Approach Delay (s/veh) | -- | -- | 43.1 | | | | | |
| Approach LOS | -- | -- | E | | | | | |

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AND = 34.8 SEC = LOS D

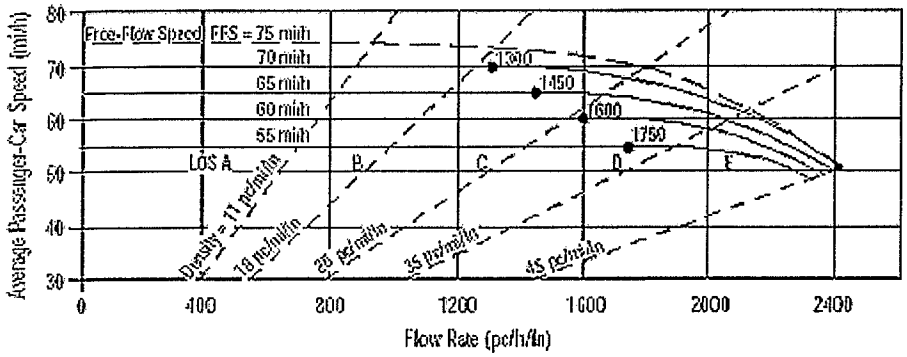
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 4.0 | | | 4.0 | | | 4.0 | | | | |
| Lane Util. Factor | 1.00 | 1.00 | | | 1.00 | | | 1.00 | | | | |
| Frt | 1.00 | 1.00 | | | 0.95 | | | 0.97 | | | | |
| Flt Protected | 0.95 | 1.00 | | | 1.00 | | | 0.96 | | | | |
| Satd. Flow (prot) | 1736 | 1827 | | | 1741 | | | 1708 | | | | |
| Flt Permitted | 0.95 | 1.00 | | | 1.00 | | | 0.96 | | | | |
| Satd. Flow (perm) | 1736 | 1827 | | | 1741 | | | 1708 | | | | |
| Volume (vph) | 100 | 368 | 0 | 0 | 167 | 89 | 255 | 0 | 66 | 0 | 0 | 0 |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 109 | 400 | 0 | 0 | 182 | 97 | 277 | 0 | 72 | 0 | 0 | 0 |
| RTOR Reduction (vph) | 0 | 0 | 0 | 0 | 39 | 0 | 0 | 12 | 0 | 0 | 0 | 0 |
| Lane Group Flow (vph) | 109 | 400 | 0 | 0 | 240 | 0 | 0 | 337 | 0 | 0 | 0 | 0 |
| Turn Type | Prot | | | | | | Perm | | | | | |
| Protected Phases | 7 | 4 | | | 8 | | | 2 | | | | |
| Permitted Phases | | | | | | | 2 | | | | | |
| Actuated Green, G (s) | 7.8 | 25.5 | | | 13.7 | | | 26.5 | | | | |
| Effective Green, g (s) | 7.8 | 25.5 | | | 13.7 | | | 26.5 | | | | |
| Actuated g/C Ratio | 0.13 | 0.42 | | | 0.23 | | | 0.44 | | | | |
| Clearance Time (s) | 4.0 | 4.0 | | | 4.0 | | | 4.0 | | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | | | 3.0 | | | 3.0 | | | | |
| Lane Grp Cap (vph) | 226 | 776 | | | 398 | | | 754 | | | | |
| v/s Ratio Prot | 0.06 | c0.22 | | | c0.14 | | | | | | | |
| v/s Ratio Perm | | | | | | | | 0.20 | | | | |
| v/c Ratio | 0.48 | 0.52 | | | 0.60 | | | 0.45 | | | | |
| Uniform Delay, d1 | 24.2 | 12.7 | | | 20.7 | | | 11.6 | | | | |
| Progression Factor | 0.90 | 1.03 | | | 1.00 | | | 1.00 | | | | |
| Incremental Delay, d2 | 1.1 | 0.4 | | | 2.6 | | | 1.9 | | | | |
| Delay (s) | 23.0 | 13.5 | | | 23.3 | | | 13.6 | | | | |
| Level of Service | C | B | | | C | | | B | | | | |
| Approach Delay (s) | | 15.6 | | | 23.3 | | | 13.6 | | | 0.0 | |
| Approach LOS | | B | | | C | | | B | | | A | |

**Intersection Summary**

| | | | |
|---|---|---|---|
| HCM Average Control Delay | 16.9 | HCM Level of Service | B |
| HCM Volume to Capacity ratio | 0.49 | | |
| Actuated Cycle Length (s) | 60.0 | Sum of lost time (s) | 8.0 |
| Intersection Capacity Utilization | 60.1% | ICU Level of Service | B |
| Analysis Period (min) | 15 | | |

c Critical Lane Group

# BASIC FREEWAY SEGMENTS WORKSHEET




| Application | Input | Output |
|---|---|---|
| Operational (LOS) | FFS, N, $v_p$ | LOS, S, D |
| Design (N) | FFS, LOS, $v_p$ | N, S, D |
| Design ($v_p$) | FFS, LOS, N | $v_p$, S, D |
| Planning (LOS) | FFS, N, AADT | LOS, S, D |
| Planning (N) | FFS, LOS, AADT | N, S, D |
| Planning ($v_p$) | FFS, LOS, N | $v_p$, S, D |

## General Information / Site Information

| | | | |
|---|---|---|---|
| Analyst | *DH* | Highway/Direction of Travel | *US 101 NB* |
| Agency or Company | *ATE* | From/To | *NORTH OF LOS BERROS ROAD* |
| Date Performed | *9/20/2006* | Jurisdiction | *SLO COUNTY* |
| Analysis Time Period | *PM PEAK* | Analysis Year | *EXISTING CONDITIONS* |

Project Description #06092

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

## Flow Inputs

| | | | | |
|---|---|---|---|---|
| Volume, V | *2036* | veh/h | Peak-Hour Factor, PHF | *0.90* |
| AADT | | veh/day | %Trucks and Buses, $P_T$ | *8* |
| Peak-Hr Prop. of AADT, K | | | %RVs, $P_R$ | *0* |
| Peak-Hr Direction Prop, D | | | General Terrain: | *Rolling* |
| DDHV = AADT x K x D | | veh/h | Grade % Length | *mi* |
| Driver type adjustment | *1.00* | | Up/Down % | |

## Calculate Flow Adjustments

| | | | |
|---|---|---|---|
| $f_p$ | *1.00* | $E_R$ | *2.0* |
| $E_T$ | *2.5* | $f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$ | *0.893* |

## Speed Inputs / Calc Speed Adj and FFS

| | | | | | |
|---|---|---|---|---|---|
| Lane Width | *12.0* | ft | $f_{LW}$ | | mi/h |
| Rt-Shoulder Lat. Clearance | *6.0* | ft | $f_{LC}$ | | mi/h |
| Interchange Density | *0.50* | I/mi | $f_{ID}$ | | mi/h |
| Number of Lanes, N | *2* | | $f_N$ | | mi/h |
| FFS (measured) | *70.0* | mi/h | FFS | *70.0* | mi/h |
| Base free-flow Speed, BFFS | | mi/h | | | |

## LOS and Performance Measures / Design (N)

| Operational (LOS) | | | Design (N) | | |
|---|---|---|---|---|---|
| $v_p$ = (V or DDHV) / (PHF x N x $f_{HV}$ x $f_p$) | *1267* | pc/h/ln | Design LOS | | |
| S | *70.0* | mi/h | $v_p$ = (V or DDHV) / (PHF x N x $f_{HV}$ x $f_p$) | | pc/h |
| D = $v_p$ / S | *18.1* | pc/mi/ln | S | | mi/h |
| LOS | *C* | | D = $v_p$ / S | | pc/mi/ln |
| | | | Required Number of Lanes, N | | |

## Glossary / Factor Location

| | | | |
|---|---|---|---|
| N - Number of lanes | S - Speed | $E_R$ - Exhibits23-8, 23-10 | $f_{LW}$ - Exhibit 23-4 |
| V - Hourly volume | D - Density | $E_T$ - Exhibits 23-8, 23-10, 23-11 | $f_{LC}$ - Exhibit 23-5 |
| $v_p$ - Flow rate | FFS - Free-flow speed | $f_p$ - Page 23-12 | $f_N$ - Exhibit 23-6 |
| LOS - Level of service | BFFS - Base free-flow speed | LOS, S, FFS, $v_p$ - Exhibits 23-2, 23-3 | $f_{ID}$ - Exhibit 23-7 |
| DDHV - Directional design hour volume | | | |

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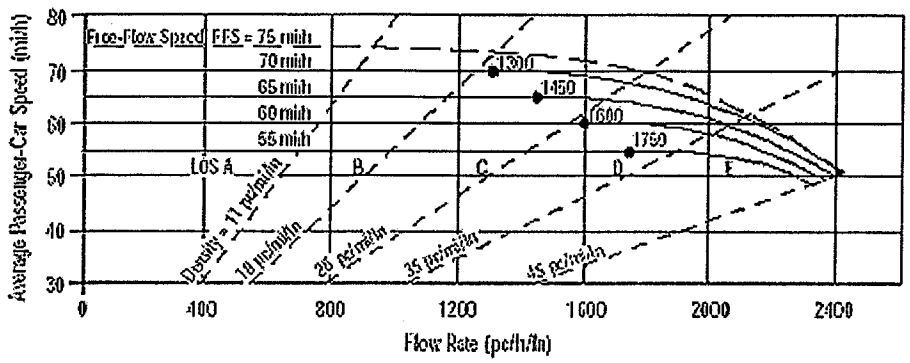
# BASIC FREEWAY SEGMENTS WORKSHEET




| Application | Input | Output |
|---|---|---|
| Operational (LOS) | FFS, N, $v_p$ | LOS, S, D |
| Design (N) | FFS, LOS, $v_p$ | N, S, D |
| Design ($v_p$) | FFS, LOS, N | $v_p$, S, D |
| Planning (LOS) | FFS, N, AADT | LOS, S, D |
| Planning (N) | FFS, LOS, AADT | N, S, D |
| Planning ($v_p$) | FFS, LOS, N | $v_p$, S, D |

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | *DH* | Highway/Direction of Travel | *US 101 NB* |
| Agency or Company | *ATE* | From/To | *NORTH OF LOS BERROS ROAD* |
| Date Performed | *9/20/2006* | Jurisdiction | *SLO COUNTY* |
| Analysis Time Period | *PM PEAK* | Analysis Year | *EXISTING + PROJECT* |

Project Description #06092

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

| Flow Inputs | | | | |
|---|---|---|---|---|
| Volume, V | *2061* | veh/h | Peak-Hour Factor, PHF | *0.90* |
| AADT | | veh/day | %Trucks and Buses, $P_T$ | *8* |
| Peak-Hr Prop. of AADT, K | | | %RVs, $P_R$ | *0* |
| Peak-Hr Direction Prop, D | | | General Terrain: | *Rolling* |
| DDHV = AADT x K x D | | veh/h | Grade % Length | *mi* |
| Driver type adjustment | *1.00* | | Up/Down % | |

| Calculate Flow Adjustments | | | |
|---|---|---|---|
| $f_p$ | *1.00* | $E_R$ | *2.0* |
| $E_T$ | *2.5* | $f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$ | *0.893* |

| Speed Inputs | | | Calc Speed Adj and FFS | | |
|---|---|---|---|---|---|
| Lane Width | *12.0* | ft | $f_{LW}$ | | mi/h |
| Rt-Shoulder Lat. Clearance | *6.0* | ft | $f_{LC}$ | | mi/h |
| Interchange Density | *0.50* | I/mi | $f_{ID}$ | | mi/h |
| Number of Lanes, N | *2* | | $f_N$ | | mi/h |
| FFS (measured) | *70.0* | mi/h | FFS | *70.0* | mi/h |
| Base free-flow Speed, BFFS | | mi/h | | | |

| LOS and Performance Measures | | | Design (N) | | |
|---|---|---|---|---|---|
| Operational (LOS) | | | Design (N) | | |
| | | | Design LOS | | |
| $v_p$ = (V or DDHV) / (PHF x N x $f_{HV}$ x $f_p$) | *1282* | pc/h/ln | $v_p$ = (V or DDHV) / (PHF x N x $f_{HV}$ x $f_p$) | | pc/h |
| S | *70.0* | mi/h | S | | mi/h |
| D = $v_p$ / S | *18.3* | pc/mi/ln | D = $v_p$ / S | | pc/mi/ln |
| LOS | *C* | | Required Number of Lanes, N | | |

| Glossary | | Factor Location | |
|---|---|---|---|
| N - Number of lanes | S - Speed | $E_R$ - Exhibits23-8, 23-10 | $f_{LW}$ - Exhibit 23-4 |
| V - Hourly volume | D - Density | $E_T$ - Exhibits 23-8, 23-10, 23-11 | $f_{LC}$ - Exhibit 23-5 |
| $v_p$ - Flow rate | FFS - Free-flow speed | $f_p$ - Page 23-12 | $f_N$ - Exhibit 23-6 |
| LOS - Level of service | BFFS - Base free-flow speed | LOS, S, FFS, $v_p$ - Exhibits 23-2, 23-3 | $f_{ID}$ - Exhibit 23-7 |
| DDHV - Directional design hour volume | | | |

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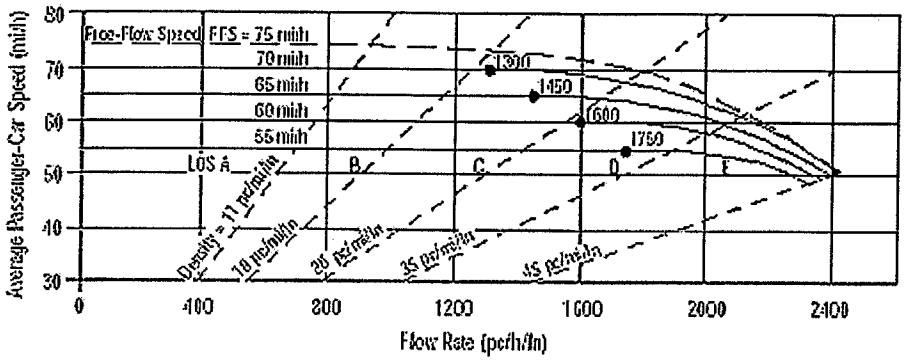
# BASIC FREEWAY SEGMENTS WORKSHEET




| Application | Input | Output |
|---|---|---|
| Operational (LOS) | FFS, N, $v_p$ | LOS, S, D |
| Design (N) | FFS, LOS, $v_p$ | N, S, D |
| Design ($v_p$) | FFS, LOS, N | $v_p$, S, D |
| Planning (LOS) | FFS, N, AADT | LOS, S, D |
| Planning (N) | FFS, LOS, AADT | N, S, D |
| Planning ($v_p$) | FFS, LOS, N | $v_p$, S, D |

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | *DH* | Highway/Direction of Travel | *US 101 NB* |
| Agency or Company | *ATE* | From/To | *NORTH OF LOS BERROS ROAD* |
| Date Performed | *9/20/2006* | Jurisdiction | *SLO COUNTY* |
| Analysis Time Period | *PM PEAK* | Analysis Year | *CUMULATIVE* |

Project Description #06092

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

| Flow Inputs | | | | |
|---|---|---|---|---|
| Volume, V | *2341* | veh/h | Peak-Hour Factor, PHF | *0.90* |
| AADT | | veh/day | %Trucks and Buses, $P_T$ | *8* |
| Peak-Hr Prop. of AADT, K | | | %RVs, $P_R$ | *0* |
| Peak-Hr Direction Prop, D | | | General Terrain: | *Rolling* |
| DDHV = AADT x K x D | | veh/h | Grade % Length | *mi* |
| Driver type adjustment | *1.00* | | Up/Down % | |

| Calculate Flow Adjustments | | | |
|---|---|---|---|
| $f_p$ | *1.00* | $E_R$ | *2.0* |
| $E_T$ | *2.5* | $f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$ | *0.893* |

| Speed Inputs | | | Calc Speed Adj and FFS | | |
|---|---|---|---|---|---|
| Lane Width | *12.0* | ft | $f_{LW}$ | | mi/h |
| Rt-Shoulder Lat. Clearance | *6.0* | ft | $f_{LC}$ | | mi/h |
| Interchange Density | *0.50* | I/mi | $f_{ID}$ | | mi/h |
| Number of Lanes, N | *2* | | $f_N$ | | mi/h |
| FFS (measured) | *70.0* | mi/h | FFS | *70.0* | mi/h |
| Base free-flow Speed, BFFS | | mi/h | | | |

| LOS and Performance Measures | | | Design (N) | | |
|---|---|---|---|---|---|
| Operational (LOS) | | | Design (N) | | |
| $v_p$ = (V or DDHV) / (PHF x N x $f_{HV}$ x $f_p$) | *1457* | pc/h/ln | Design LOS | | |
| S | *69.9* | mi/h | $v_p$ = (V or DDHV) / (PHF x N x $f_{HV}$ x $f_p$) | | pc/h |
| D = $v_p$ / S | *20.8* | pc/mi/ln | S | | mi/h |
| LOS | *C* | | D = $v_p$ / S | | pc/mi/ln |
| | | | Required Number of Lanes, N | | |

| Glossary | | Factor Location | |
|---|---|---|---|
| N - Number of lanes | S - Speed | $E_R$ - Exhibits23-8, 23-10 | $f_{LW}$ - Exhibit 23-4 |
| V - Hourly volume | D - Density | $E_T$ - Exhibits 23-8, 23-10, 23-11 | $f_{LC}$ - Exhibit 23-5 |
| $v_p$ - Flow rate | FFS - Free-flow speed | $f_p$ - Page 23-12 | $f_N$ - Exhibit 23-6 |
| LOS - Level of service | BFFS - Base free-flow speed | LOS, S, FFS, $v_p$ - Exhibits 23-2, 23-3 | $f_{ID}$ - Exhibit 23-7 |
| DDHV - Directional design hour volume | | | |

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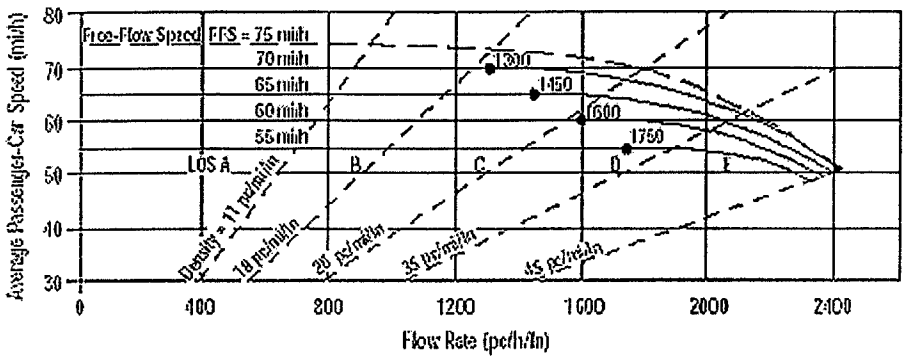
# BASIC FREEWAY SEGMENTS WORKSHEET




| Application | Input | Output |
|---|---|---|
| Operational (LOS) | FFS, N, $v_p$ | LOS, S, D |
| Design (N) | FFS, LOS, $v_p$ | N, S, D |
| Design ($v_p$) | FFS, LOS, N | $v_p$, S, D |
| Planning (LOS) | FFS, N, AADT | LOS, S, D |
| Planning (N) | FFS, LOS, AADT | N, S, D |
| Planning ($v_p$) | FFS, LOS, N | $v_p$, S, D |

## General Information

| | |
|---|---|
| Analyst | *DH* |
| Agency or Company | *ATE* |
| Date Performed | *9/20/2006* |
| Analysis Time Period | *PM PEAK* |

## Site Information

| | |
|---|---|
| Highway/Direction of Travel | *US 101 NB* |
| From/To | *NORTH OF LOS BERROS ROAD* |
| Jurisdiction | *SLO COUNTY* |
| Analysis Year | *CUMULATIVE+PROJECT* |

Project Description #06092

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

## Flow Inputs

| | | | | |
|---|---|---|---|---|
| Volume, V | *2366* | veh/h | Peak-Hour Factor, PHF | *0.90* |
| AADT | | veh/day | %Trucks and Buses, $P_T$ | *8* |
| Peak-Hr Prop. of AADT, K | | | %RVs, $P_R$ | *0* |
| Peak-Hr Direction Prop, D | | | General Terrain: | *Rolling* |
| DDHV = AADT x K x D | | veh/h | Grade % Length | *mi* |
| Driver type adjustment | *1.00* | | Up/Down % | |

## Calculate Flow Adjustments

| | | | |
|---|---|---|---|
| $f_p$ | *1.00* | $E_R$ | *2.0* |
| $E_T$ | *2.5* | $f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$ | *0.893* |

## Speed Inputs

| | | |
|---|---|---|
| Lane Width | *12.0* | ft |
| Rt-Shoulder Lat. Clearance | *6.0* | ft |
| Interchange Density | *0.50* | I/mi |
| Number of Lanes, N | *2* | |
| FFS (measured) | *70.0* | mi/h |
| Base free-flow Speed, BFFS | | mi/h |

## Calc Speed Adj and FFS

| | | |
|---|---|---|
| $f_{LW}$ | | mi/h |
| $f_{LC}$ | | mi/h |
| $f_{ID}$ | | mi/h |
| $f_N$ | | mi/h |
| FFS | *70.0* | mi/h |

## LOS and Performance Measures

Operational (LOS)

| | | |
|---|---|---|
| $v_p$ = (V or DDHV) / (PHF x N x $f_{HV}$ x $f_p$) | *1472* | pc/h/ln |
| S | *69.9* | mi/h |
| D = $v_p$ / S | *21.1* | pc/mi/ln |
| LOS | *C* | |

## Design (N)

Design (N)

Design LOS

| | | |
|---|---|---|
| $v_p$ = (V or DDHV) / (PHF x N x $f_{HV}$ x $f_p$) | | pc/h |
| S | | mi/h |
| D = $v_p$ / S | | pc/mi/ln |
| Required Number of Lanes, N | | |

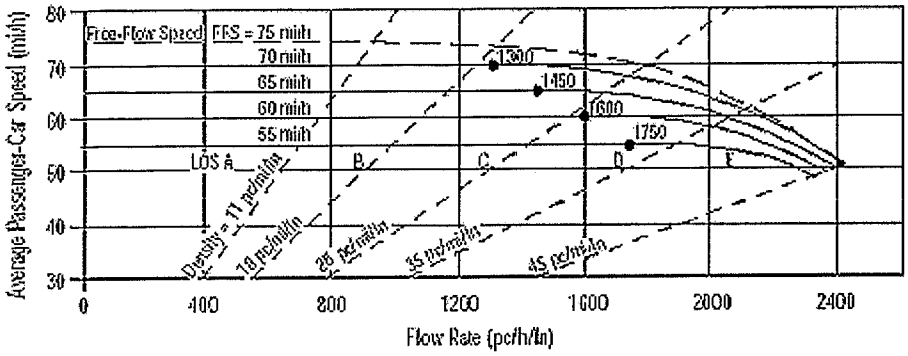
## Glossary

| | |
|---|---|
| N - Number of lanes | S - Speed |
| V - Hourly volume | D - Density |
| $v_p$ - Flow rate | FFS - Free-flow speed |
| LOS - Level of service | BFFS - Base free-flow speed |
| DDHV - Directional design hour volume | |

## Factor Location

| | |
|---|---|
| $E_R$ - Exhibits23-8, 23-10 | $f_{LW}$ - Exhibit 23-4 |
| $E_T$ - Exhibits 23-8, 23-10, 23-11 | $f_{LC}$ - Exhibit 23-5 |
| $f_p$ - Page 23-12 | $f_N$ - Exhibit 23-6 |
| LOS, S, FFS, $v_p$ - Exhibits 23-2, 23-3 | $f_{ID}$ - Exhibit 23-7 |

# BASIC FREEWAY SEGMENTS WORKSHEET




| Application | Input | Output |
|---|---|---|
| Operational (LOS) | FFS, N, $v_p$ | LOS, S, D |
| Design (N) | FFS, LOS, $v_p$ | N, S, D |
| Design ($v_p$) | FFS, LOS, N | $v_p$, S, D |
| Planning (LOS) | FFS, N, AADT | LOS, S, D |
| Planning (N) | FFS, LOS, AADT | N, S, D |
| Planning ($v_p$) | FFS, LOS, N | $v_p$, S, D |

## General Information

| | |
|---|---|
| Analyst | *DH* |
| Agency or Company | *ATE* |
| Date Performed | *9/20/2006* |
| Analysis Time Period | *PM PEAK* |

## Site Information

| | |
|---|---|
| Highway/Direction of Travel | *US 101 SB* |
| From/To | *NORTH OF LOS BERROS ROAD* |
| Jurisdiction | *SLO COUNTY* |
| Analysis Year | *EXISTING CONDITIONS* |

Project Description #06092

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

## Flow Inputs

| | | | | |
|---|---|---|---|---|
| Volume, V | *2630* | veh/h | Peak-Hour Factor, PHF | *0.90* |
| AADT | | veh/day | %Trucks and Buses, $P_T$ | *8* |
| Peak-Hr Prop. of AADT, K | | | %RVs, $P_R$ | *0* |
| Peak-Hr Direction Prop, D | | | General Terrain: | *Rolling* |
| DDHV = AADT x K x D | | veh/h | Grade % Length | *mi* |
| Driver type adjustment | *1.00* | | Up/Down % | |

## Calculate Flow Adjustments

| | | | |
|---|---|---|---|
| $f_p$ | *1.00* | $E_R$ | *2.0* |
| $E_T$ | *2.5* | $f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$ | *0.893* |

## Speed Inputs

| | | |
|---|---|---|
| Lane Width | *12.0* | ft |
| Rt-Shoulder Lat. Clearance | *6.0* | ft |
| Interchange Density | *0.50* | I/mi |
| Number of Lanes, N | *2* | |
| FFS (measured) | *70.0* | mi/h |
| Base free-flow Speed, BFFS | | mi/h |

## Calc Speed Adj and FFS

| | | |
|---|---|---|
| $f_{LW}$ | | mi/h |
| $f_{LC}$ | | mi/h |
| $f_{ID}$ | | mi/h |
| $f_N$ | | mi/h |
| FFS | *70.0* | mi/h |

## LOS and Performance Measures

Operational (LOS)

| | | |
|---|---|---|
| $v_p$ = (V or DDHV) / (PHF x N x $f_{HV}$ x $f_p$) | *1636* | pc/h/ln |
| S | *69.2* | mi/h |
| D = $v_p$ / S | *23.6* | pc/mi/ln |
| LOS | *C* | |

## Design (N)

Design (N)

| | | |
|---|---|---|
| Design LOS | | |
| $v_p$ = (V or DDHV) / (PHF x N x $f_{HV}$ x $f_p$) | | pc/h |
| S | | mi/h |
| D = $v_p$ / S | | pc/mi/ln |
| Required Number of Lanes, N | | |

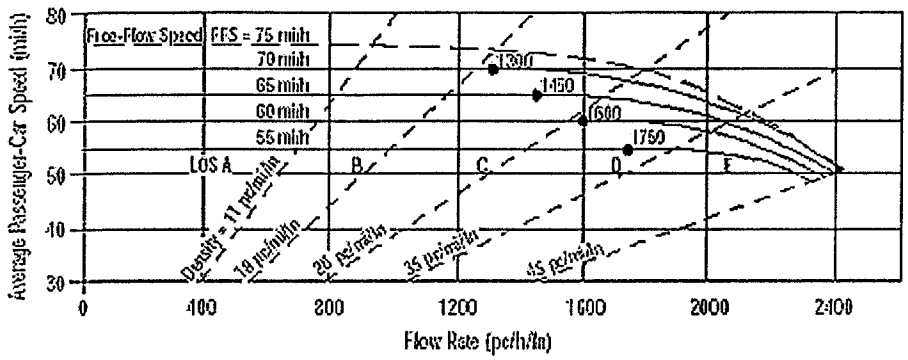
## Glossary

| | |
|---|---|
| N - Number of lanes | S - Speed |
| V - Hourly volume | D - Density |
| $v_p$ - Flow rate | FFS - Free-flow speed |
| LOS - Level of service | BFFS - Base free-flow speed |
| DDHV - Directional design hour volume | |

## Factor Location

| | |
|---|---|
| $E_R$ - Exhibits23-8, 23-10 | $f_{LW}$ - Exhibit 23-4 |
| $E_T$ - Exhibits 23-8, 23-10, 23-11 | $f_{LC}$ - Exhibit 23-5 |
| $f_p$ - Page 23-12 | $f_N$ - Exhibit 23-6 |
| LOS, S, FFS, $v_p$ - Exhibits 23-2, 23-3 | $f_{ID}$ - Exhibit 23-7 |

# BASIC FREEWAY SEGMENTS WORKSHEET




| Application | Input | Output |
|---|---|---|
| Operational (LOS) | FFS, N, $v_p$ | LOS, S, D |
| Design (N) | FFS, LOS, $v_p$ | N, S, D |
| Design ($v_p$) | FFS, LOS, N | $v_p$, S, D |
| Planning (LOS) | FFS, N, AADT | LOS, S, D |
| Planning (N) | FFS, LOS, AADT | N, S, D |
| Planning ($v_p$) | FFS, LOS, N | $v_p$, S, D |

## General Information

| | |
|---|---|
| Analyst | *DH* |
| Agency or Company | *ATE* |
| Date Performed | *9/20/2006* |
| Analysis Time Period | *PM PEAK* |

## Site Information

| | |
|---|---|
| Highway/Direction of Travel | *US 101 SB* |
| From/To | *NORTH OF LOS BERROS ROAD* |
| Jurisdiction | *SLO COUNTY* |
| Analysis Year | *EXISTING + PROJECT* |

Project Description #06092

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

## Flow Inputs

| | | | | |
|---|---|---|---|---|
| Volume, V | *2672* | veh/h | Peak-Hour Factor, PHF | *0.90* |
| AADT | | veh/day | %Trucks and Buses, $P_T$ | *8* |
| Peak-Hr Prop. of AADT, K | | | %RVs, $P_R$ | *0* |
| Peak-Hr Direction Prop, D | | | General Terrain: | *Rolling* |
| DDHV = AADT x K x D | | veh/h | Grade % Length | *mi* |
| Driver type adjustment | *1.00* | | Up/Down % | |

## Calculate Flow Adjustments

| | | | |
|---|---|---|---|
| $f_p$ | *1.00* | $E_R$ | *2.0* |
| $E_T$ | *2.5* | $f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$ | *0.893* |

## Speed Inputs

| | | |
|---|---|---|
| Lane Width | *12.0* | ft |
| Rt-Shoulder Lat. Clearance | *6.0* | ft |
| Interchange Density | *0.50* | I/mi |
| Number of Lanes, N | *2* | |
| FFS (measured) | *70.0* | mi/h |
| Base free-flow Speed, BFFS | | mi/h |

## Calc Speed Adj and FFS

| | | |
|---|---|---|
| $f_{LW}$ | | mi/h |
| $f_{LC}$ | | mi/h |
| $f_{ID}$ | | mi/h |
| $f_N$ | | mi/h |
| FFS | *70.0* | mi/h |

## LOS and Performance Measures

Operational (LOS)

| | | |
|---|---|---|
| $v_p$ = (V or DDHV) / (PHF x N x $f_{HV}$ x $f_p$) | *1663* | pc/h/ln |
| S | *69.1* | mi/h |
| D = $v_p$ / S | *24.1* | pc/mi/ln |
| LOS | *C* | |

## Design (N)

Design (N)

| | | |
|---|---|---|
| Design LOS | | |
| $v_p$ = (V or DDHV) / (PHF x N x $f_{HV}$ x $f_p$) | | pc/h |
| S | | mi/h |
| D = $v_p$ / S | | pc/mi/ln |
| Required Number of Lanes, N | | |

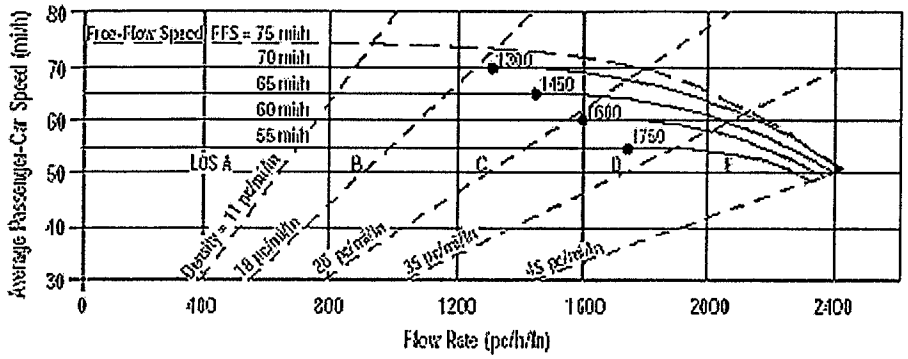
## Glossary

| | |
|---|---|
| N - Number of lanes | S - Speed |
| V - Hourly volume | D - Density |
| $v_p$ - Flow rate | FFS - Free-flow speed |
| LOS - Level of service | BFFS - Base free-flow speed |
| DDHV - Directional design hour volume | |

## Factor Location

| | |
|---|---|
| $E_R$ - Exhibits23-8, 23-10 | $f_{LW}$ - Exhibit 23-4 |
| $E_T$ - Exhibits 23-8, 23-10, 23-11 | $f_{LC}$ - Exhibit 23-5 |
| $f_p$ - Page 23-12 | $f_N$ - Exhibit 23-6 |
| LOS, S, FFS, $v_p$ - Exhibits 23-2, 23-3 | $f_{ID}$ - Exhibit 23-7 |

# BASIC FREEWAY SEGMENTS WORKSHEET




| Application | Input | Output |
|---|---|---|
| Operational (LOS) | FFS, N, $v_p$ | LOS, S, D |
| Design (N) | FFS, LOS, $v_p$ | N, S, D |
| Design ($v_p$) | FFS, LOS, N | $v_p$, S, D |
| Planning (LOS) | FFS, N, AADT | LOS, S, D |
| Planning (N) | FFS, LOS, AADT | N, S, D |
| Planning ($v_p$) | FFS, LOS, N | $v_p$, S, D |

## General Information

| | |
|---|---|
| Analyst | *DH* |
| Agency or Company | *ATE* |
| Date Performed | *9/20/2006* |
| Analysis Time Period | *PM PEAK* |

## Site Information

| | |
|---|---|
| Highway/Direction of Travel | *US 101 SB* |
| From/To | *NORTH OF LOS BERROS ROAD* |
| Jurisdiction | *SLO COUNTY* |
| Analysis Year | *CUMULATIVE* |

Project Description #06092

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

## Flow Inputs

| | | | | |
|---|---|---|---|---|
| Volume, V | *3025* | veh/h | Peak-Hour Factor, PHF | *0.90* |
| AADT | | veh/day | %Trucks and Buses, $P_T$ | *8* |
| Peak-Hr Prop. of AADT, K | | | %RVs, $P_R$ | *0* |
| Peak-Hr Direction Prop, D | | | General Terrain: | *Rolling* |
| DDHV = AADT x K x D | | veh/h | Grade % Length | *mi* |
| Driver type adjustment | *1.00* | | Up/Down % | |

## Calculate Flow Adjustments

| | | | |
|---|---|---|---|
| $f_p$ | *1.00* | $E_R$ | *2.0* |
| $E_T$ | *2.5* | $f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$ | *0.893* |

## Speed Inputs

| | | |
|---|---|---|
| Lane Width | *12.0* | ft |
| Rt-Shoulder Lat. Clearance | *6.0* | ft |
| Interchange Density | *0.50* | I/mi |
| Number of Lanes, N | *2* | |
| FFS (measured) | *70.0* | mi/h |
| Base free-flow Speed, BFFS | | mi/h |

## Calc Speed Adj and FFS

| | | |
|---|---|---|
| $f_{LW}$ | | mi/h |
| $f_{LC}$ | | mi/h |
| $f_{ID}$ | | mi/h |
| $f_N$ | | mi/h |
| FFS | *70.0* | mi/h |

## LOS and Performance Measures

Operational (LOS)

| | | |
|---|---|---|
| $v_p$ = (V or DDHV) / (PHF x N x $f_{HV}$ x $f_p$) | *1882* | pc/h/ln |
| S | *66.8* | mi/h |
| D = $v_p$ / S | *28.2* | pc/mi/ln |
| LOS | *D* | |

## Design (N)

Design (N)

| | | |
|---|---|---|
| Design LOS | | |
| $v_p$ = (V or DDHV) / (PHF x N x $f_{HV}$ x $f_p$) | | pc/h |
| S | | mi/h |
| D = $v_p$ / S | | pc/mi/ln |
| Required Number of Lanes, N | | |

## Glossary

N - Number of lanes
V - Hourly volume
$v_p$ - Flow rate
LOS - Level of service
DDHV - Directional design hour volume
S - Speed
D - Density
FFS - Free-flow speed
BFFS - Base free-flow speed

## Factor Location

$E_R$ - Exhibits23-8, 23-10
$E_T$ - Exhibits 23-8, 23-10, 23-11
$f_p$ - Page 23-12
LOS, S, FFS, $v_p$ - Exhibits 23-2, 23-3
$f_{LW}$ - Exhibit 23-4
$f_{LC}$ - Exhibit 23-5
$f_N$ - Exhibit 23-6
$f_{ID}$ - Exhibit 23-7

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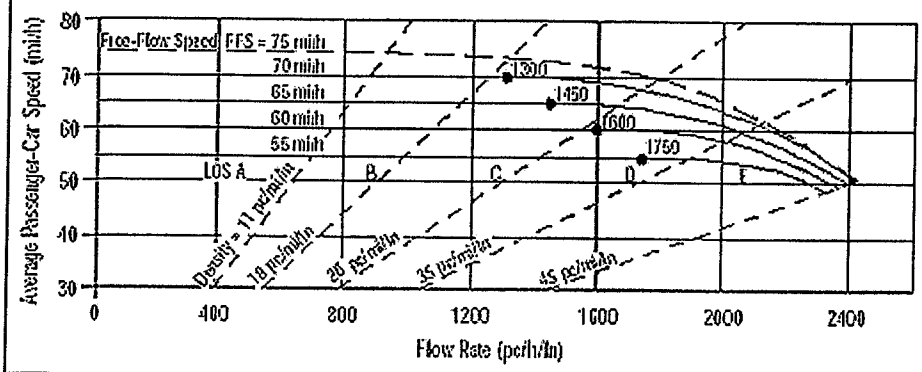
# BASIC FREEWAY SEGMENTS WORKSHEET




| Application | Input | Output |
|---|---|---|
| Operational (LOS) | FFS, N, $v_p$ | LOS, S, D |
| Design (N) | FFS, LOS, $v_p$ | N, S, D |
| Design ($v_p$) | FFS, LOS, N | $v_p$, S, D |
| Planning (LOS) | FFS, N, AADT | LOS, S, D |
| Planning (N) | FFS, LOS, AADT | N, S, D |
| Planning ($v_p$) | FFS, LOS, N | $v_p$, S, D |

## General Information

| | |
|---|---|
| Analyst | *DH* |
| Agency or Company | *ATE* |
| Date Performed | *9/20/2006* |
| Analysis Time Period | *PM PEAK* |

## Site Information

| | |
|---|---|
| Highway/Direction of Travel | *US 101 SB* |
| From/To | *NORTH OF LOS BERROS ROAD* |
| Jurisdiction | *SLO COUNTY* |
| Analysis Year | *CUMULATIVE+PROJECT* |

Project Description #06092

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

## Flow Inputs

| | | | | |
|---|---|---|---|---|
| Volume, V | *3067* | veh/h | Peak-Hour Factor, PHF | *0.90* |
| AADT | | veh/day | %Trucks and Buses, $P_T$ | *8* |
| Peak-Hr Prop. of AADT, K | | | %RVs, $P_R$ | *0* |
| Peak-Hr Direction Prop, D | | | General Terrain: | *Rolling* |
| DDHV = AADT x K x D | | veh/h | Grade % Length | *mi* |
| Driver type adjustment | *1.00* | | Up/Down % | |

## Calculate Flow Adjustments

| | | | |
|---|---|---|---|
| $f_p$ | *1.00* | $E_R$ | *2.0* |
| $E_T$ | *2.5* | $f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$ | *0.893* |

## Speed Inputs

| | | |
|---|---|---|
| Lane Width | *12.0* | ft |
| Rt-Shoulder Lat. Clearance | *6.0* | ft |
| Interchange Density | *0.50* | I/mi |
| Number of Lanes, N | *2* | |
| FFS (measured) | *70.0* | mi/h |
| Base free-flow Speed, BFFS | | mi/h |

## Calc Speed Adj and FFS

| | | |
|---|---|---|
| $f_{LW}$ | | mi/h |
| $f_{LC}$ | | mi/h |
| $f_{ID}$ | | mi/h |
| $f_N$ | | mi/h |
| FFS | *70.0* | mi/h |

## LOS and Performance Measures

Operational (LOS)

| | | |
|---|---|---|
| $v_p$ = (V or DDHV) / (PHF x N x $f_{HV}$ x $f_p$) | *1908* | pc/h/ln |
| S | *66.4* | mi/h |
| D = $v_p$ / S | *28.7* | pc/mi/ln |
| LOS | *D* | |

## Design (N)

Design (N)

| | | |
|---|---|---|
| Design LOS | | |
| $v_p$ = (V or DDHV) / (PHF x N x $f_{HV}$ x $f_p$) | | pc/h |
| S | | mi/h |
| D = $v_p$ / S | | pc/mi/ln |
| Required Number of Lanes, N | | |

## Glossary

| | |
|---|---|
| N - Number of lanes | S - Speed |
| V - Hourly volume | D - Density |
| $v_p$ - Flow rate | FFS - Free-flow speed |
| LOS - Level of service | BFFS - Base free-flow speed |
| DDHV - Directional design hour volume | |

## Factor Location

| | |
|---|---|
| $E_R$ - Exhibits23-8, 23-10 | $f_{LW}$ - Exhibit 23-4 |
| $E_T$ - Exhibits 23-8, 23-10, 23-11 | $f_{LC}$ - Exhibit 23-5 |
| $f_p$ - Page 23-12 | $f_N$ - Exhibit 23-6 |
| LOS, S, FFS, $v_p$ - Exhibits 23-2, 23-3 | $f_{ID}$ - Exhibit 23-7 |

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**TRAFFIC COUNT DATA**

**ALL TRAFFIC RESOURCES**
**42232 WOODSTONE LN**
**QUARTZ HILL, CA 93536**
**(661) 718-8226 (661) 303-1564**

File Name : SH101SB & THOMPSON'06
Site Code : 09130603
Start Date : 9/13/2006
Page No : 1

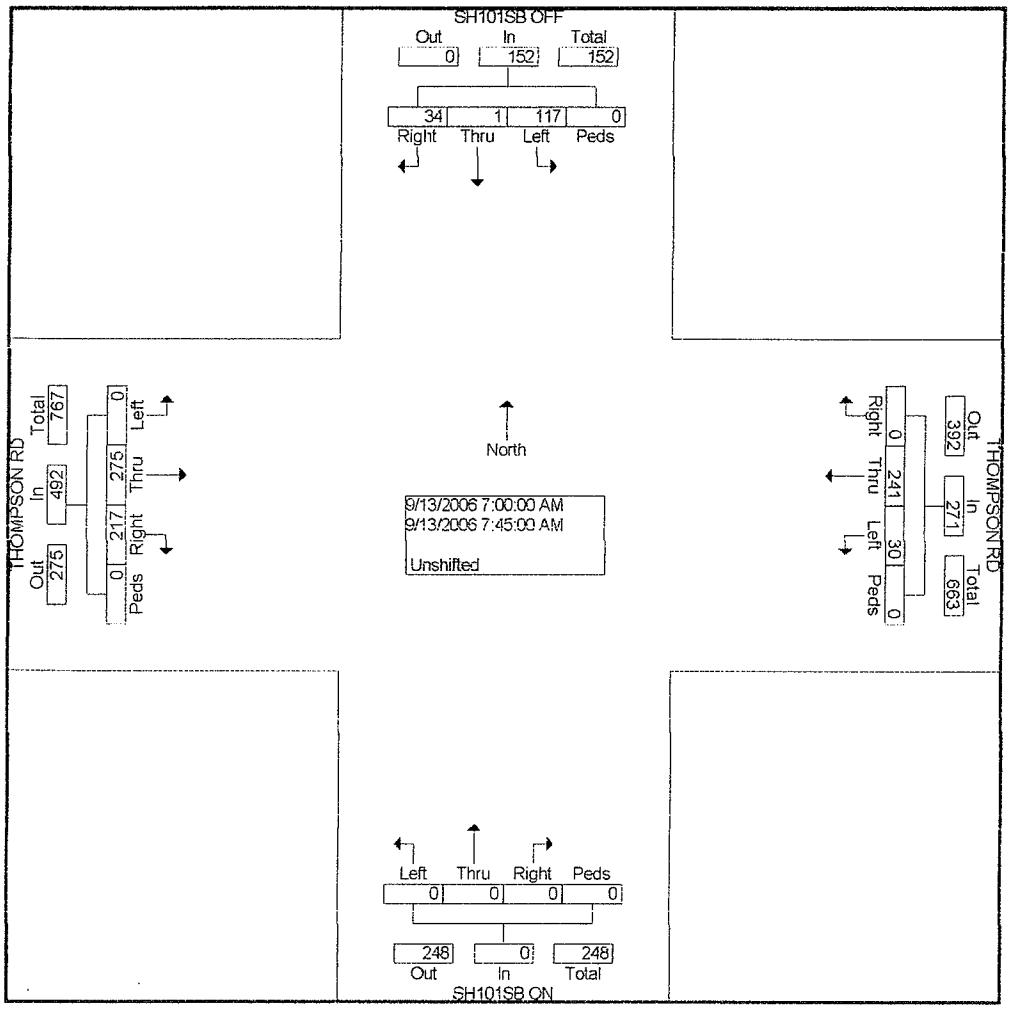
Groups Printed- Unshifted

| | SH101SB OFF From North | | | | THOMPSON RD From East | | | | SH101SB ON From South | | | | THOMPSON RD From West | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | Right | Thru | Left | Peds | Right | Thru | Left | Peds | Right | Thru | Left | Peds | Int. Total |
| Factor | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | |
| 07:00 AM | 7 | 0 | 23 | 0 | 0 | 40 | 7 | 0 | 0 | 0 | 0 | 0 | 35 | 45 | 0 | 0 | 157 |
| 07:15 AM | 15 | 0 | 48 | 0 | 0 | 53 | 7 | 0 | 0 | 0 | 0 | 0 | 54 | 62 | 0 | 0 | 239 |
| 07:30 AM | 6 | 0 | 27 | 0 | 0 | 88 | 11 | 0 | 0 | 0 | 0 | 0 | 66 | 109 | 0 | 0 | 307 |
| 07:45 AM | 6 | 1 | 19 | 0 | 0 | 60 | 5 | 0 | 0 | 0 | 0 | 0 | 62 | 59 | 0 | 0 | 212 |
| Total | 34 | 1 | 117 | 0 | 0 | 241 | 30 | 0 | 0 | 0 | 0 | 0 | 217 | 275 | 0 | 0 | 915 |
| 08:00 AM | 5 | 0 | 18 | 0 | 0 | 35 | 9 | 0 | 0 | 0 | 0 | 0 | 39 | 31 | 0 | 0 | 137 |
| 08:15 AM | 9 | 0 | 15 | 0 | 0 | 34 | 10 | 0 | 0 | 0 | 0 | 0 | 47 | 41 | 0 | 0 | 156 |
| 08:30 AM | 7 | 0 | 12 | 0 | 0 | 27 | 7 | 0 | 0 | 0 | 0 | 0 | 32 | 46 | 0 | 0 | 131 |
| 08:45 AM | 9 | 0 | 11 | 0 | 0 | 42 | 7 | 0 | 0 | 0 | 0 | 0 | 33 | 41 | 0 | 0 | 143 |
| Total | 30 | 0 | 56 | 0 | 0 | 138 | 33 | 0 | 0 | 0 | 0 | 0 | 151 | 159 | 0 | 0 | 567 |
| *** BREAK *** | | | | | | | | | | | | | | | | | |
| 04:00 PM | 19 | 0 | 54 | 0 | 0 | 51 | 5 | 0 | 0 | 0 | 0 | 0 | 48 | 38 | 0 | 0 | 215 |
| 04:15 PM | 30 | 0 | 23 | 0 | 0 | 51 | 4 | 0 | 0 | 0 | 0 | 0 | 50 | 31 | 0 | 0 | 189 |
| 04:30 PM | 29 | 0 | 41 | 0 | 0 | 54 | 4 | 0 | 0 | 0 | 0 | 0 | 42 | 30 | 0 | 0 | 200 |
| 04:45 PM | 20 | 0 | 39 | 0 | 0 | 75 | 4 | 0 | 0 | 0 | 0 | 0 | 39 | 41 | 0 | 0 | 218 |
| Total | 98 | 0 | 157 | 0 | 0 | 231 | 17 | 0 | 0 | 0 | 0 | 0 | 179 | 140 | 0 | 0 | 822 |
| 05:00 PM | 34 | 1 | 40 | 0 | 0 | 62 | 12 | 0 | 0 | 0 | 0 | 0 | 58 | 30 | 0 | 0 | 237 |
| 05:15 PM | 22 | 0 | 46 | 0 | 0 | 73 | 9 | 0 | 0 | 0 | 0 | 0 | 42 | 43 | 0 | 0 | 235 |
| 05:30 PM | 24 | 0 | 46 | 0 | 0 | 67 | 0 | 0 | 0 | 0 | 0 | 0 | 57 | 34 | 0 | 0 | 228 |
| 05:45 PM | 22 | 0 | 36 | 0 | 0 | 72 | 9 | 0 | 0 | 0 | 0 | 0 | 54 | 30 | 0 | 0 | 223 |
| Total | 102 | 1 | 168 | 0 | 0 | 274 | 30 | 0 | 0 | 0 | 0 | 0 | 211 | 137 | 0 | 0 | 923 |
| Grand Total | 264 | 2 | 498 | 0 | 0 | 884 | 110 | 0 | 0 | 0 | 0 | 0 | 758 | 711 | 0 | 0 | 3227 |
| Apprch % | 34.6 | 0.3 | 65.2 | 0.0 | 0.0 | 88.9 | 11.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 51.6 | 48.4 | 0.0 | 0.0 | |
| Total % | 8.2 | 0.1 | 15.4 | 0.0 | 0.0 | 27.4 | 3.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 23.5 | 22.0 | 0.0 | 0.0 | |

**ALL TRAFFIC RESOURCES**
**42232 WOODSTONE LN**
**QUARTZ HILL, CA 93536**
**(661) 718-8226 (661) 303-1564**

File Name : SH101SB & THOMPSON'06
Site Code : 09130603
Start Date : 9/13/2006
Page No : 2

| | SH101SB OFF From North | | | | | THOMPSON RD From East | | | | | SH101SB ON From South | | | | | THOMPSON RD From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| Peak Hour From 07:00 AM to 11:45 AM - Peak 1 of 1 | | | | | | | | | | | | | | | | | | | | | |
| Intersection | 07:00 AM | | | | | | | | | | | | | | | | | | | | |
| Volume | 34 | 1 | 117 | 0 | 152 | 0 | 241 | 30 | 0 | 271 | 0 | 0 | 0 | 0 | 0 | 217 | 275 | 0 | 0 | 492 | 915 |
| Percent | 22.4 | 0.7 | 77.0 | 0.0 | | 0.0 | 88.9 | 11.1 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | | 44.1 | 55.9 | 0.0 | 0.0 | | |
| 07:30 Volume | 6 | 0 | 27 | 0 | 33 | 0 | 88 | 11 | 0 | 99 | 0 | 0 | 0 | 0 | 0 | 66 | 109 | 0 | 0 | 175 | 307 |
| Peak Factor | | | | | | | | | | | | | | | | | | | | | 0.745 |
| High Int. | 07:15 AM | | | | | 07:30 AM | | | | | 6:45:00 AM | | | | | 07:30 AM | | | | | |
| Volume | 15 | 0 | 48 | 0 | 63 | 0 | 88 | 11 | 0 | 99 | 0 | 0 | 0 | 0 | 0 | 66 | 109 | 0 | 0 | 175 | |
| Peak Factor | | | | | 0.603 | | | | | 0.684 | | | | | | | | | | 0.703 | |

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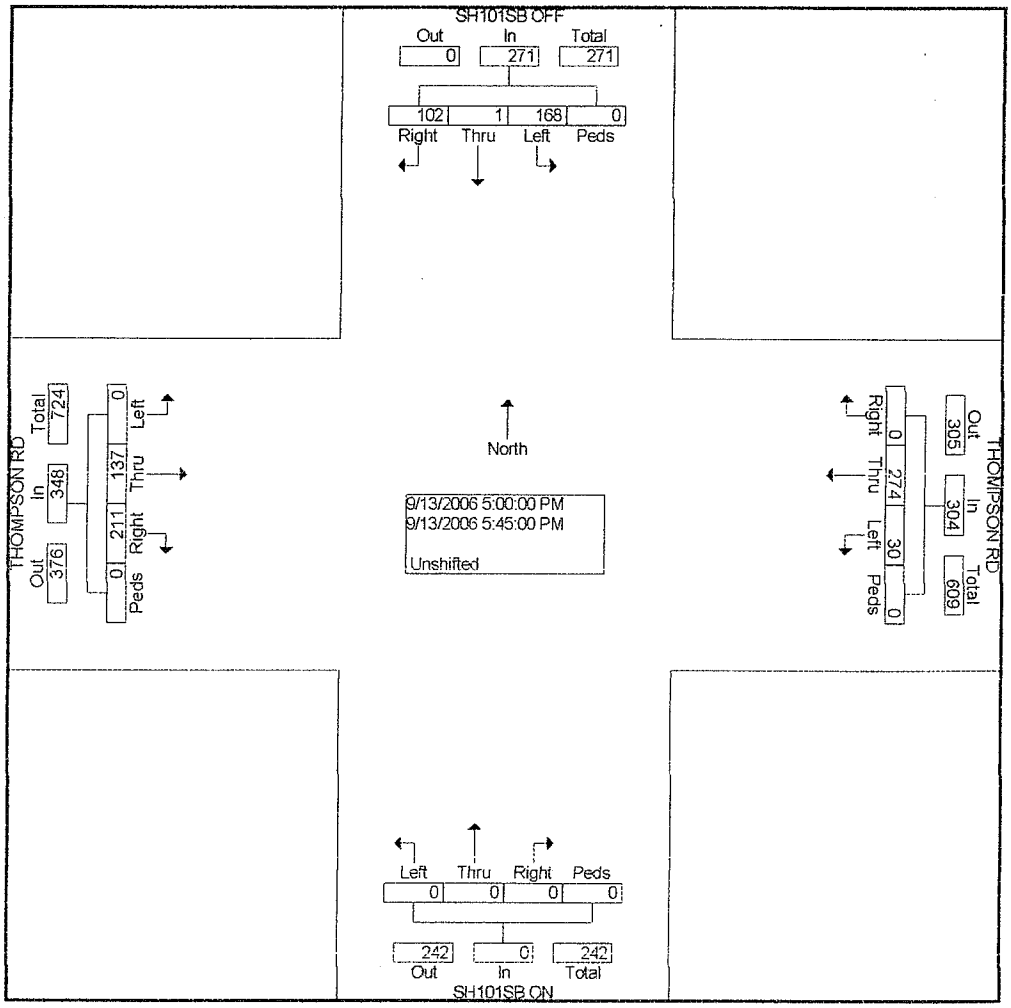
**ALL TRAFFIC RESOURCES**
**42232 WOODSTONE LN**
**QUARTZ HILL, CA 93536**
**(661) 718-8226 (661) 303-1564**

File Name : SH101SB & THOMPSON'06
Site Code : 09130603
Start Date : 9/13/2006
Page No : 3

| | SH101SB OFF From North | | | | | THOMPSON RD From East | | | | | SH101SB ON From South | | | | | THOMPSON RD From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| Peak Hour From 12:00 PM to 05:45 PM - Peak 1 of 1 | | | | | | | | | | | | | | | | | | | | | |
| Intersection | 05:00 PM | | | | | | | | | | | | | | | | | | | | |
| Volume | 102 | 1 | 168 | 0 | 271 | 0 | 274 | 30 | 0 | 304 | 0 | 0 | 0 | 0 | 0 | 211 | 137 | 0 | 0 | 348 | 923 |
| Percent | 37.6 | 0.4 | 62.0 | 0.0 | | 0.0 | 90.1 | 9.9 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | | 60.6 | 39.4 | 0.0 | 0.0 | | |
| 05:00 Volume | 34 | 1 | 40 | 0 | 75 | 0 | 62 | 12 | 0 | 74 | 0 | 0 | 0 | 0 | 0 | 58 | 30 | 0 | 0 | 88 | 237 |
| Peak Factor | | | | | | | | | | | | | | | | | | | | | 0.974 |
| High Int. | 05:00 PM | | | | | 05:15 PM | | | | | | | | | | 05:30 PM | | | | | |
| Volume | 34 | 1 | 40 | 0 | 75 | 0 | 73 | 9 | 0 | 82 | 0 | 0 | 0 | 0 | 0 | 57 | 34 | 0 | 0 | 91 | |
| Peak Factor | | | | | 0.903 | | | | | 0.927 | | | | | | | | | | 0.956 | |




31

**ALL TRAFFIC RESOURCES**
**42232 WOODSTONE LN**
**QUARTZ HILL, CA 93536**
**(661) 718-8226 (661) 303-1564**

File Name : SH101NB & THOMPSON'06
Site Code : 09130602
Start Date : 9/13/2006
Page No : 1

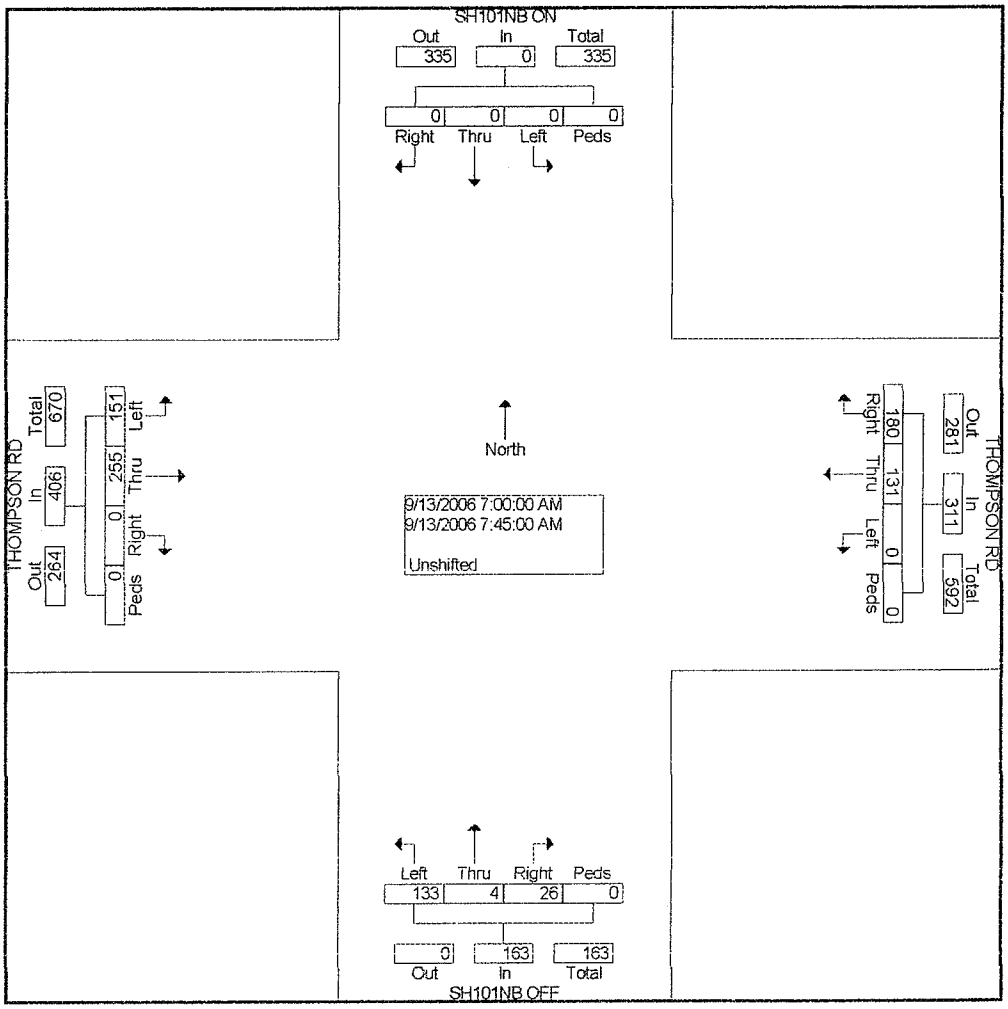
Groups Printed- Unshifted

| | SH101NB ON From North | | | | THOMPSON RD From East | | | | SH101NB OFF From South | | | | THOMPSON RD From West | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | Right | Thru | Left | Peds | Right | Thru | Left | Peds | Right | Thru | Left | Peds | Int. Total |
| Factor | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | |
| 07:00 AM | 0 | 0 | 0 | 0 | 29 | 12 | 0 | 0 | 8 | 1 | 34 | 0 | 0 | 33 | 33 | 0 | 150 |
| 07:15 AM | 0 | 0 | 0 | 0 | 41 | 28 | 0 | 0 | 4 | 1 | 28 | 0 | 0 | 99 | 21 | 0 | 222 |
| 07:30 AM | 0 | 0 | 0 | 0 | 56 | 61 | 0 | 0 | 9 | 2 | 40 | 0 | 0 | 86 | 53 | 0 | 307 |
| 07:45 AM | 0 | 0 | 0 | 0 | 54 | 30 | 0 | 0 | 5 | 0 | 31 | 0 | 0 | 37 | 44 | 0 | 201 |
| Total | 0 | 0 | 0 | 0 | 180 | 131 | 0 | 0 | 26 | 4 | 133 | 0 | 0 | 255 | 151 | 0 | 880 |
| 08:00 AM | 0 | 0 | 0 | 0 | 26 | 17 | 0 | 0 | 4 | 1 | 29 | 0 | 0 | 22 | 27 | 0 | 126 |
| 08:15 AM | 0 | 0 | 0 | 0 | 31 | 15 | 0 | 0 | 7 | 1 | 28 | 0 | 0 | 30 | 28 | 0 | 140 |
| 08:30 AM | 0 | 0 | 0 | 0 | 25 | 8 | 0 | 0 | 2 | 1 | 25 | 0 | 0 | 25 | 32 | 0 | 118 |
| 08:45 AM | 0 | 0 | 0 | 0 | 41 | 28 | 0 | 0 | 5 | 1 | 25 | 0 | 0 | 24 | 31 | 0 | 155 |
| Total | 0 | 0 | 0 | 0 | 123 | 68 | 0 | 0 | 18 | 4 | 107 | 0 | 0 | 101 | 118 | 0 | 539 |
| *** BREAK *** | | | | | | | | | | | | | | | | | |
| 04:00 PM | 0 | 0 | 0 | 0 | 18 | 14 | 0 | 0 | 5 | 0 | 35 | 0 | 0 | 64 | 16 | 0 | 152 |
| 04:15 PM | 0 | 0 | 0 | 0 | 30 | 21 | 0 | 0 | 8 | 1 | 38 | 0 | 0 | 35 | 12 | 0 | 145 |
| 04:30 PM | 0 | 0 | 0 | 0 | 18 | 18 | 0 | 0 | 8 | 2 | 38 | 0 | 0 | 56 | 16 | 0 | 156 |
| 04:45 PM | 0 | 0 | 0 | 0 | 16 | 19 | 0 | 0 | 8 | 0 | 63 | 0 | 0 | 57 | 21 | 0 | 184 |
| Total | 0 | 0 | 0 | 0 | 82 | 72 | 0 | 0 | 29 | 3 | 174 | 0 | 0 | 212 | 65 | 0 | 637 |
| 05:00 PM | 0 | 0 | 0 | 0 | 15 | 33 | 0 | 0 | 10 | 2 | 42 | 0 | 0 | 55 | 8 | 0 | 165 |
| 05:15 PM | 0 | 0 | 0 | 0 | 22 | 29 | 0 | 0 | 3 | 0 | 52 | 0 | 0 | 59 | 24 | 0 | 189 |
| 05:30 PM | 0 | 0 | 0 | 0 | 27 | 23 | 0 | 0 | 6 | 1 | 41 | 0 | 0 | 64 | 15 | 0 | 177 |
| 05:45 PM | 0 | 0 | 0 | 0 | 23 | 31 | 0 | 0 | 6 | 1 | 49 | 0 | 0 | 53 | 9 | 0 | 172 |
| Total | 0 | 0 | 0 | 0 | 87 | 116 | 0 | 0 | 25 | 4 | 184 | 0 | 0 | 231 | 56 | 0 | 703 |
| Grand Total | 0 | 0 | 0 | 0 | 472 | 387 | 0 | 0 | 98 | 15 | 598 | 0 | 0 | 799 | 390 | 0 | 2759 |
| Apprch % | 0.0 | 0.0 | 0.0 | 0.0 | 54.9 | 45.1 | 0.0 | 0.0 | 13.8 | 2.1 | 84.1 | 0.0 | 0.0 | 67.2 | 32.8 | 0.0 | |
| Total % | 0.0 | 0.0 | 0.0 | 0.0 | 17.1 | 14.0 | 0.0 | 0.0 | 3.6 | 0.5 | 21.7 | 0.0 | 0.0 | 29.0 | 14.1 | 0.0 | |

**ALL TRAFFIC RESOURCES**
**42232 WOODSTONE LN**
**QUARTZ HILL, CA 93536**
**(661) 718-8226 (661) 303-1564**

File Name : SH101NB & THOMPSON'06
Site Code : 09130602
Start Date : 9/13/2006
Page No : 2

| | SH101NB ON From North | | | | | THOMPSON RD From East | | | | | SH101NB OFF From South | | | | | THOMPSON RD From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| Peak Hour From 07:00 AM to 11:45 AM - Peak 1 of 1 | | | | | | | | | | | | | | | | | | | | | |
| Intersection | 07:00 AM | | | | | | | | | | | | | | | | | | | | |
| Volume | 0 | 0 | 0 | 0 | 0 | 180 | 131 | 0 | 0 | 311 | 26 | 4 | 133 | 0 | 163 | 0 | 255 | 151 | 0 | 406 | 880 |
| Percent | 0.0 | 0.0 | 0.0 | 0.0 | | 57.9 | 42.1 | 0.0 | 0.0 | | 16.0 | 2.5 | 81.6 | 0.0 | | 0.0 | 62.8 | 37.2 | 0.0 | | |
| 07:30 Volume | 0 | 0 | 0 | 0 | 0 | 56 | 61 | 0 | 0 | 117 | 9 | 2 | 40 | 0 | 51 | 0 | 86 | 53 | 0 | 139 | 307 |
| Peak Factor | | | | | | | | | | | | | | | | | | | | | 0.717 |
| High Int. | 6:45:00 AM | | | | | 07:30 AM | | | | | 07:30 AM | | | | | 07:30 AM | | | | | |
| Volume | 0 | 0 | 0 | 0 | 0 | 56 | 61 | 0 | 0 | 117 | 9 | 2 | 40 | 0 | 51 | 0 | 86 | 53 | 0 | 139 | |
| Peak Factor | | | | | | | | | | 0.665 | | | | | 0.799 | | | | | 0.730 | |

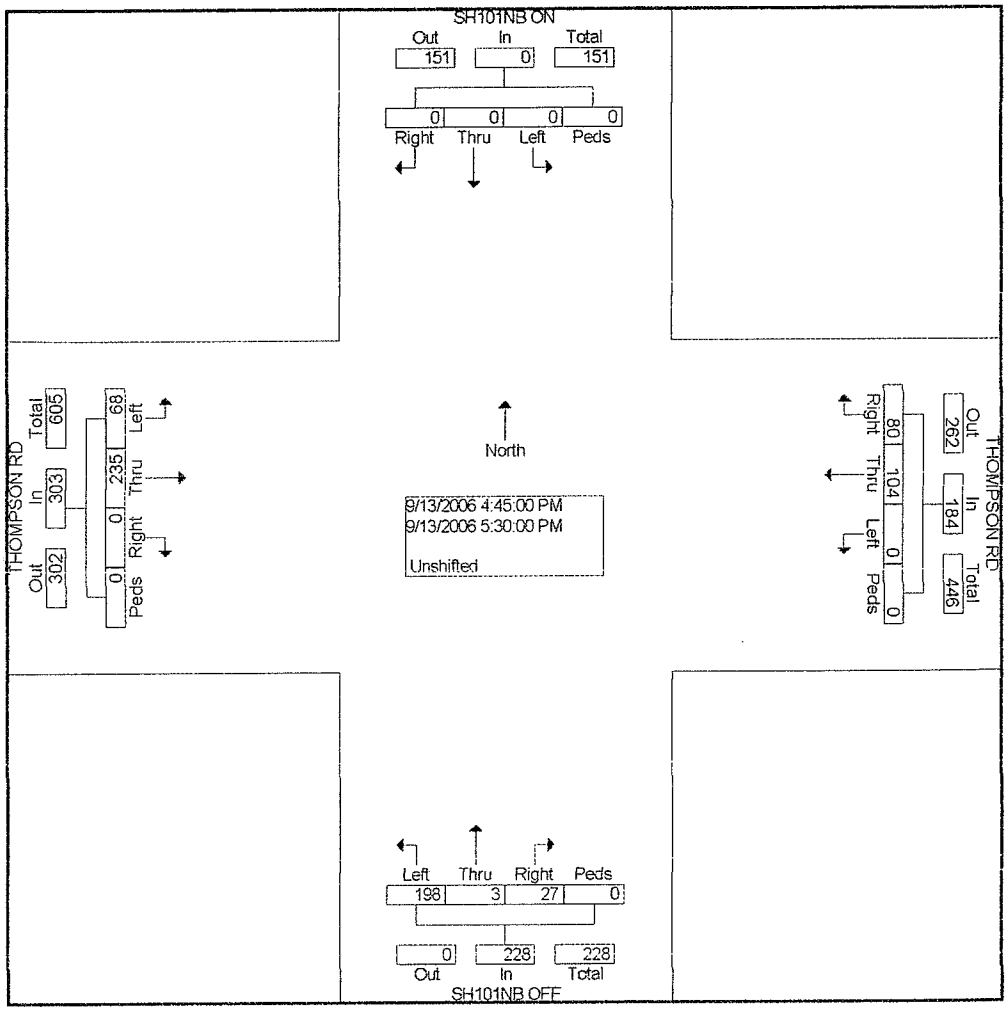



33

**ALL TRAFFIC RESOURCES**
**42232 WOODSTONE LN**
**QUARTZ HILL, CA 93536**
**(661) 718-8226 (661) 303-1564**

File Name : SH101NB & THOMPSON'06
Site Code : 09130602
Start Date : 9/13/2006
Page No : 3

| | SH101NB ON From North | | | | | THOMPSON RD From East | | | | | SH101NB OFF From South | | | | | THOMPSON RD From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| Peak Hour From 12:00 PM to 05:45 PM - Peak 1 of 1 | | | | | | | | | | | | | | | | | | | | | |
| Intersection | 04:45 PM | | | | | | | | | | | | | | | | | | | | |
| Volume | 0 | 0 | 0 | 0 | 0 | 80 | 104 | 0 | 0 | 184 | 27 | 3 | 198 | 0 | 228 | 0 | 235 | 68 | 0 | 303 | 715 |
| Percent | 0.0 | 0.0 | 0.0 | 0.0 | | 43.5 | 56.5 | 0.0 | 0.0 | | 11.8 | 1.3 | 86.8 | 0.0 | | 0.0 | 77.6 | 22.4 | 0.0 | | |
| 05:15 Volume | 0 | 0 | 0 | 0 | 0 | 22 | 29 | 0 | 0 | 51 | 3 | 0 | 52 | 0 | 55 | 0 | 59 | 24 | 0 | 83 | 189 |
| Peak Factor | | | | | | | | | | | | | | | | | | | | | 0.946 |
| High Int. | | | | | | 05:15 PM | | | | | 04:45 PM | | | | | 05:15 PM | | | | | |
| Volume | 0 | 0 | 0 | 0 | 0 | 22 | 29 | 0 | 0 | 51 | 8 | 0 | 63 | 0 | 71 | 0 | 59 | 24 | 0 | 83 | |
| Peak Factor | | | | | | | | | | 0.902 | | | | | 0.803 | | | | | 0.913 | |




34

# Mitron Systems Volume Count Report

| | |
|---|---|
| Site Name | THOMPSON RD e/o SH101NB |
| Jurisdiction | |
| Study Type | Volume (ch1) |
| Location Code | 913061 |
| Direction | West |
| Date | 9/12/2006 |
| Real Time | 10:57 |
| Start Date | 9/12/2006 |
| Start Time | 11:00 |
| Sample Time | 00:15 |
| Operator Number | 0 |
| Machine Number | 7 |

Tuesday, September 12, 2006

09-12-06 (Ch1)

| HR Begin | HR Total | 00-15 | 15-30 | 30-45 | 45-00 |
|---|---|---|---|---|---|
| 11 | 104 | 28 | 30 | 25 | 21 |
| 12 | 141 | 36 | 33 | 35 | 37 |
| 13 | 150 | 33 | 32 | 39 | 46 |
| 14 | 213 | 51 | 30 | 33 | 99 |
| 15 | 180 | 42 | 39 | 49 | 50 |
| 16 | 151 | 35 | 42 | 47 | 27 |
| 17 | 150 | 43 | 36 | 41 | 30 |
| 18 | 153 | 45 | 27 | 41 | 40 |
| 19 | 95 | 30 | 24 | 16 | 25 |
| 20 | 82 | 14 | 27 | 35 | 6 |
| 21 | 39 | 8 | 10 | 11 | 10 |
| 22 | 12 | 6 | 3 | 3 | 0 |
| 23 | 13 | 5 | 4 | 3 | 1 |
| 00 | 4 | 0 | 2 | 1 | 1 |
| 01 | 3 | 1 | 1 | 1 | 0 |
| 02 | 1 | 0 | 0 | 0 | 1 |
| 03 | 3 | 1 | 0 | 1 | 1 |
| 04 | 9 | 1 | 5 | 2 | 1 |
| 05 | 48 | 9 | 6 | 15 | 18 |
| 06 | 152 | 16 | 35 | 53 | 48 |
| 07 | 321 | 50 | 76 | 116 | 79 |
| 08 | 191 | 48 | 43 | 34 | 66 |
| 09 | 112 | 32 | 29 | 19 | 32 |
| 10 | 105 | 23 | 15 | 36 | 31 |
| | 2432 | Total | | | |

09-13-06 (Ch1)

| HR Begin | HR Total | 00-15 | 15-30 | 30-45 | 45-00 |
|---|---|---|---|---|---|
| 11 | 140 | 28 | 40 | 37 | 35 |
| 12 | 140 | 27 | 46 | 36 | 31 |
| 13 | 114 | 32 | 21 | 23 | 38 |
| 14 | 191 | 31 | 32 | 41 | 87 |
| 15 | 189 | 52 | 34 | 53 | 50 |
| 16 | 168 | 33 | 54 | 40 | 41 |
| 17 | 215 | 53 | 50 | 52 | 60 |
| 18 | | | | | |
| 19 | | | | | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |
| 23 | | | | | |
| 00 | | | | | |
| 01 | | | | | |
| 02 | | | | | |
| 03 | | | | | |
| 04 | | | | | |
| 05 | | | | | |
| 06 | | | | | |
| 07 | | | | | |
| 08 | | | | | |
| 09 | | | | | |
| 10 | | | | | |
| | 1157 | Total | | | |

| | |
|---|---|
| AM Peak Hour Start | 07:00 |
| AM Peak Hour Total | 321 |
| AM Peak Hour Factor | 69.18 % |
| PM Peak Hour Start | 14:45 |
| PM Peak Hour Total | 229 |
| PM Peak Hour Factor | 57.83 % |

| | |
|---|---|
| AM Peak Hour Start | 11:00 |
| AM Peak Hour Total | 140 |
| AM Peak Hour Factor | 87.50 % |
| PM Peak Hour Start | 14:45 |
| PM Peak Hour Total | 226 |
| PM Peak Hour Factor | 64.94 % |

35

# Mitron Systems Volume Count Report

| | |
|---|---|
| Site Name | THOMPSON RD e/o SH101NB |
| Jurisdiction | |
| Study Type | Volume (2-way) |
| Location Code | 913061 |
| Direction | East |
| Date | 9/12/2006 |
| Real Time | 10:57 |
| Start Date | 9/12/2006 |
| Start Time | 11:00 |
| Sample Time | 00:15 |
| Operator Number | 0 |
| Machine Number | 7 |

Tuesday, September 12, 2006

| | 09-12-06 (Ch2(2-1)) | | | | |
|---|---|---|---|---|---|
| HR Begin | HR Total | 00-15 | 15-30 | 30-45 | 45-00 |
| 11 | 83 | 12 | 15 | 28 | 28 |
| 12 | 107 | 28 | 23 | 35 | 21 |
| 13 | 126 | 22 | 30 | 40 | 34 |
| 14 | 190 | 34 | 43 | 55 | 58 |
| 15 | 188 | 52 | 37 | 56 | 43 |
| 16 | 260 | 76 | 62 | 68 | 54 |
| 17 | 251 | 59 | 60 | 67 | 65 |
| 18 | 172 | 49 | 52 | 39 | 32 |
| 19 | 116 | 35 | 27 | 27 | 27 |
| 20 | 79 | 21 | 21 | 19 | 18 |
| 21 | 69 | 21 | 15 | 10 | 23 |
| 22 | 33 | 15 | 4 | 7 | 7 |
| 23 | 22 | 11 | 6 | 2 | 3 |
| 00 | 5 | 2 | 0 | 3 | 0 |
| 01 | 5 | 3 | 1 | 0 | 1 |
| 02 | 2 | 0 | 0 | 0 | 2 |
| 03 | 1 | 0 | 0 | 1 | 0 |
| 04 | 5 | 0 | 1 | 0 | 4 |
| 05 | 19 | 0 | 2 | 3 | 14 |
| 06 | 96 | 8 | 8 | 43 | 37 |
| 07 | 303 | 45 | 111 | 100 | 47 |
| 08 | 125 | 27 | 38 | 28 | 32 |
| 09 | 94 | 28 | 21 | 20 | 25 |
| 10 | 106 | 28 | 29 | 23 | 26 |
| | 2457 | Total | | | |

| | 09-13-06 (Ch2(2-1)) | | | | |
|---|---|---|---|---|---|
| HR Begin | HR Total | 00-15 | 15-30 | 30-45 | 45-00 |
| 11 | 102 | 32 | 26 | 24 | 20 |
| 12 | 94 | 22 | 28 | 21 | 23 |
| 13 | 120 | 21 | 25 | 32 | 42 |
| 14 | 193 | 23 | 41 | 65 | 64 |
| 15 | 231 | 57 | 51 | 60 | 63 |
| 16 | 259 | 80 | 45 | 65 | 69 |
| 17 | 260 | 69 | 66 | 67 | 58 |
| 18 | | | | | |
| 19 | | | | | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |
| 23 | | | | | |
| 00 | | | | | |
| 01 | | | | | |
| 02 | | | | | |
| 03 | | | | | |
| 04 | | | | | |
| 05 | | | | | |
| 06 | | | | | |
| 07 | | | | | |
| 08 | | | | | |
| 09 | | | | | |
| 10 | | | | | |
| | 1259 | Total | | | |

| | |
|---|---|
| AM Peak Hour Start | 07:00 |
| AM Peak Hour Total | 303 |
| AM Peak Hour Factor | 68.24 % |
| PM Peak Hour Start | 16:00 |
| PM Peak Hour Total | 260 |
| PM Peak Hour Factor | 85.53 % |

| | |
|---|---|
| AM Peak Hour Start | 11:00 |
| AM Peak Hour Total | 102 |
| AM Peak Hour Factor | 79.69 % |
| PM Peak Hour Start | 16:45 |
| PM Peak Hour Total | 271 |
| PM Peak Hour Factor | 98.19 % |

# SECTION 4

# Noise Technical Study

## Summary

All potential impacts related to noise from agricultural operations or the exposure of new residents to project construction and project operations can be mitigated to a less than significant level. ESA visited the site and took noise measurements of operating farm equipment and noise from traffic along US 101. Mitigation measures are provided in this study to reduce potential impacts from exposure to less than significant levels.

# NOISE TECHNICAL STUDY

## Laetitia Agriculture Cluster Technical Studies

## Overview

This noise study was prepared to analyze potential noise impacts of the proposed Laetitia Vineyard Agriculture Cluster. The noise study includes noise measurements and an analysis of whether the proposed project would:

- Expose the proposed residences to noise from vineyard or winery operations in excess of County noise thresholds;
- Expose residents to noise from US 101 in excess of the County noise compatibility standards; or
- Generate project traffic that would cause a significant increase in noise (from the project or in combination with cumulative projects) at sensitive receptors along Sheehy or Thompson Road.

This noise study identifies potential impacts related to construction noise (see Impact Noise-2 and Recommended Measures Noise-2a through Noise-2d) and potential impacts related to noise from agricultural maintenance operations, the winery processing facility, and the proposed wastewater treatment facility (see Impact Noise-3; and Recommended Measures Noise-3a through Noise-3c). With implementation of the Recommended Measures, which appear to be feasible, potentially significant impacts related to noise would be reduced to a less-than-significant level.

## Setting

The existing noise environment at the site is influenced by steady noise from US 101 and intermittent noise from various vineyard operations, distant train horns, and airplanes. At the project site, noise from US 101 is dependent primarily on the time of day, distance from US 101, and the topography between US 101 and any particular site location. Whereas highway noise is constant from day to day at any location, noise from vineyard equipment operations changes daily depending on its location. The noisiest vineyard operations are (1) mowing, which occurs three to four times a year between the vines, and (2) disking the cover crop, which occurs once every three years.

The proposed residences are set back a minimum of 1,420 feet (0.27 miles) from US 101, and approximately half of the proposed residences are more than one mile from US 101. The

proposed residences nearest to winery operations are Lot 49 and Lot 58, which are approximately 410 feet from the winery building. There is one existing residence located approximately 390 feet east of Lot 63 (which is the closest proposed new residence); this residence is surrounded by vineyard cultivation.

ESA interviewed Lino Bozzano, the vineyard manager, at the winery on August 29, 2006, to better understand winery operations that could affect noise levels at proposed residences. Important information from that interview included the following:

- The loudest activity at the vineyard is mowing. The cover crop between the vines is mowed three to four times a year.
- On a rotating schedule, the vineyard disks the cover crop in all areas (completed in approximately one week) once every three years to reestablish and/or rotate cover crops. Disk operations are not as loud as mowing activities. The disk moves slower than the mower and makes three to four passes over each area.
- The vineyard uses goats for vegetation control in steep areas.
- The vineyard harvests by hand and does not harvest at night.
- Vehicles used for vineyard operations are not very loud and generally operate at speeds of 5 to 10 mph. Site observations by ESA confirmed that these vehicles were not obtrusive noise sources at the vineyard, typical noise levels from these vehicles can be assumed to typically be less than 60 dBA at a distance of 50 feet.
- The vineyard processing area includes crushing, pressing, storage and bottling. This area is oriented so that noise is directed towards the south, away from the wine tasting room and all proposed residences.[1] Destemming, crushing, and pressing occur outdoors and bottling occurs inside the building.
- The vineyard processing area operates from about 7 a.m. to 7 p.m. during the harvest. Since Mr. Bozzano has been manager of the Vineyard there have been no nighttime operations of the winery and none are expected, pending some unforeseen emergency. Because of the climate, fruit that has not been processed at the end of the day can sit overnight and be processed in the morning.

To characterize existing noise levels at the project site, ESA took both long-term and short-term noise measurements. Long-term noise measurements were taken at two proposed housing sites; near Lot 58 and near Lot 46 (the data is plotted in Figures 1 and 2, respectively). A summary of long- and short-term noise measurements are provided in Table 1, below.

1 All activities at the wine tasting facility and visitor areas would be required to conform to the San Luis Obispo Noise Ordinance.

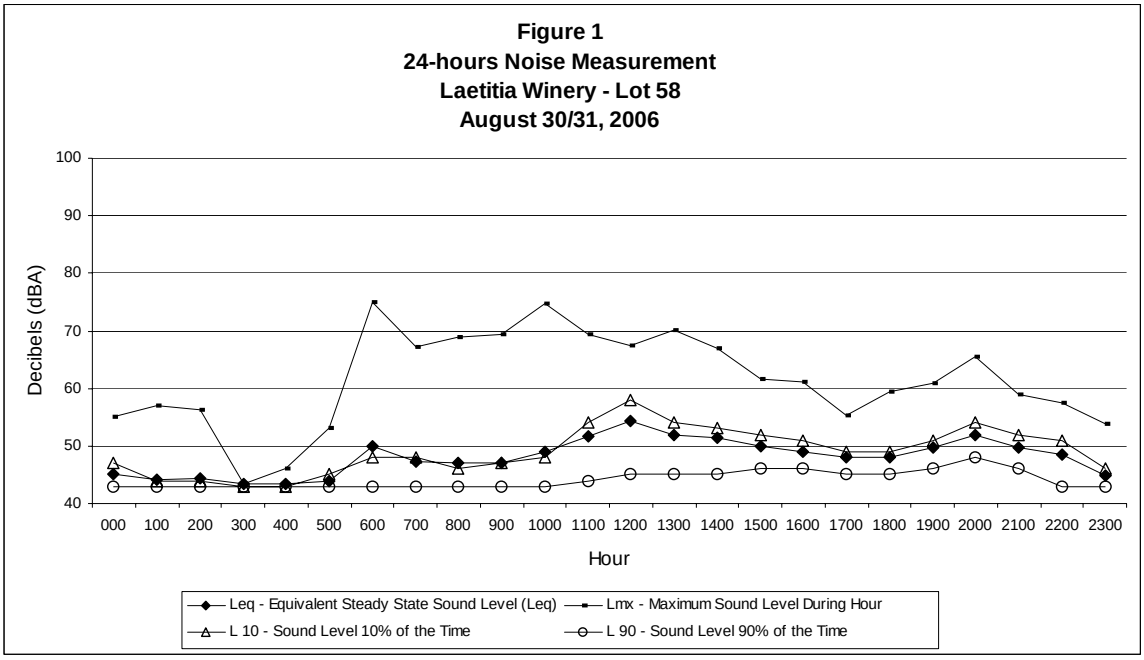


Figure 1
24-hours Noise Measurement
Laetitia Winery - Lot 58
August 30/31, 2006
Decibels (dBA)
100
90
80
70
60
50
40
000 100 200 300 400 500 600 700 800 900 1000 1100 1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200 2300
Hour
Leq - Equivalent Steady State Sound Level (Leq)
Lmx - Maximum Sound Level During Hour
L 10 - Sound Level 10% of the Time
L 90 - Sound Level 90% of the Time

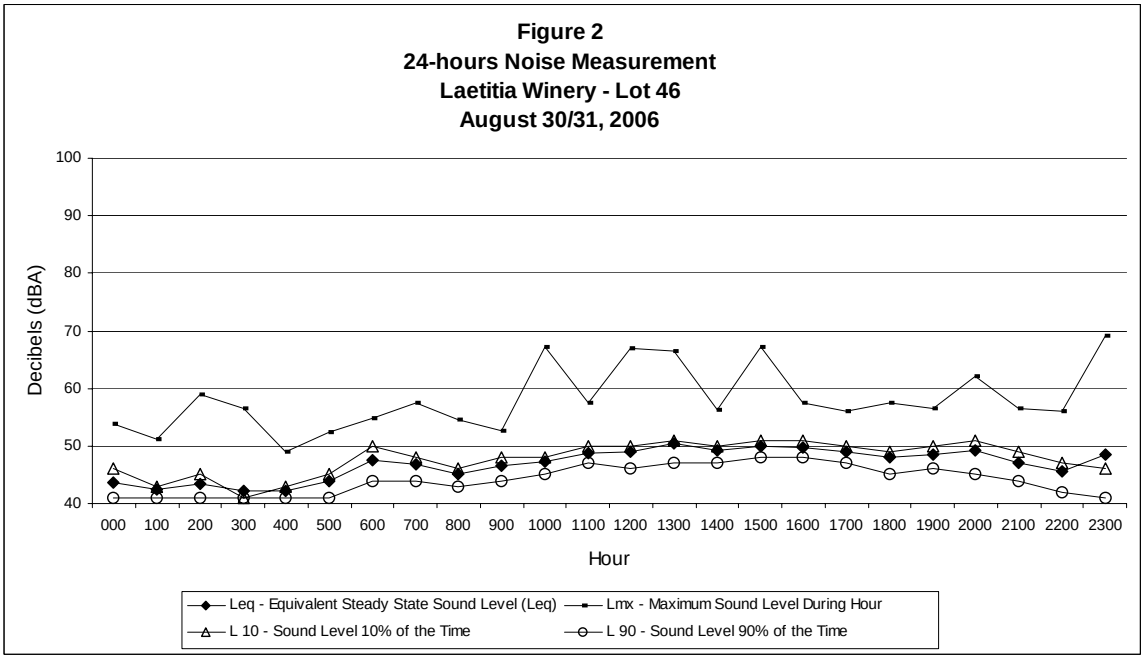


Figure 2
24-hours Noise Measurement
Laetitia Winery - Lot 46
August 30/31, 2006
Decibels (dBA)
100
90
80
70
60
50
40
000 100 200 300 400 500 600 700 800 900 1000 1100 1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200 2300
Hour
Leq - Equivalent Steady State Sound Level (Leq)
Lmx - Maximum Sound Level During Hour
L 10 - Sound Level 10% of the Time
L 90 - Sound Level 90% of the Time

**TABLE 1**
**SUMMARY OF EXISTING NOISE MEASUREMENTS**

| Noise Measurement Location/ ID | Time Period | Leq (dBA) | Noise Sources |
|---|---|---|---|
| 1A. Lot 58 | August 30/31, 2006<br>24-hour CNEL= 54 | Hourly Leq values were between 43 and 54. | Unattended 24-hour measurement – individual noise sources not identified. |
| 1B. Lot 58 | August 29, 2006<br>(3:55 p.m. – 3:59 p.m.) | 1-minute Leqs ranged from 47 to 52 dBA. | US 101 traffic noise at about 50 dBA<br>Overhead aircraft 54 dBA<br>Brake noise from truck behind processing area – audible but not loud (<50 dBA) |
| 2. Lot 46 | August 30/31, 2006<br>24-hour CNEL= 53 | Hourly Leq values were between 42 and 50. | Unattended 24-hour measurement – individual noise sources not identified. |
| 3A. Winery outdoor processing area below wine tasting area. South side of processing area. | August 29, 2006 (1:59 p.m. to 2:30 p.m.)<br>25' to 75' from various activities | 1-minute Leqs ranged from 56 to 71 dBA. | Forklifts taking grape crates off of trucks Destemmer 67 dBA at 50 feet<br>Backup beeper 82 dBA at 25 feet<br>Hosing equipment 54 dBA. |
| 3B. Southwest area south of winery. Near the compressors and fans. | August 29, 2006 (4:12 p.m. to 4:19 p.m.) | 1-minute Leqs ranged from 63 to 70 dBA. | Noise levels were 63 to 70 dBA at 25 feet from compressor fans (varies depending on the number of fans running) |
| 4. West side of winery mid-building. | August 29, 2006 (2:33 p.m. to 2:35 p.m.) | 1-minute Leqs ranged from 55 to 58 dBA. | Noise from US 101 and noise from winery processing operations were shielded by the building to a level that they were below US 101 noise at the side of the winery processing area. Heard no processing noise at this location. |
| 5. Tasting room parking lot directly north of the winery processing building. | August 29, 2006 (2:44 p.m. to 2:47 p.m.) | 1-minute Leqs ranged from 48 to 54 dBA. | Trickling water from the fountain near the tasting room. Some freeway traffic noticeable here, but no noise from grape processing on the south side of the building. |
| 6. Tractor pulling mower this was cutting the cover crop between vines. | August 29, 2006 (3:01 p.m. to 3:14 p.m.) | 1-minute Leqs ranged from 50 to 84 dBA. | Mower behind the tractor has a noise level of 86 dBA at a distance of 25 feet. |
| 7. SE of the Intersection of N. Thompson Avenue and Sheehy Road | August 30, 2006 (7:57 a.m. to 8:07 a.m.) | 5-minute Leqs 58 and 61 dBA | Approximately 100 feet from center of N. Thompson Avenue and approximately 100 feet from Sheehy Road. Noise is from cars on Thompson Avenue (28 cars during first 5 minutes; 23 cars during second 5 minutes). Less traffic on Sheehy. |
| 8A. East of existing entrance road to Laetitia Winery. | August 30, 2006 (8:55 a.m. to 9:10 a.m.) | 5-minute Leqs 69 to 71 dBA | Approximately 150 feet from center of northbound US 101 lanes. (US 101 traffic is the main noise source.) |
| 8B. East of existing entrance road to Laetitia Winery. | August 30, 2006 (9:25 a.m. to 9:40 a.m.) | 5-minute Leqs 65 to 66 dBA | Approximately 250 feet from center of northbound US 101 lanes. (US 101 traffic is the main noise source.) |
| 9. Lot 71 | August 30, 2006 (4:45 p.m. to 5:00 p.m.) | 5-minute Leqs 44 to 45 dBA | Distant noises of US 101, train horn and airplanes overhead |
| 10. Lot 79 | August 30, 2006 (5:16 p.m. to 5:26 p.m.) | 5-minute Leqs 48 and 48 dBA | Highway noise was less than 50 dBA; small plane flyover |
| 11. Lot 18 | August 30, 2006 (5:46 p.m. to 5:56 p.m.) | 5-minute Leqs 44 to 45 dBA | Highway noise in distance.<br>Train horn in distance; Crickets in field; Dripping of irrigation onto vines. |

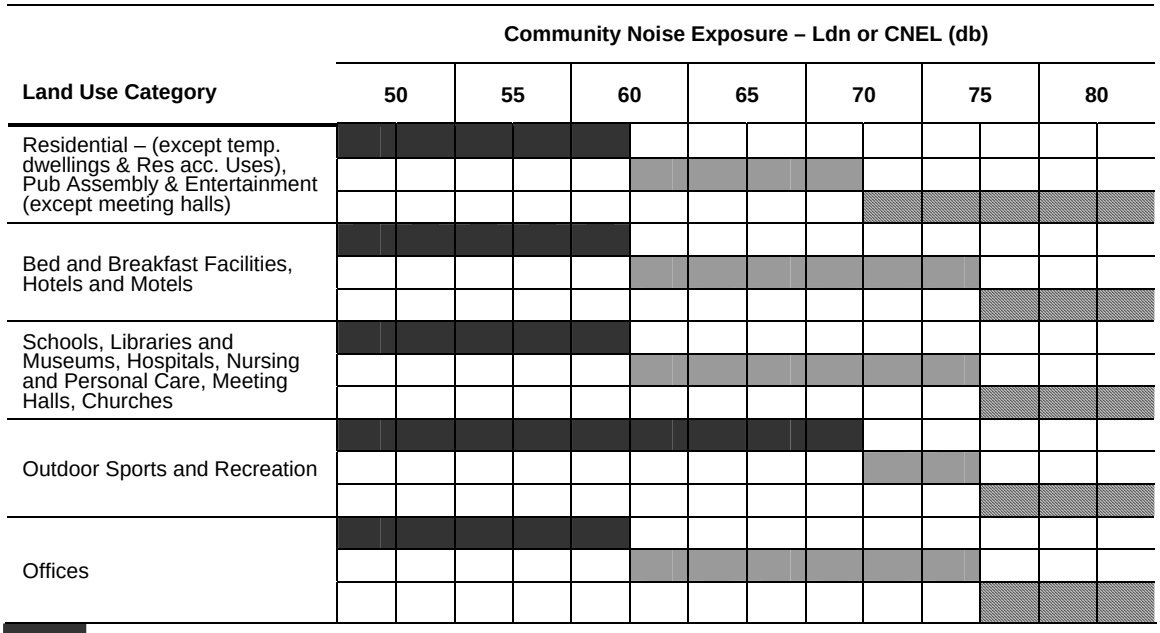
SOURCE: ESA, 2006

# Regulatory Environment

## San Luis Obispo County General Plan Noise Element

The San Luis Obispo General Plan Noise Element designates the ranges of noise exposure from transportation noise sources (including major roadways such as US 101) that are considered to be acceptable, conditionally acceptable, or unacceptable for the development of different land uses. These noise exposure ranges are shown below in Figure 3 (from the Figure 3-1 in the *County Noise Element*).

**Figure 3**
**San Luis Obispo County Land Use Compatibility for New Development near Transportation Noise Sources**




| | | |
|---|---|---|
| | **Acceptable** | (no mitigation required). |
| | **Conditionally Acceptable** | Mitigation required. Use should be permitted only after careful study and inclusion of mitigation measures as needed to satisfy policies of the Noise Element. |
| | **Unacceptable** | New construction or development generally should not be undertaken. |

SOURCE: San Luis Obispo General Plan Noise Element (Figure 3-1), 1992.

The following policies from the County Noise Element are relevant to the proposed residential development at Laetitia Winery.

Policy 3.3.1 The noise standards in this chapter represent maximum acceptable noise levels. New development should minimize noise exposure and noise generation.

Policy 3.3.2 New development of noise-sensitive land uses (see Section 1.5 – Definitions) shall not be permitted in areas exposed to existing or projected future levels of noise from transportation noise sources which exceed 60 dB LDN or CNEL (70 LDN or CNEL for outdoor sports and recreation) unless the project design includes effective mitigation measures to reduce noise in outdoor activity areas and interior spaces to or below the levels specified for the given land use in Table 3-1 (Note to readers: Table 3-1 in the Noise Element has the same levels for residential as shown in Figure 3 in this report [60 Ldn, dBA for Outdoor Activity).

## San Luis Obispo County Noise Ordinance

San Luis Obispo County Noise Ordinances 22.10.120 establish maximum allowable noise exposure levels for exterior and interior noise levels as a result of stationary activities (see Table 2).

**TABLE 2**
**STATIONARY SOURCE NOISE LEVEL STANDARDS IN SLO COUNTY[a]**

| Criteria | Daytime (7 a.m. to 10 p.m.) | Nighttime (10 p.m. to 7 a.m.) |
|---|---|---|
| Exterior Standards | | |
| Hourly $L_{eq}$, dB | 50 | 45 |
| Maximum level, dB | 70 | 65 |
| Interior Standards | | |
| Hourly $L_{eq}$, dB | 40 | 35 |
| Maximum level, dB | 60 | 55 |

[a] These standards are not applicable to noise associated with construction, provided such activities do not take place before seven a.m. or after nine p.m. any day except Saturday or Sunday, or before eight a.m. or after five p.m. on Saturday or Sunday (San Luis Obispo County Noise Ordinance, Section 22.10.020.A.4)..

SOURCE: San Luis Obispo County Noise Ordinance, 1992

# Impacts and Recommended Measures

## Significance Criteria[2]

Impacts from project-related noise would be considered significant if:

1) Residences would be subjected to an environment with noise levels that are Unacceptable according to Figure 3.

2) Adopted noise element policies, standards, or ordinances would be exceeded in noise level, timing, or duration (according to Table 2).

[2] Adapted from significance criteria for San Luis Obispo County in the Guadalupe Restoration Project, Final Supplemental EIR, 2005.

3) The project would increase the ambient noise level above ordinance-specified limits or by more than 3 dBA in areas already exceeding the limits.

4) An increase in noise levels of 15 dBA or more would occur over a period of at least one-half day at a sensitive receptor at any ambient noise level; permanent daytime or nighttime increases of 10 dBA would also be significant.

5) The project would generate noise levels in excess of 65 dBA that affect sensitive receptors.

6) The project would generate detrimental earth-borne vibrations perceptible at the lot line of sensitive receptors for more than two consecutive weeks.

**Impact Noise-1: Development of the project could potentially be inconsistent with County land use compatibility criteria for residential development. (Potentially Significant)**

As shown in Figure 3, according to the General Plan, residential land uses are compatible in locations where the CNEL is below 60 dBA. Recent noise measurements were conducted to determine the compatibility of proposed lots with County General Plan residential noise standards. Lots 58 and 46 were considered to be representative of the lots most affected by noise from US 101 and the winery processing building. Twenty-four hour noise measurements at Lots 58 and 46 determined that the CNELs in these locations were 54 and 53 dBA respectively (see Figures 1 and 2 and Locations 1A and 2 in Table 1). On the basis of these measurements and existing vineyard/winery operations (no noisy operations between 10 p.m. and 7 a.m.) and other measures used to pick grapes and control vegetation, the lots can be considered to be consistent with County land use compatibility standards for residences. There would be no impact from the project. Although mitigation measures are not needed, the following measure is recommended to maximize noise control.

> **Recommended Measure Noise-1:** The vineyard and winery shall continue to handpick the grapes, use non-gas powered alternatives to gas powered weed whackers, and limit vineyard/winery operations to daytime hours (no noisy operations between 10 p.m. and 7 a.m.).

Implementation of Recommended Measure Noise-1 would reduce potential impacts associated with the proximity of residential uses to agricultural uses to a less than significant level.

**Significance after Mitigation**: Less than significant.

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**Impact Noise-2: Development of the project would result in temporary noise impacts during project construction. (Potentially Significant)**

Construction activity noise levels at and near the project site would fluctuate depending on the particular type, number, and duration of uses of various pieces of construction equipment. Construction-related material haul trips would raise ambient noise levels along haul routes, depending on the number of haul trips made and types of vehicles used. In addition, certain types

of construction equipment generate impulsive noises, which can be particularly annoying. Table 3 shows typical noise levels during different construction stages.

Construction of the project would generate a significant amount of noise corresponding to the appropriate phase of building construction and the noise generating equipment used during those phases. The closest potential sensitive receptors would be those residences built and occupied as part of the project before construction of residences built during later phases of the project. There

**TABLE 3**
**TYPICAL CONSTRUCTION NOISE LEVELS**

| Construction Phase | Noise Level (dBA, Leq) [a] |
|---|---|
| Ground Clearing | 84 |
| Excavation | 89 |
| Foundations | 78 |
| Erection | 85 |
| Finishing | 89 |

[a] Average noise levels correspond to a distance of 50 feet from the noisiest piece of equipment associated with a given phase of construction and 200 feet from the rest of the equipment associated with that phase.

SOURCE: U.S. Environmental Protection Agency, *Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances*, 1971.

are no residences offsite that are close enough to the project site to be affected by construction of the homes.

Construction of the homes can be assumed to occur over a period of several years, during which construction noise would be intermittent. The project would already be required by law to comply with County Ordinance 23.06.042, which limits construction activities to between 7:00 AM and 9:00 PM on weekdays, and 8:00 AM and 5:00 PM on weekends. The following measures would reduce construction noise to a less than significant environmental effect:

**Measures Already Required by Law:**

**SLO County Measure Noise-1:** In compliance with County Ordinance 22.10.120.A.3, construction activities shall be limited to between 7:00 a.m. and 9:00 p.m. weekdays and 8:00 a.m. and 5:00 p.m. on weekends.

**Additional Recommended Measures:**

**Recommended Measure Noise-2a:** Construction equipment noise shall be minimized during project construction by muffling and shielding intakes and exhaust on construction equipment (per the manufacturer's specifications) and by shrouding or shielding impact tools.

**Recommended Measure Noise-2b:** Construction contractors shall locate fixed construction equipment (such as compressors and generators) and construction staging areas as far as possible from adjacent residences.

**Recommended Measure Noise-2c:** No amplified sources (e.g., stereo "boom boxes") shall be used in the vicinity of residences during project construction.

**Recommended Measure Noise-2d:** To further address the nuisance impact of project construction, construction contractors shall implement the following measures:

- Signs shall be posted for the purposes of informing all contractors/subcontractors, their employees, agents, material haulers, and all other persons at the construction site, of the basic requirements of SLO County Measure 1 and Recommended Measures Noise-2a through Noise-2c.

- Signs shall be posted at the construction site that include permitted construction days and hours, a day and evening contact number for the job site, and a contact number for San Luis Obispo County in the event of problems.

- An onsite complaint and enforcement manager shall respond to and track complaints and questions related to noise.

Implementation of SLO County Measure 1 and Recommended Measures Noise-2a through Noise-2d would reduce potential impacts associated with temporary construction noise impacts to a less than significant level.

**Significance after Mitigation:** Less than Significant.

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**Impact Noise-3: Operational activities (non-transportation) associated with the project, the vineyards or the winery could increase ambient noise levels at residences developed as part of the project above County standards. (Potentially Significant)**

**Noise from Residences:** Because of the requirements of County Noise Ordinance Section 22.10.120, the proposed residences would not be expected to generate noise levels above those in Table 2. This would be a less-than-significant impact.

**Residences exposed to noise from Mowing and Disking:** The proposed residences would potentially be exposed to maximum noise levels (Lmax) and/or hourly equivalent sound levels (Leqh) up to approximately ten hours per year. Mowing operations closer than approximately 150 feet to proposed residences would result in noise levels that exceed the County Lmax standard of 70 dBA. Since the disking is not as loud as the mower, the disking will be assumed to exceed the standard when disking is closer than 100 feet to a residence. Although this level of noise is typical near any residence (from lawnmowers and leaf blowers on and adjacent to the residence), it would exceed the County Noise Ordinance and would be a potentially significant impact. However, pursuant to the County's "Right to Farm" ordinance, the project applicant would be

required to provide disclosure statements to purchasers of the new residences. The disclosure statements would inform property purchasers that they may be subject to certain inconveniences or discomforts (i.e., noise, odors, dust, chemicals, and operations) arising from the nearby agricultural operations. The provision of the disclosure statements would further ensure that agricultural operations would be protected. Based on the above, the proposed project would not result in significant impacts from agriculture-related noise in close proximity to residential clusters.

**Residences exposed to noise from the winery processing area:** Twenty-four-hour noise measurements were taken at Lot 58 (see Figure 1) and Lot 46 (see Figure 2) from August 29 to August 30, 2006, and a short-term measurement was taken at Lot 58 (see Table 1 measurement 1B). Lot 46 measurements were within the County standards, but Lot 58 occasionally had noise levels marginally above 70 Lmax and above 50 Leq. The short-term measurement at Lot 58 identified noise from US 101 as approximately 50 dBA at this location. Lot 58 is perhaps the only lot that would have a clear view of the entrance to the winery processing area. The winery was active during the measurements, but not at peak season. It is likely that the noise from the winery could exceed the noise ordinance at Lot 58, and perhaps Lots 49, 50 and 59, based on their proximity to Lot 58. This would be a potentially significant impact. However, as noted above, pursuant to the County's "Right to Farm" ordinance, the project applicant would be required to provide disclosure statements to purchasers of the new residences. The disclosure statements would inform property purchasers that they may be subject to certain inconveniences or discomforts (i.e., noise, odors, dust, chemicals, and operations) arising from the nearby agricultural operations. The provision of the disclosure statements would further ensure that agricultural operations would be protected. Based on the above, the proposed project would not impede the winery processing operations at the site.

**Residences exposed to noise from the wastewater treatment facility:** The wastewater treatment facility would be adjacent to the vineyard operations headquarters and shop. This building has offices and is the storage location for equipment, fuel, and pesticides. The noise from the wastewater treatment facility should be compatible with these uses. The facility would be located approximately 400 to 600 feet from Lots 49 through 52 and 58 through 62. It appears to be in an area that would be shielded completely by the hillside from Lots 49 through 52 and 58 through 62. The facility would also be located approximately 900 feet from the existing residence to the northeast. Without more details on the facility it could potentially have a **significant impact** on the adjacent existing residence. The following measures would reduce potential operational noise to a less than significant environmental effect:

**Measures Already Required by Law:**

**SLO County Measure Noise-2:** All residents would be required to comply with County Noise Ordinance Section22.10.120.

**Additional Recommended Measures:**

**Recommended Measure Noise-3a:** Residences in the project should include deed restrictions that acknowledge acceptance of noises associated with vineyard (i.e., mowing and disking) and winery operations.

**Recommended Measure Noise-3b:** A sound wall could be added to block the line of sight between Lots 49 and 58 and the entrance road and parking areas at the eastern side of the winery processing building. To be effective, the sound wall should be either next to the entrance road and parking area or two sound walls could be built on the south side of lots 49 and 58.

**Recommended Measure Noise-3c:** The project shall ensure that noise levels from the water recycling facility do not exceed 45 dBA at residential property lines.

**Significance after Implementation of Recommended Measures:** With implementation of the Recommended Measures Noise-1, and Noise-3a through Noise-3c, the above-identified impacts would be reduced to a less-than-significant level.

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**Impact Noise-4: Project-generated traffic could potentially result in an increase in ambient noise levels on nearby roadways affected by project traffic. (Less than Significant)**

To assess the impact of project traffic on roadside noise levels, noise level projections use the Federal Highway Administration's (FHWA) Noise Prediction Model for Sheehy Road and North Thompson Avenue. The predictions are based upon peak hour traffic levels reported in the traffic report by Associated Transportation Engineers, *Laetitia Residential Cluster Project County of San Luis Obispo Traffic and Circulation Study*, January 3, 2007. Figures 3, 4, and 5 of the report provide the peak hour trip information used in this analysis.

The results of the modeling effort are shown in Table 4. For the modeling effort, a.m., and p.m. peak-hour traffic volumes during weekdays were analyzed. Estimated noise levels shown in Table 4 correspond to a distances of 30 meters (100 feet) from the centerline of applicable roadway segments. A review of Table 4 finds that the impact of project traffic is less than significant in all cases. The estimated noise from project traffic (with no background traffic), including traffic along N. Thompson Road during peak hours, is slightly above 60 dBA.

**TABLE 4**
**PREDICTED NOISE LEVELS ALONG ROADWAYS USED BY THE PROJECT**

| Roadway Segment/ Peak hour[a] | Existing | Existing Plus Project | Incremental Increase (Existing vs. Existing + Project) | Project Significant? (Yes or No)[b] |
|---|---|---|---|---|
| 1. N. Thompson (between Sheehy Road and Hwy. 101) a.m. peak hour[c] | 63.5 | 64.0 | 0.5 | No |
| 1. N. Thompson (between Sheehy Road and Hwy. 101) p.m. peak hour[c] | 62.3 | 63.2 | 0.9 | No |
| 2. Sheehy Road (between N. Thompson Ave. and N. Dana Foothill Road) a.m. peak hour[d] | ND | 52.3[e] | -- | No |
| 2. Sheehy Road (between N. Thompson Ave. and N. Dana Foothill Road) p.m. peak hour[d] | ND | 53.5[e] | -- | No |

[a] Road center to receptor distance is 15 meters (approximately 50 feet) for values shown in this table. Noise levels were determined using FHWA Traffic Noise Prediction Model (FHWA RD-77-108). Traffic volumes are from Associated Transportation Engineers, *Laetitia Residential Cluster Project County of San Luis Obispo Traffic and Circulation Study*, January 3, 2007

[b] Considered significant if the incremental increase in noise is greater than 3 dBA and a noise environment above 60 dBA.

[c] Vehicle mix on these road segments is assumed to be 98 percent auto and 2 percent medium trucks. The speed limit for these segments is 55 miles per hour.

[d] Vehicle mix on these road segments is assumed to be 98 percent auto and 2 percent medium trucks. The speed limit for this segments is 45 miles per hour.

[e] Only project traffic was reported in the traffic report, so this noise level is from project traffic only on Sheehy Road. It does not include any background traffic. Area observations on August 30, 2006 indicated very light traffic on Sheehy Road during the a.m. peak hour.

SOURCE: ESA, 2006.

However, the project increases the noise level less than 1 dBA, which is, in general, not perceptible by the human ear. In all cases the noise levels would be increased by less than 1 dBA, CNEL[3] or be less than 60 dBA. State law (Title 24) already requires that interior noise levels be reduced to 45 dBA.

**Recommended Measures for Impact Noise-4:** None required.

# References

Associated Transportation Engineers, *Revised Traffic and Circulation Study for the Laetitia Residential Cluster Project*, January 3, 2007.

Barry, T.M. and J.A. Regan, FHWA Highway Traffic Noise Prediction Model. Report No. FHWA-RD-77-108, December 1978.

Caltrans, *Technical Noise Supplement*, 1998.

San Luis Obispo County, *San Luis Obispo County General Plan Noise Element, Part I Policy Document/Acoustical Design Manual and Technical Appendices*, adopted May 5, 1992.

[3] Ldn and CNEL are approximately equal to the Leq peak hour under normal traffic conditions (Caltrans, 1998).

San Luis Obispo County, San Luis Obispo County Noise Ordinance, Section 22.10.120, available at http://www.nonoise.org/lawlib/cities/ca/sanluis_ca.htm, accessed February, 2007.

U.S. Environmental Protection Agency, *Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances*, 1971.

# SECTION 5
# Hazards

The project applicant has agreed to install crash gates at the project site. These crash gates would allow one entrance to the site from Laetitia Vineyard Drive and one entrance from US 101. These gates will be installed in accordance with all County and California Department of Forestry standards for emergency use only.

All roadways at the site will be constructed in accordance with County standards for Agriculture Clusters.

As a result, the proposed project would result in no significant impacts regarding potential hazards related to emergency access to the site, or roadway widths and/or turnaround space for emergency vehicles.

# SECTION 6

# Agricultural Buffers Technical Study

## Summary

The proposed project is subject to the policies and regulations in effect at the time the project application was deemed complete. As a result, the proposed project is subject to the Agricultural Buffer Policies established in 2002, which emphasize that buffers are established on a case-by-case basis. A rationale for the buffers has been established by the architect that takes into consideration the variety of factors noted in the 2002 policies.

The project site is also subject to the Highway 101 Corridor Standards.

The proposed project, with mitigation measure incorporated, would result in a less than significant impact to agricultural resources. These mitigation measures include mitigation measures used for similar projects for which environmental documents have been certified and/or use other standards established by the Highway 101 Corridor Standards, as well as policies for agriculture clusters.

# AGRICULTURAL BUFFER TECHNICAL STUDY

## Laetitia Agriculture Cluster Technical Studies

## Overview

The purpose of this technical study is to determine whether the proposed Laetitia Vineyard Project (the proposed project) would result in significant impacts on agricultural resources. Specifically, this study analyzes whether the proposed project could:

- Impair the existing and new agricultural use of the site;
- Impede agricultural operations at the site;
- Adversely affect agricultural viability due to proximity to residential uses; and
- Expose residences to adverse agricultural-associated effects, such as pesticides, odors, noise, etc.

## Technical Background

Two planning principles related to development in agricultural areas are relevant to the scope of this study: Agricultural Clustering and Agricultural Buffers. Agricultural clustering is a technique whereby residential developments are "clustered" on smaller parcels of land instead of being dispersed on larger parcels of land.

Residential developments adjacent to farmland can result in negative impacts for both land uses. In an effort to minimize land use compatibility issues, agricultural buffers are often established to physically segregate agricultural and non-agricultural land uses and minimize potential land use conflicts. For residences, agricultural buffers could provide protection against potential pesticide drifts, noise, odors, dust or smoke, and farm traffic. For agricultural operations, the buffers protect against litter, pets, theft/vandalism, intrusive residents, and potential liability issues related to safety and potentially hazardous conditions.

| Common Environmental Impacts to Residential Uses | Common Environmental Impacts to Agricultural Uses |
|---|---|
| Pesticides (drifts) | Litter |
| Noise/Nighttime Lighting (from machinery) | Damage from pets |
| Odor (from livestock, fertilizers, and compost) | Theft/Vandalism |
| Dust and smoke | Imported pests— (weeds spreading from urban areas, and insects) |
| Pests (flies, mosquitoes, etc) | Potential for indirect growth inducement that could further reduce future agricultural use |
| Agricultural Burns | |
| Safety hazards from farming operations for residents, visitors, and pets | |

SOURCE: Coppock and Kreith, 1997; ESA, 2006.

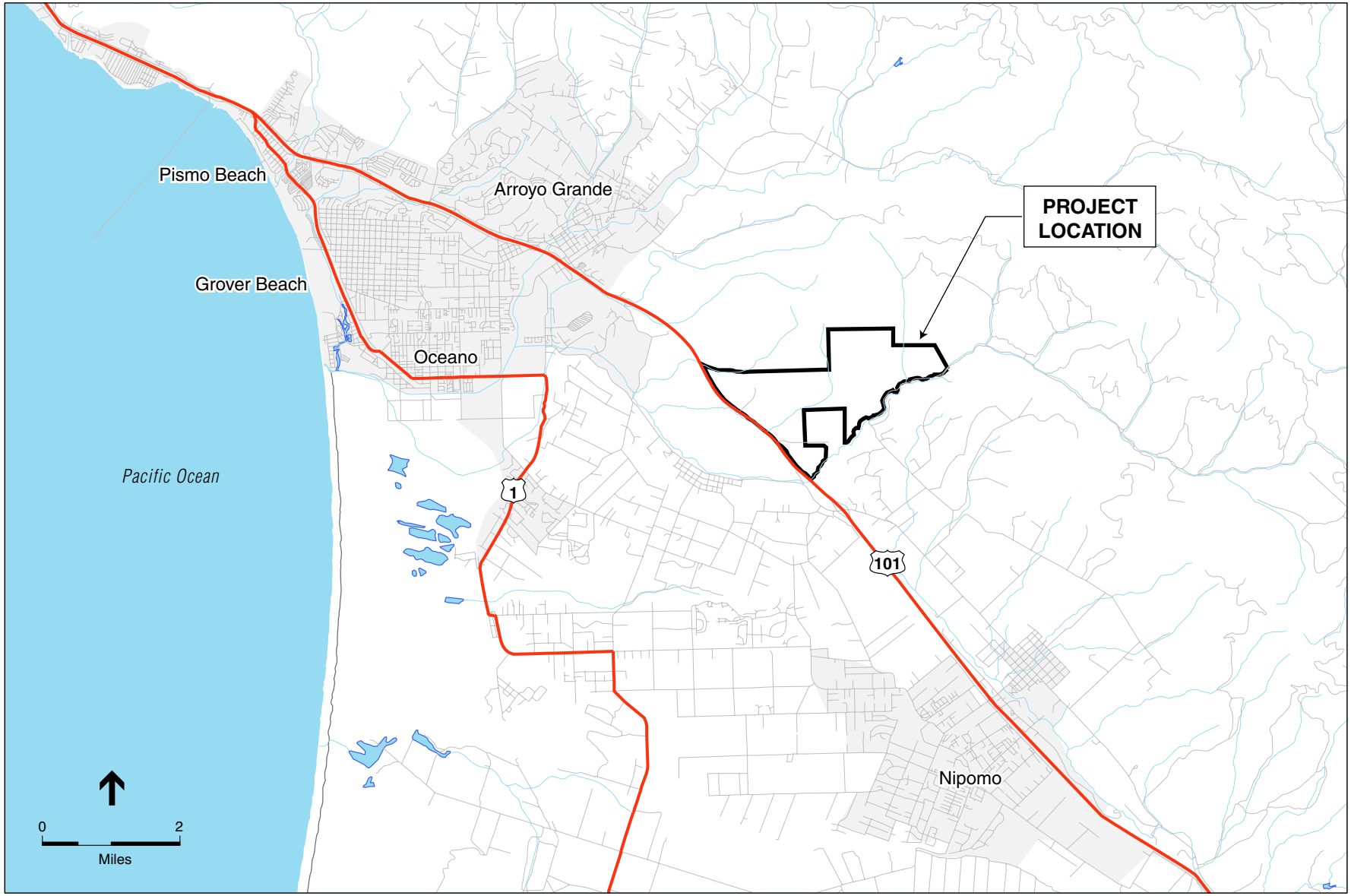
# Project Description

The proposed project would develop 102 single family home sites and associated infrastructure and roadway improvements on existing agricultural and rural land in San Luis Obispo (SLO) County (see **Figure 1**). In order to preserve agricultural lands, the proposed project would be implemented as an agricultural cluster development. Residential development would be clustered and concentrated primarily along existing ranch roads. Each home site would be approximately one acre in size and would contain one single-family residential unit. The size of each residential unit would be limited to the area within the home site remaining after rear, front and side setbacks from the property line per Land Use Ordinance Title 22. Approximately 62 single family lots would be developed on land designated as Rural Lands in the South County inland Area Plan (see discussion following regarding land use designations in the South County Inland Area Plan) and approximately 40 single family lots would be developed on land designated as Agriculture. The proposed project would include agricultural buffers of widths ranging from approximately 150 feet to over 400 feet between the residential structures and new and/or existing agricultural land. The proposed buffers would retain the natural topography of the land. For the purpose of this analysis, the residential development is identified as Areas A through I (see **Figure 2**). The following is a brief description of each of the areas:

Area A: This area would be developed with 23 home sites (Home Sites 1 through 23) with buffers ranging from 190 to 470 feet. Agricultural land is adjacent to the southwest and north of the home sites.

Area B: This area would be developed with 6 home sites (Home Sites 24 through 29). The closest agricultural land to the home sites would be located approximately 160 feet to 360 feet to the east.

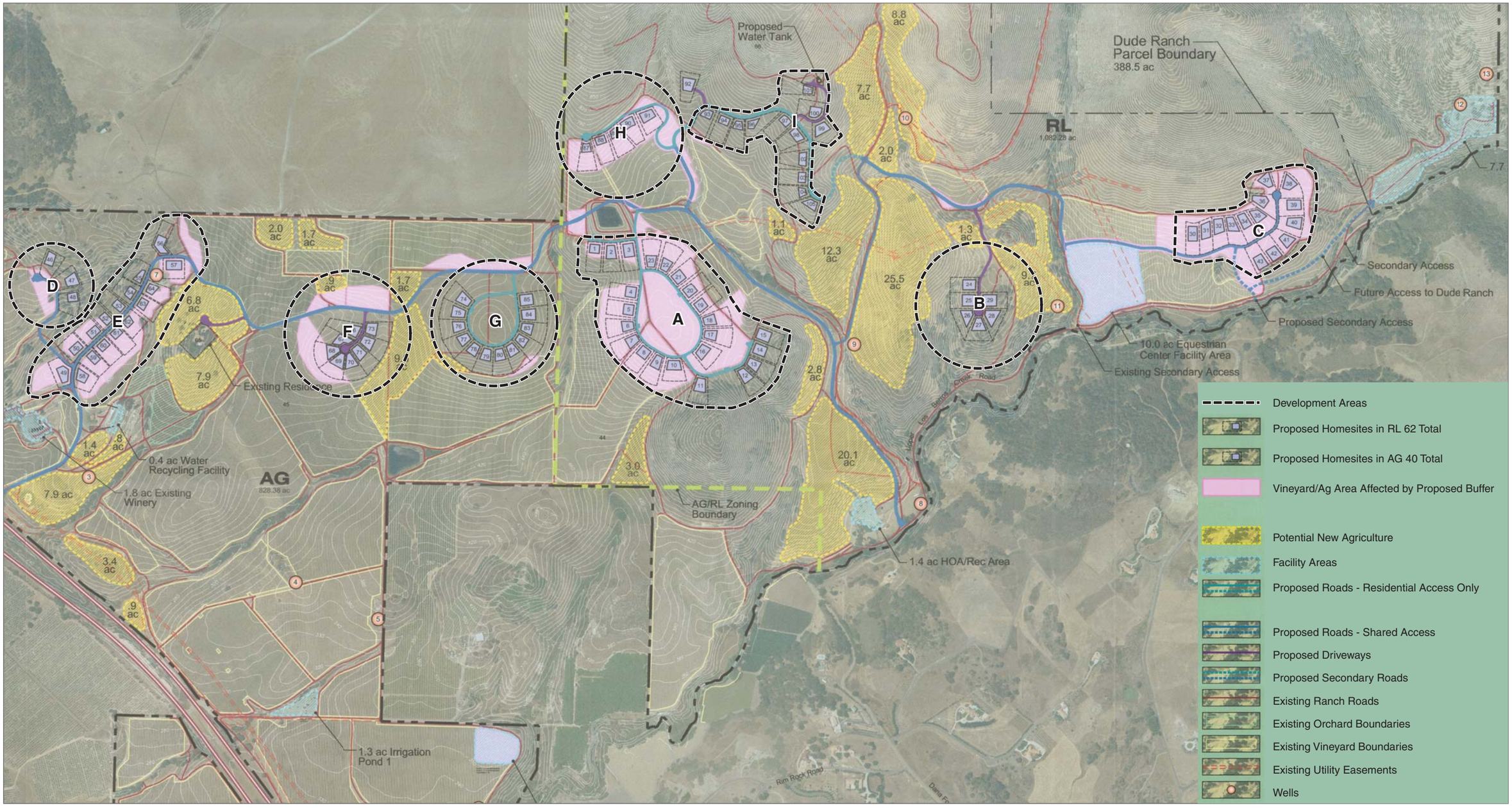
Area C: This area would be developed with 14 home sites (Home Sites 30 through 43) with buffers of 180 feet and 320 feet. Agricultural land is located to the south and east of this area. A proposed roadway would be located between the buffer and agricultural land, thus serving as an additional buffer.




SOURCE: ESRI, 2006.

Letitia Vineyards . 206193

**Figure 1**
Regional Location Map




SOURCE: RRM Design Group, 2006.

Laetitia Vineyards . 206193

**Figure 2**
Development Areas

Area D: This area would be developed with 3 home sites (Home Sites 46 through 48) with buffers ranging from 120 feet to 300 feet.[1] A proposed roadway would traverse between the home sites and adjacent agricultural land to the west, thus serving as an additional buffer.

Area E: This area would be developed with 16 home sites (Home Sites 49 through 65) with buffers ranging from approximately 150 feet to 400+ feet. Agricultural land is located to the south and east of the home sites.

Area F: This area would be developed with 8 home sites (Home Sites 66 through 73) with buffers of approximately 160 feet to 370 feet. Agricultural land is located to the south, east, and west of the home sites.

Area G: This area would be developed with 12 home sites (Home Sites 74 through 85) with buffers of 160 feet to 340 feet. Agricultural land is located to the south of the home sites.

Area H: This area would be developed with 5 home sites (Home Sites 87 through 91) with buffers of 150 feet to 200 feet.[2] Agricultural land is located to the south of the home sites.

Area I: This area would be developed with 14 home sites (Home Sites 92 through 105). The home site closest to agricultural land to the south would have a buffer of approximately 250 feet.

To develop the project, approximately 143 acres of vacant land would be placed into agricultural production. This new acreage would consist of approximately 94 acres of currently vacant rural land and 49 acres of currently vacant agricultural land; the crops would consist of vineyards, lemon and/or olive orchards, avocado orchards or other crops. The addition of the new agricultural production acreage would result in a net gain of approximately 36 acres of agricultural production. Approximately 107 acres of existing vineyards (consisting of 27.9 acres on Agriculture land and 78.9 acres on Rural land) that would be developed would be transferred or rotated into the new agricultural areas. .

## Environmental Setting

The project site is located in an unincorporated area of San Luis Obispo County, approximately 1.7 miles south of the city limits of Arroyo Grande, 2.1 miles north of the community of Nipomo and 0.3 miles northeast of the Los Berros Village Area (see Figure 1). The project site encompasses approximately 1,522 acres (excluding the Dude Ranch parcel) of predominantly agricultural land within the South County Inland Planning Area. Approximately 828.38 acres is designated as Agriculture and approximately 693.78 acres of the eastern portion of the site is designated as Rural land. As discussed further below, the purpose of land designated as Agriculture is to emphasize agricultural uses as a priority and to protect agricultural resources. The purpose of land designated as Rural Lands is to allow for low density development in a manner that would protect the undeveloped character of the area.

1 There are no Home Sites 44 and 45.
2 There is no Home Site 86.

Approximately 568.2 acres (or 37 percent) of the site are currently utilized for agricultural purposes as vineyards (approximately 563.8 acres) and lemon orchards (approximately 4.4 acres).[3] Eight existing wells throughout the site provide irrigation for the vineyards and orchards. A winery, and a tasting facility are located adjacent to the site; a maintenance structure, and a residence are located in the northeast portion of the project site.

The topography of the site is characterized by gently rolling hills. Steep slopes are present northeast of the site. Surrounding land uses includes some rural residential development, which is immediately adjacent to the more dense development in the town of Nipomo to the south, agricultural land to the north, rural land to the east, and downhill to the west and northwest, more intense residential and commercial development, along with some agricultural uses, that extends to the beach areas.

The project site is underlain by bedrock of the Paso Robles Formation (characterized by unconsolidated to poorly consolidated coarse sand and gravel, as well as finer sand, silt, and clay and some limestone), the Monterey Formation (characterized by siltsone claystone or cherty shale), and the Obispo Formation (characterized by tuffaceous member and resistant member). In some areas of the site, surficial earth materials of landslide deposits and stream alluvium occur. None of the soils underlying the site are considered prime agricultural soils (e.g., Class I or II soils).[4] The majority of the project site is designated as Grazing Land or as Unique Farmland (see **Figure 3**), indicating that soils underlying the site is of lesser quality for agricultural production. Further discussions of these farmland designations are provided below. The project site is not subject to a Williamson Act contract.[5]

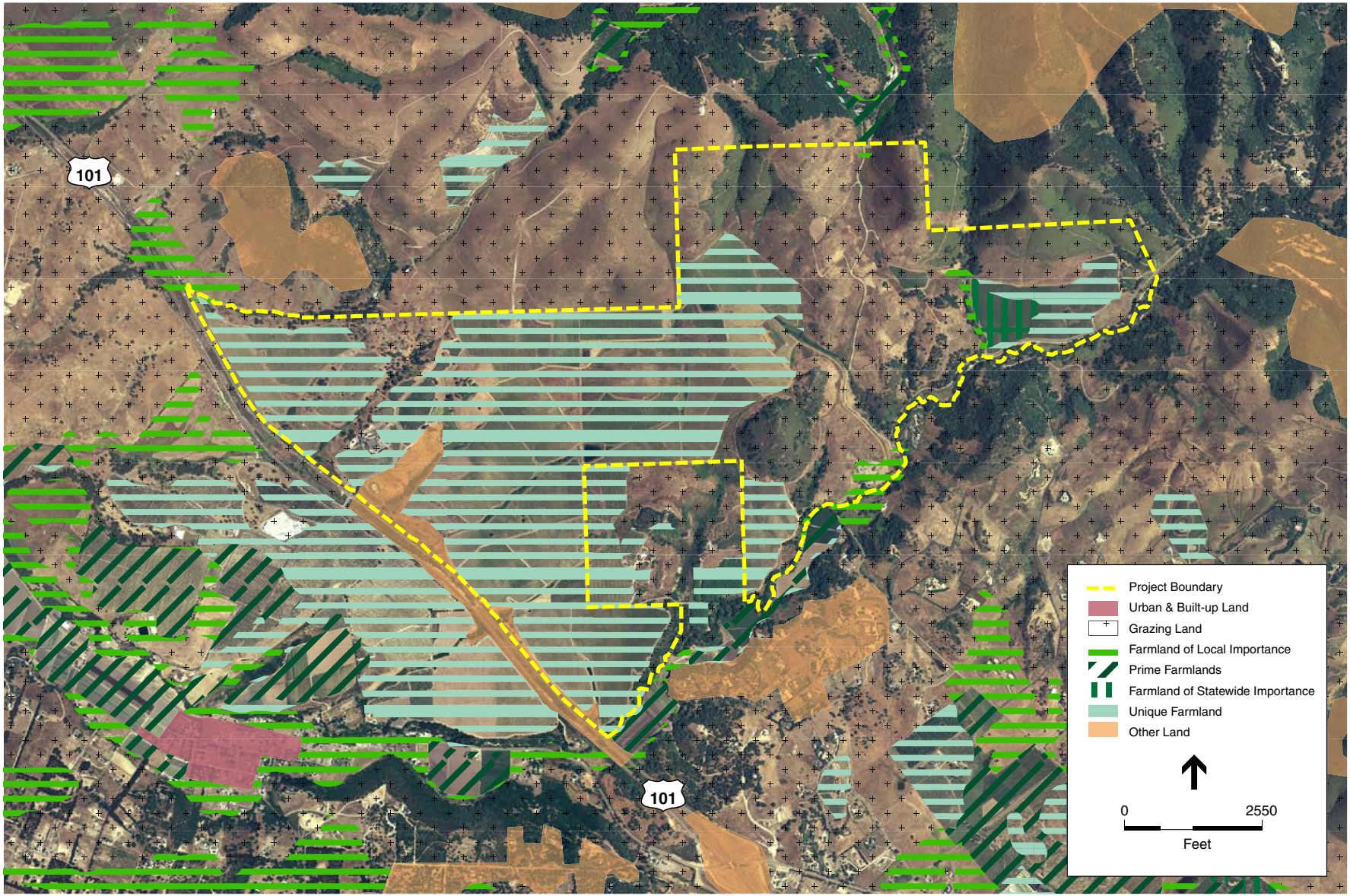
# Regulatory Setting

## Federal

### *Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)*

The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), passed in 1910 and amended in1972, granted the US Environmental Protection Agency (US EPA) primary authority to regulate pesticides in the country. The legislation also gave US EPA authority to delegate pesticide enforcement authority to states by entering into cooperative agreements with state pesticide regulatory programs. Under these agreements, states are authorized to train their personnel to enforce pesticide laws, and to develop licensing, certification, and training programs for applicators of restricted-use pesticides. The legislation also authorized US EPA to pay certain costs associated with these enforcement and training programs, subject to the state providing a certain percentage of matching funds. In 1975, after more than a year of negotiation, US EPA signed its first cooperative agreement for pesticide enforcement — with the state of California.

3 Based on calculations using Geographic Information Systems for the proposed site plan.
4 Laetitia Agriculture Cluster Application, 2004.
5 San Luis Obispo County, Agricultural Preserve Map, online at http://slocountymaps.calpoly.edu/images/MapsPDF/AgPreserve.pdf, accessed November 16, 2006.




SOURCE: Globe Xplorer, 2006; The California Spatial Information Library, 2006.

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**Figure 3**
Important Farmland

The agreement served as a model for future state agreements of its type. With this agreement in place, a state has primary enforcement responsibility for pesticide use violations.

## State

### *Farmland Mapping and Monitoring Program*

Section 65570 of the California Government Code provides the Department of Conservation the authority to collect or acquire information on the amount of land converted to or from agricultural use. Pursuant to state law, the Farmland Mapping and Monitoring Program (FMMP) was established in 1982 to obtain necessary data on the nature, location, and extent of farmland, grazing land, and urban built-up areas. The FMMP was also directed to prepare and maintain an automated map and database system to record and report changes in the use of agricultural lands. The intent of the FMMP was to provide a basis for consistent and impartial analysis of agricultural land use and change in the state. About 90 percent of FMMP's study area is covered by soil surveys conducted by the Natural Resources Conservation Service. Technical ratings of the soils and current land use information are combined to determine the appropriate map category. The minimum mapping size for agricultural land is 10 acres unless otherwise specified. The categories of land type used in the FMMP are:

- Prime Farmland (P): Farmland with the best combination of physical and chemical features able to sustain long term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.

- Farmland of Statewide Importance (S): Farmland similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.

- Unique Farmland (U): Farmland of lesser quality soils used for the production of the state's leading agricultural crops. This land is usually irrigated, but may include non irrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date.

- Farmland of Local Importance (L): Land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee.

- Grazing Land (G): Land on which the existing vegetation is suited to the grazing of livestock. The minimum mapping unit for Grazing Land is 40 acres.

- Urban And Built-Up Land (D): Land occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. This land is used for residential, industrial, commercial, institutional, public administrative purposes, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes.

- Other Land (X): Land not included in any other mapping category. This may include low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry or aquaculture facilities; strip mines, borrow pits; and water bodies smaller than 40 acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.

As indicated earlier, the project site is primarily designated as Grazing Land or Unique Farmland, which results from the poor soils at the site before vineyards were established.

### *California Code of Regulations – Pesticide Management*

The California Department of Pesticide Regulation (DPR) is the state agency responsible for regulating pesticide sales and use and fostering reduced-risk pest management to ensure the protection of human health and the environment. DPR's oversight includes pesticide evaluation and registration, environmental monitoring, and residue testing of fresh produce. Additionally, the DPR works closely with county agricultural commissioners (CACs), who serve as the primary local enforcement agents for pesticide laws and regulations. Each county in the State has an assigned CAC. The CAC for San Luis Obispo County is housed within the County of San Luis Obispo Department of Agriculture/Weights and Measures.

Section 6500 of the California Code of Regulations (CCR) requires professional agricultural applicators to be licensed by DPR and registered with the CAC before performing pest control work. Professional applicators include commercial businesses hired to apply pesticides such as landscape gardeners and agricultural and structural pest control companies. The DPR issues two types of business licenses. The Maintenance Gardener Business License is for people who perform pest control incidental to their gardening business. Prior to applying for the business license, the applicator must obtain a Qualified Applicator Certificate (QAC) in the maintenance gardener category (Category Q). A Pest Control Business (PCB) License is required for any person who engages in the business of providing pest control. A Qualified Applicator License (QAL) is required in order to apply for the PCB License. The State DPR administers the exams for both the QAL and QAC.

Section 6624 of the CCR gives the DRP clear statutory authority to require full reporting of pesticide use. Reports are filed with the agricultural commissioner in the county where the applications occur. Commissioners send reports to the DRP and the information received are entered into the statewide database.

In addition, pursuant to Sections 6400, the DPR designates certain pesticides as restricted-use based on a review of data submitted by registrants or information derived from field studies or incident investigations (for example, pesticides found in ground water from routine agricultural use are designated restricted materials to allow for greater local control over their use). DPR designed the restricted material permit program to accommodate widely divergent local needs. Before a farmer or pest control business can buy or use a restricted material, they must be certified by DPR, that is, they must have had specified training in handling and using pesticides. In addition, to buy or use a California-restricted pesticide, a person must obtain a permit from the

local CAC. The regulations require the CAC to determine if a substantial adverse health or environmental impact will result from the proposed use of a restricted material.

## Local

In 2002, an application for the proposed project was processed and deemed complete and accepted by the County. Thus, as confirmed at the County's Board of Supervisors hearing on November 22, 2005, the proposed project is subject to the local ordinances and policies in effect at the time the applications were deemed complete. Where applicable, the discussion of local regulations provided below includes those which were in effect at the time the applications were deemed complete.

### *County of San Luis Obispo County Department of Agriculture/ Weights & Measures*

The San Luis Obispo County Department of Agriculture/Weights & Measures (Department) was established in the mid-1980s and is responsible for protecting agricultural resources and operations from the negative effects of encroaching suburban and urban development. In addition, the Department is charged with monitoring and regulating the use of pesticides for compliance with mandated requirements. The Department acts in an advisory capacity when reviewing land use projects. Projects submitted to the County Planning and Building Department are referred to the Department for review. As mentioned above, the CAC for San Luis Obispo County is within the Department of Agriculture.

As discussed above, a restricted materials permit from the CAC in the Department of Agriculture is required to purchase, use, and store restricted pesticides. Certification is required prior to using these pesticides. Professional applicators with a QAL or QAC license are certified to utilize restricted materials. Otherwise, certification may be obtained by examination at the County Agricultural Commissioner's Office for a Private Applicator Certificate (PAC). When issuing the restricted materials permit, the CAC must consider the need for a particular pesticide and whether a safer pesticide or better method of application could be used and still prove effective.

### *San Luis Obispo County General Plan*

Government Code Section 65300 requires that each city and county jurisdiction prepare and adopt a comprehensive, long-term General Plan to guide development and planning activities. The General Plan must contain seven mandatory elements: land use, circulation, housing, conservation, open space, noise, and safety. Depending on the jurisdiction's characteristics, general plans may also contain special elements, including local coastal plans, waste management, hazardous waste, and airport land use. Local land use decisions (including subdivisions, capital improvements, development agreements, zoning, and specific plans) must be consistent with the communities' general plans.

The San Luis Obispo County General Plan (the General Plan) expresses the county's development goals and embodies public policy relative to the distribution of future land uses. It identifies the County's land use, circulation, environmental, economic, and social goals and policies as they

relate to land use and development. It provides the framework for local decision making in the County and informs citizens, developers, and decision-makers of the ground rules that guide development within the County. The General Plan is comprised of the seven mandatory elements as well as seven optional elements: Recreation, Historic and Aesthetic, Energy, Off-shore Energy, Economic and Agriculture.

### Land Use Element

The Land Use Element, first adopted in 1980 and last revised in January 2003, coordinates policies and programs in other county general plan elements that affect land use, and provides policies and standards for the management of growth and development in each unincorporated community and the rural areas of the county. The Land Use Element is intended to serve as a reference point and guide for future land use planning studies throughout the county. The Land Use Element of the General Plan (page 1-2) lists the following general goals which are relevant to the scope of this technical study:

9. Identify important agricultural, natural and other rural areas between cities and communities and work with landowners to maintain their rural character.

10. Encourage the protection of agricultural land for the production of food, fiber, and other agricultural commodities.

The Land Use Element (page 2-2) states the following:

> The increasing division of agriculturally productive land into rural homesites is a significant trend because of its potential for continuing and accelerating the displacement of agriculture as both a land use and an employment base... The land demands of anticipated population and economic growth must be balanced with the needs of viable agriculture for areas free from conflicting land uses.
>
> The county's policy to protect agricultural land is a top land use priority for guiding further economic development. Although agriculture does not provide a significant amount of employment, it is a stable sector of the county’s economy.

Additionally, the Land Use Element (page 6-1) sets forth land use categories (i.e., Agriculture, Rural) which support the following goals with regard to agricultural resources:

3. To support preservation of the county's agricultural industry and the soils essential to agriculture.

4. To support protection and preservation of county open space and recreational resources while providing for appropriate development.

5. To provide areas where agricultural, residential, commercial and industrial uses may be developed inharmonious patterns and with all the necessities for satisfactory living and working environments.

As provided in the Land Use Element (page 6-10), the stated purpose of land within the Agriculture land use category is:

a. To recognize and retain commercial agriculture as a desirable land use and as a major segment of the county's economic base.

b. To designate areas where agriculture is the primary land use with all other uses being secondary, in direct support of agriculture.

c. To designate areas where a combination of soil types, topography, water supply, existing parcel sizes and good management practices will result in the protection of agricultural land for agricultural uses, including the production of food and fiber.

d. To designate areas where rural residential uses that are not related to agriculture would find agricultural activities a nuisance, or be incompatible.

e. To protect the agricultural basis of the county economy and encourage the open space values of agriculture to continue agricultural uses, including the production of food and fiber.

f. To recognize that agricultural activities on a small scale can supplement income from other sources, particularly where older subdivisions have resulted in parcels smaller than would currently qualify for new subdivisions within the parcel size range for the Agriculture category.

g. Support conversion of agricultural lands to other uses only when such conversion would be appropriate or because the continuing agricultural productivity of a specific site is infeasible, considering the factors in purpose statement c, above.

h. To give high priority to the protection of commercial prime and nonprime agricultural soils where the commercial viability, siting (whether inside or outside urban reserve lines), and natural resources allow for agricultural uses, including the production of food and fiber.

With regard to Rural land, the stated purpose (page 6-11 of the Land Use Element) of such land is:

a. To encourage rural development at very low densities that maximizes preservation of open space, watershed and wildlife habitat areas.

b. To retain large parcel sizes where rural residences may be established on lands having open space value but limited agricultural potential.

c. To maintain low population densities in rural areas outside of urban and village reserve lines where an open and natural countryside with very low development intensity is preferred.

d. To establish areas where non-agricultural activities are the primary use of the land, but where agriculture and compatible uses may co-exist.

### Agriculture and Open Space Element

The intent of the Agriculture and Open Space Element of the San Luis Obispo County General Plan, adopted in 1998, is to identify important agricultural land (i.e., farms, ranches and soils) and establish goals, policies, and measures to enable their long term stability and productivity. In addition, this Element seeks to identify valued open space in the County and to establish goals, policies, and measures to protect these areas. Although the application for this project was deemed completed before some of the revisions made to this element in 2007, these policies

address the intent of the agricultural clusters. The Agriculture and Open Space Element lists the following goals and policies which are relevant to this technical study:

### *Agricultural Goals (AG)*

AG-1a: Support and promote a healthy and competitive agricultural industry whose products are recognized in national and international markets as being produced in San Luis Obispo County.

AG 3: Conserve agricultural resources

a. Establish criteria in this element for agricultural land divisions that will promote the long-term viability of agriculture.

b. Maintain and protect agricultural lands from inappropriate conversion to non-agricultural uses. Establish criteria in this element and corresponding changes in the Land Use Element and Land Use Ordinance for when it is appropriate to convert land from agricultural uses to non-agricultural uses.

c. Maintain and strengthen the county's agricultural preserve program (Williamson Act) as an effective means for long-term agricultural land preservation.

d. Provide incentives for landowners to maintain land in productive agricultural uses.

### *Agricultural Policies (AGP)*

AGP20: Agricultural Land Divisions

a. Where a division of agricultural lands is proposed, a contiguous cluster division consistent with AGP 22 or 23 is an alternative to a conventional "lot split" land division.

b. Where a land division is proposed, the proposed parcels should be designed to ensure the long term protection of agricultural resources.

**Discussion:** . . . Agricultural cluster divisions provide a way to protect lands for continued and enhanced agricultural production, particularly if the homes are clustered in a compact, contiguous manner which reduces the agricultural/residential interface. . . . To encourage the use of a cluster design, there should be an increase in the number of parcels that will provide a sufficient incentive to the land owner to choose the cluster approach. In return for that increase, areas of the site intended for agricultural production are permanently protected by a recorded open space easement, as well as being placed in a Land Conservation Act (Williamson Act) contract that will provide long-term protection of the agricultural resources.

AGP22: Major Agricultural Cluster Projects (not available in Coastal Zone)

a. Properties that are partly or entirely within five miles of the urban and village reserve lines designated in the LUO and that meet the minimum area criteria can apply for a major agriculture cluster.

b. The maximum number of parcels allowed in a major agricultural cluster project shall be equivalent to the number of primary dwellings normally allowed on the parcels that would result from a conventional land division in the Agriculture land use category based on the minimum parcel size criteria specified in Figure 2-2. (Major agricultural cluster projects may include a reduction in the number of parcels down to 26% of the maximum potential allowance if proposed by the applicant in order to mitigate potential impacts of the project.)

c. All resulting agricultural parcels must meet the minimum parcel size criteria of Figure 2-2 and must be covered by a permanent agricultural open space easement.

d. All resulting residential parcels are entitled to one dwelling per parcel.

e. Whether or not an EIR must be prepared will be determined by the CEQA "initial study."

f. Consistent with the provisions of the existing agricultural cluster ordinance in the LUO, areas of the site intended for agricultural production must be permanently protected by a recorded open space easement and be placed in a Land Conservation Act (Williamson Act) contract.

Discussion: The Board of Supervisors adopted the agricultural cluster ordinance in 1984 as a tool available to inland property owners to "encourage the preservation of agricultural lands . . . for the continuing and enhanced production of food and fiber . . ." As an incentive, the ordinance states that it is the Board's policy to "encourage the use of clustering by allowing the number of cluster parcels to equal the number of dwelling units normally permitted on a standard agricultural land division (LUO Section 22.04.037). See Fig. 203 for an illustration of the cluster project concept.

### *South County Inland Area Plan*

San Luis Obispo County divides its unincorporated areas into two major areas: (1) the coastal zone, established as a result of the California Coastal Act of 1976; and (2) the inland area. Each of these two large areas is further broken down into more manageable "planning areas." The project site is within the planning area of the South County Inland Area Plan.

The South County Inland Area Plan, revised in June 2006, lists the following goals which are relevant to this technical study:

8. Maintain a distinction between urban and rural development by providing for rural uses outside of urban and village areas which are predominately agriculture, low-intensity recreation, residential and open space uses, which will preserve and enhance the pattern of identifiable communities.

9. Identify important agricultural, natural and other rural areas between cities and communities, and work with landowners to maintain their rural character.

10. Encourage the protection of agricultural land for the production of food, fiber and other agricultural commodities.

18. Locate new and additional public service facilities on existing public lands where feasible, allowing for sufficient buffers to protect adjacent rural and agricultural areas.

The South County Inland Area Plan also states the following with regard to Agriculture land:

> The Agriculture land use category designates areas that have existing or potential production capability. Agriculture has historically been, and still is, the most widespread use of land in the South County planning area. Agricultural practices of varying degrees of intensity involve over two-thirds of the planning area. Any appreciable loss in viable farm acreage should be avoided.

Regarding Rural Lands:

> The Rural lands category encompasses the rugged and rolling terrain of the Temettate Ridge and Newsom Ridge area north and east of Nipomo and the larger properties south of Nipomo along the Highway 101 corridor. These areas are generally in large ownerships and are used for grazing, watershed and, more recently, rural residential uses.
>
> The Rural lands category provides for low density development where agriculture is not the primary use of land due to smaller parcel sizes, steep topography or poorer quality soils. Inappropriate rural residential uses could dramatically change the present character of the rural landscape. Special uses such as dude ranches and camps may be appropriate in the mountainous rural areas, but must be compatible with the existing rural environment. The Temettate and Newsom Ridges are the scenic backdrop to the Nipomo Valley. Care should be taken to preserve their scenic qualities by carefully locating new roads and siting proposed buildings so they do not intrude on the landscape, but blend with it. Any cut and fill slopes should be replanted to reduce visual impacts.

### *San Luis Obispo County Code*

Section 22.22.140, Cluster Division, of the San Luis Obispo County Code, establishes the number of parcels that can be clustered, the minimum parcel size, and the applicable density bonus.

Section 22.22.150, Agricultural Lands Clustering, sets forth regulations pertaining to agricultural clustering. This section states the purpose of the agricultural clustering, as well as the requirements for a proposed cluster project. The SLO County Code identifies two methods by which agricultural clustering may occur: major land clustering and minor land clustering.

Pursuant to Section 22.22.152, Major Agricultural Clustering can only occur on properties located within five miles of the urban reserve line of Arroyo Grande, Atascadero, San Luis Obispo, San Miguel, Nipomo, Paso Robles, and Santa Maria and the Creston Village. Section 22.22.152 establishes a minimum lot size of 10,000 square feet and a maximum of 2.5 acres for clustered residential parcels.

Pursuant to Section 22.22.154, Minor Agricultural Clusters may occur on any properties in the Agriculture or Rural land use category. Section 22.22.154 establishes a minimum lot size of 20,000 square feet and a maximum of 5 acres for clustered residential parcels.

Pursuant to Section 22.112.040.3.f(1), Residential Land Divisions: Clustering Encouraged, residential lands are encouraged to be clustered in conformance to 22.22.140. The guideline is whether the open space in new land divisions will preserve existing views of land subject to the Highway 101 corridor design standards.

Pursuant to Sections 22.22.152(d) and 22.22.154(d) of the San Luis Obispo County code, clustered developments must provide for the permanent preservation of open space. Each cluster division should include at least one open space parcel, which shall be maintained under a permanent open space easement and a Williamson Act Contract. The open space area may include all areas in agricultural production and associated accessory structures. For a Major Agricultural cluster, the minimum size for the open space parcel must be 95 percent of the gross site area. For a minor agricultural cluster, the minimum size for the open space parcel must be 90 percent of the gross site area.

Chapter 5.16 of the San Luis Obispo County Code establishes the County's "Right to Farm" ordinance. The intent and purpose of the ordinance is to prevent the loss of the County's agricultural resources by clarifying the circumstances under which Agricultural Operations may be considered a nuisance. Another purpose of the ordinance is to promote good neighborhood policies by requiring disclosure statements to purchasers of residential property. The disclosure statement informs property purchasers that they may be subject to certain inconveniences or discomforts (i.e., noise, odors, dust, chemicals, and operations) arising from nearby agricultural operations which are protected by law. In order for an agricultural operation to be protected, it must be conducted for commercial purposes, conducted in a manner consistent with proper and accepted practices and standards, has predated the residential property, has been in existence for more than three years, and was not a nuisance at the time it began.

### *County of San Luis Obispo Agricultural Buffer Policies and Procedures*

At the time that the project's applications were deemed complete and accepted (2002), SLO County set forth its "Agricultural Buffer Policies," as titled, in Appendix D of the Agriculture and Open Space Element of the General Plan. The Agricultural Buffer Policies set forth policies and procedures to address the use of buffers for proposed residential projects adjacent to agricultural uses. The Agriculture Buffer Policies provided two objectives:

1. The department will make a determination of "significant land use conflict" on project referrals. The basis for the determination will also be provided.

2. Recommended mitigation measures will be provided if a significant land use conflict determination is made.

The policies provided that in the determination of significant land use conflicts and subsequent mitigation measures, the following factors are considered: agriculture use, zoning, site-specific non-crop factors (topography, prevailing wind direction, natural screening, soil type, extent of existing development), and nature of the proposal. The policies state that the most effective

mitigation measure for minimizing land use compatibility issues are buffers. However, the policies stated the following with regard to buffers:

> *The County does not have the authority to restrict the agricultural land use in order to accomplish the recommended buffer. However, the Agricultural Commissioner does have the authority, and has at times, imposed spray buffers and other restrictions to pest management practices due to development or other potential hazards near agricultural operations.*

Thus, the buffer distances in the Agricultural Buffer Policies as provided in Table 1 were not intended as requirements but rather as recommendations. The buffer distances are set as ranges to allow for the "influence of site or project specific factors." Other mitigation measures, such as screening, could also affect final buffer distances.

**TABLE 1**
**SAN LUIS OBISPO COUNTY RECOMMENDED BUFFER WIDTHS RANGE BY CROP (2002)**

| Crop Type | Buffer Width Range (feet) |
|---|---|
| Vineyards | Between 400 feet and 800 feet |
| Irrigated orchards | Between 300 feet and 800 feet |
| Irrigated vegetables and berries | Between 200 feet and 500 feet |
| Field Crops | Between 100 feet and 400 feet |
| Dry farm almonds | Between 100 feet and 200 feet |
| Rangeland/pasture | Between 50 feet and 200 feet |
| Wholesale nurseries | Between 100 feet and 500 feet |

SOURCE: County of San Luis Obispo Agriculture and Open Space Element, Appendix D, "Agricultural Buffer Policies," 2002.

The Agricultural Policies go on to state the following:

<u>Referral Process</u>

4. Buffer determinations and other mitigation measures are made on a case by case basis considering all relevant factors. *County wide standard or minimum setback distances are not used.* However, this procedural guideline is followed to provide for maximum consistency. [emphasis added]

5. Recommended mitigation measures are subject to review and modification by our staff as long as the margin of safety is maintained, potential nuisance issues are adequately addressed and potential land use conflict is maintained at a level below significance.

The objective for establishing buffers is also provided:

> Objective
>
> Building setbacks (buffers) and/or screening techniques (walls, landscaping, etc.) are useful to increase the likelihood of compatibility between development (homes, schools, etc.) and agricultural property. Buffers are the most effective mitigation measure.

The Procedural Guidelines state that the "type and extent of agricultural use, zoning, site specific non-crop factors, and the nature of the land use proposal are the most significant factors in a determination of significant land use conflict and subsequent mitigation measures" (p. D-3).

In determining the adequacy of buffers, "various site specific factors are evaluated and potentially utilized in land use conflict determinations and mitigation measures. These include, but are not limited to: topography, prevailing wind direction , natural screening (e.g., vegetation, stream channels), soil type, and the extent of existing development" (p. D-4).

After the project applications were accepted in 2002, the County's agricultural buffer policies were revised and are now set forth in SLO County's "Agricultural Buffer Policies and Procedures" document (dated November 2005). The County's buffer policies describe the procedures to use and various factors to consider when evaluating the need for and width of agricultural buffers. Table 2 shows the prescribed ranges of buffer widths by crop type which are required for currently proposed project.

**TABLE 2**
**SAN LUIS OBISPO COUNTY BUFFER WIDTHS RANGE BY CROP (2005)**

| Crop Type | Buffer Width Range (feet) |
|---|---|
| Intensive Agricultural Use | |
| Vineyards | Between 200 feet and 600 feet |
| Irrigated orchards | Between 200 feet and 600 feet |
| Irrigated vegetables and berries | Between 200 feet and 600 feet |
| Irrigated forage and field crops | Between 100 feet and 400 feet |
| Wholesale nurseries – outdoors | Between 100 feet and 500 feet |
| Greenhouses | Between 100 feet and 300 feet |
| Non-Intensive Agricultural Uses | |
| Dry farm field crops | Between 100 feet and 200 feet |
| Rangeland/pasture | Between 50 feet and 200 feet |

SOURCE: County of San Luis Obispo, "Agricultural Buffer Policies and Procedures", November 2005.

The County's policies state that "significant overriding factors or land unsuitable for agricultural use could justify recorded buffers less than the indicated range." As stated above, the proposed

project is subject to the County's former Agricultural Buffer Policies, which do not require buffer setbacks for the residential structures.

# Impacts and Recommended Measures

## Significance Criteria

San Luis Obispo County does not have established thresholds for determining significant impacts to agricultural resources.[6] In general, pursuant to the State CEQA Guidelines, the County considers a project to have a significant impact on agricultural resources if a proposed project would:

- Convert prime agricultural land (i.e., prime Class I and II agricultural soils) to non-agricultural use;
- Conflict with an existing Williamson Contract;
- Involve other changes in the existing environment, which due to their location or nature could individually or cumulatively result in loss of Farmland to non-agricultural use.

However, for the purpose of the analysis presented herein (as it relates to the scope of the study), the proposed project would result in a significant impact on agricultural resources if the proposed project would:

- Impair the agricultural use of the site;
- Impede agricultural operations at the site;
- Adversely affect the agricultural viability due to proximity to residential uses;
- Expose residences to adverse agricultural-associated effects, such as pesticides, odors, etc.

The methodology for the analysis consisted of research and review of applicable regulations and the use of agricultural buffers. Site plans of the proposed project were also reviewed to assess the proposed residences' spatial relationship to adjacent agricultural land.

The length of the agricultural buffer, or the space between the vineyard and the homesite development envelope, was established by the architects in part based on the predominant wind direction of the Central Coast. The buffer was allowed to be reduced at some homesites on a case-by-case basis. Buffers are less where the elevation at the base of the development envelope would be 20 feet or greater above the vineyard elevation.

6 Telephone communication with John McKenzie, Environmental Specialist, San Luis Obispo County Planning & Building Department, October 11, 2006.

**Impact AG-1: The project could impair the agricultural use of the site. (Less than Significant)**

The proposed project would be implemented as a cluster development to ensure that a large expanse of permanent agricultural land would remain. Nonetheless, existing agricultural uses would be affected. There are currently approximately 662 acres of land in agricultural production. The proposed project would add approximately 143 acres of vacant land into new agricultural production. The new acreage would consist of approximately 94 acres of currently vacant agricultural and approximately 49 acres of currently vacant agricultural land that would consist of vineyards, lemon and/or olive orchards, avocado orchards or other crops. This new production acreage would result in a net gain of approximately 36 acres of land under permanent cultivation.[7] It should be noted that since the soils underlying the site are of lesser quality for agricultural production, extensive efforts would be required to create the new agricultural land similar to those already undertaken on the site to make the areas currently in vineyards suitable for the current farming operations. Thus, the proposed project would not impair agricultural use of the site, but rather would enhance the agricultural use of the site.

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**Impact AG-2: The proposed project's new residences could impede agricultural operations at the site. (Potentially Significant)**

As discussed above, the proposed project would be subject to the local ordinances and policies in effect at the time the applications were deemed completed and approved. Specifically, the proposed project would be subject to the County's former Agricultural Buffer Policies (2002), which do not require imposition of agricultural buffers for residential uses adjacent to agricultural uses. These buffers, would allow residential uses to be developed without hindering or impairing the agricultural use of the adjacent land. As stated in the 2002 policies, the issue of agricultural buffers is decided on a case-by-case basis. In addition to the buffers, the proposed project would implement Mitigation Measures AG-1 through AG-4 (as discussed below) to minimize potential land use conflicts between residential and agricultural uses. Furthermore, pursuant to the County's "Right to Farm" ordinance, the project applicant would be required to provide disclosure statements to purchasers of the new residences. The disclosure statements would inform property purchasers that they may be subject to certain inconveniences or discomforts (i.e., noise, odors, dust, chemicals, and operations) arising from the nearby agricultural operations. The provision of the disclosure statements would further ensure that agricultural operations would be protected. Based on the above, the proposed project would not impede the agricultural operations at the site.

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[7] Agricultural operations often rotate land uses, taking some areas out of production and putting other areas into production, or reconfiguring production areas. Calculations of land use for agricultural production would not likely be static and would be likely to shift over the years.

**Impact AG-3: The proposed project could adversely affect the agricultural viability of adjacent land due to proximity to residential uses. (Potentially Significant)**

The proposed project would provide buffers between approximately 150 feet and 400+ feet between the residential structures and the agricultural uses. The buffer areas would be planted with trees, shrubbery, grass and other plantings, based on the requirements in the Conditions of Approval. As analyzed below, the proposed agricultural buffer setbacks would be adequate to minimize potential land use conflicts in combination with a physical agricultural buffering setback. The proposed buffers are analyzed in terms of the following potential environmental concerns for farmers:

### Litter

Trash receptacles would be provided in open space areas to reduce the potential for litter. Additionally, street sweeping services and trash pickup for the residential uses would be provided for and funded by a Homeowner's Association as set forth in Mitigation Measure AG-1. The buffers would be maintained and kept free of litter by the Homeowners' Association. Furthermore, the proposed buffers would be planted with trees and shrubs to minimize litter from being carried onto agricultural land. With proper maintenance of the buffer areas as set forth in Mitigation Measure AG-1, a significant impact associated with litter would not occur.

> **Recommended Measure AG-1:** Street sweeping services and trash pickup for the residential uses shall be provided for and funded by a Homeowner's Association.
>
> **Recommended Measure AG-2:** The applicant shall maintain a landscaped buffer of 200 feet where feasible, and still preserve the desired clustering of homes. Where the buffer between homes and agricultural areas is less than 200 feet, the vineyard operators shall undertake farm operations in such a manner as to minimize potential disturbance of residents to the maximum extent possible. The buffer areas shall be maintained free of litter by a groundkeeping crew at the expense of the Homeowners' Association.

**Significance after Implementation of Recommended Measures:** With implementation of the Recommended Measures AG-1 and AG-2, the above-identified impacts would be reduced to a less-than-significant level.

### Damage from Pets

Damage to agricultural operations from domestic pets, including dogs and cats, can cost farmers thousands of dollars. As the residential uses and agricultural uses would be managed by the same entity (the project applicant), pet damage to agricultural uses could be prevented by establishing policies and open lines of communication with residents on proper management of outdoor pets. Policies would include signage requiring that pets be leashed, informational notices to residents regarding leashing policies, and establishing fines for unleashed pets. These policies are set forth as Mitigation Measure AG-3. The proposed buffers would also provide distance and a physical barrier to further reduce the likelihood that pets would occur on agricultural land. However, additional measures, as described in Recommended Measure AG-3 would further reduce potential impacts to farming operations from pets.

**Recommended Measure AG-3:** Signage requiring pets to be leashed shall be posted in community and open space areas of the residential uses. Informational notices on leashing of pets shall also be distributed to new residents. Owners of unleashed pets shall be subject to fines.

Significance after Implementation of Recommended Measures: With the implementation of Recommended Measures AG-3, potential impacts to agricultural land from domestic pets would be reduced to a less-than-significant level.

### Theft/Vandalism

Given the quality of the housing proposed and the overall rural nature of the area, it is unlikely that theft and vandalism would be issues of concern for the agricultural uses. Although not anticipated, theft and vandalism on agricultural land could potentially arise as a result of conflicts between the farmers and residences. However, as the residential uses and agricultural uses would be managed by related entities, theft and vandalism could be prevented by setting policies and procedures as well as creating open lines of communication for resolving this type of conflict. The proposed buffers would act as physical separations and barriers to further reduce theft and vandalism from trespassers. With implementation of the buffers, a significant impact associated with theft/vandalism would not occur.

### Imported Pests

The proposed agricultural buffers would provide a physical separation between residential and agricultural uses, and thus would minimize the spreading of pests from urban areas. In addition, trees and other vegetation planted in the buffer would attract birds which aid in pest control. With implementation of the buffers, a significant impact associated with imported pests would not occur.

### Indirect Residential Growth Inducement

In accordance with Sections 22.22.152(d) and 22.22.154(d) of the San Luis Obispo County code, the project would ensure for the long term preservation agricultural land. The open space areas would include crop production areas, buffer areas, and undeveloped land. These areas would be enrolled under a Williamson Act contract, which would ensure that the land is maintained for agricultural or open space use. As such, it can be assured that these areas would be protected from future development. The project would not indirectly induce residential growth nearby that could further reduce future agricultural uses.

### Impacts to Residences

Certain home sites in Areas A, C, E, F, G, and H are more likely to be affected by agricultural uses than others because these sites would be the closest in proximity to agricultural areas. Potential impacts to the residences include pesticide drift, noise/nighttime light, odors, dust, pests, and agricultural burns. (See the Noise Technical Study for potential noise effects related to proximity to Laetitia vineyard operations.) Spray drift is likely to be the greatest concern for the proposed residences. The potential environmental impacts are analyzed below.

**Impact AG-4: The proposed project would potentially expose residences to adverse agricultural-associated effects, such as pesticides, odors, etc. (Potentially Significant)**

### Pesticide Drift

The US Environmental Protection Agency (US EPA) defines pesticide spray drift as the physical movement of a pesticide through air at the time of application or soon thereafter, to any site other than that intended for application (often referred to as off target). Pesticide drift occurs when the nozzles of spray equipment produce small droplets of pesticide that are suspended in the air and are carried by air currents until they contact a surface or drop to the ground. A number of factors influence drift, including weather conditions, topography, and application equipment and methods. During a weather inversion,[8] drift impacts are greater as small droplets remain suspended in the air. Additionally, windy conditions play a role in determining drift movement. Topography also influences drift movement as drift tends to follow low-lying areas.

Under the proposed project, the aerial application of chemicals by aircraft on existing and new vineyards or orchards would not occur. Chemicals would be applied on the ground using spray equipment to minimize the potential for drift. Federal and State laws require that all pesticides be handled strictly according to their label instructions. Pesticides must not be allowed to drift, run off or move off target, or be used in any way not approved by the label, law, or regulation.

Implementation of the agricultural buffers would provide a physical separation such that drift impacts to residences would be reduced. Additionally, in certain areas, topographic differences would exist between the residential uses and agricultural land such that drift would be less likely. Nonetheless, the potential for drift to reach residences would still exist. The reduced width for the agricultural buffers would incrementally increase the potential for residents to be exposed to pesticide drift. Thus, in order to reduce potentially significant impacts, best management practices (BMPs) for pesticide application should be implemented. With implementation of these BMPs as set forth in Mitigation Measures AG-4 and AG-5, as well as implementation of the buffers, significant impacts associated with pesticide drift would not occur.

> **Recommended Measure AG-4:** In accordance with the County Right to Farm Ordinance (No. 2050), upon the transfer of real property on the project site, the transferor shall deliver to the prospective transferee a written disclosure statement that shall make all prospective homeowners in the proposed project site aware that although potential impacts of discomforts between agricultural and non-agricultural uses may be lessened by proper maintenance, some level of incompatibility between the uses would remain. This notification shall include disclosure of potential nuisances associated with on-site agricultural uses, including frequency, type, and technique for pesticide spraying, frequency of any noise making bird control devices, dust, and any other vineyard practices that may present potential health and safety effects. Should crop maintenance practices

8 An inversion is a stable atmospheric condition characterized by an increase in air temperature with an increase in height above the ground until at some height a barrier of cold air is met. During an inversion, less material will usually drift from the target field, but the material that does leave the target field remains in a more concentrated cloud and the level of residue that settles onto nontarget areas will be higher than usual. Even though the amount of chemical that drifts from the target area during an inversion is often less, the potential for a drift problem can be greater because the small droplets are not lofted into the upper atmosphere, diluted and spread over a large area.

change substantially (e.g., through the use of new agricultural chemicals or application techniques), notification shall be provided to existing and prospective project residents.

**Recommended Measure AG-5:** To minimize impacts of spray drift, the following best management practices should be followed:

- Nozzles which produce as large of a droplet spectrum as possible while yielding adequate plant coverage and pest control shall be used. Large nozzle orifices and low spray pressure creates a large droplet spectrum. It may be necessary to apply higher than normal amounts of diluted spray per acre when using large droplets to avoid drift in order to get adequate coverage.

- A formulation less subject to drift shall be utilized, wherever possible (granules – least likely; spray – intermediate; and dusts – most likely)

- Applications during temperature inversions shall be avoided.

- Applications shall be made when the wind is blowing away from any highly sensitive nontarget areas and the wind velocity should range between 3 to 10 mph. Extremely low winds are avoided because they indicate inversion conditions and winds above 10 mph shall be avoided because relatively large droplets can be transported into neighboring fields.

- Nozzles shall provide adequate coverage and pest control while minimizing small, drift prone droplets. Request a droplet spectrum data sheet from the manufacturer that gives information about the percentage of the droplets that are smaller than 150 micrometers. Use nozzles with the smallest portion below this size.

- The lowest pressure possible that will give adequate coverage and control to limit the number of drift-prone droplets shall be used.

- Applications shall be made at the minimum height that provides a uniform spray pattern.

- Sprayers shall be shut off when turning at the ends of the rows.

**Significance after Implementation of Recommended Measures:** With implementation of the Recommended Measures AG-4 and AG-5, the above-identified impacts would be reduced to a less-than-significant level.

### Noise / Nighttime Light

Sources of noise and nighttime light on agricultural lands include farm machinery and heavy duty trucks. See the Noise Technical Study, for a discussion of noise impacts.

The proposed residences are considered sensitive receptors to light. Nighttime operation of farm machinery would be minor and generally limited to nighttime fertilizers. Light from the machinery would be directed at the agricultural crops. Therefore, light impacts from agricultural

uses on the residences would not occur. Significant impacts related to agricultural lighting would not occur.

Additional discussion of light and glare is provided in the Visual Quality Technical Study.

### Odor

The proposed project would not include livestock, food processing, or manure disposal operations. Therefore, there would be no odors impacts associated with these uses. The planting of trees on the buffers would slow the wind, allowing odor-carrying dust to drop to the ground. The trees and other plantings would also provide a windbreak to reduce odors from traveling to the residences. With implementation of the buffers, a significant impact associated with odors would not occur.

### Dust

Dust from soils pose health risks for residents living adjacent to agricultural land. Dust arises during cultivation and harvesting of the vineyards and orchards. As discussed above, trees planted within the proposed buffers would slow the wind, allowing dust particles to drop to the ground. Furthermore, the trees and other plantings would also provide a barrier against dust being carried to the residences. With the implementation of Mitigation Measure AG-6, potential impacts from dust, particularly in winter months, could be reduced to a less-than-significant level.

> **Recommended Measure AG-6:** Following the fall harvest, cover crops (either annuals or perennials) shall be used to provide long-term protective cover lasting for more than three years to protect against dust. Examples of commonly used cover crops in vineyards include erosion mixes such as various grass species and annual legumes.

**Significance after Implementation of Recommended Measures:** With implementation of the Recommended Measure AG-56 the above-identified impacts would be reduced to a less-than-significant level.

### Pests (flies, mosquitoes, etc.)

The project site would not include livestock, food processing, or manure disposal operations that would attract flies and other pests. Furthermore, the new and proposed vineyards and orchards would be treated with pesticides to reduce the occurrence of pests. The proposed agricultural buffers would also provide physical separation, and thus would prevent pests from reaching the residences. In addition, the trees and other vegetation planted in the buffers would attract birds which aid in pest control. With implementation of the buffers, a significant impact associated with agricultural pests would not occur.

### Agricultural Burns

No agricultural burns would be conducted on the existing and proposed vineyards and orchards. Thus, no agricultural burn impacts would occur.

### *Conclusion*

The County's current 2005 agricultural buffer guidelines suggest a minimum 200-foot buffer between residential structures and adjacent vineyard uses. The project is, however, subject to the 2002 agricultural buffers that provide suggested guidelines for an issue that must be dealt with on a case-by-case basis, taking into account a variety of factors that include:

- The prevailing wind;
- Site topography;
- Relevant site and project criteria, practical knowledge of agricultural practices, technical literature, contact with other professionals within the University, industry, government agencies and training;
- "Margin of safety" and "probability" concepts and other factors" (also included in the Agricultural Buffer Policies, 2002); and
- Zoning.

The 2002 Guidelines also caution staff to identify recommended mitigation measures and not alternatives.

The buffers used for this project, with the incorporation of the recommended measures above, would reduce potential impacts from varying buffers between the project and agricultural uses to a less than significant impact. The proposed buffers and the incorporation of the recommended measures, would conform to the intent of buffers between existing agricultural uses and proposed residences.

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# SECTION 7

# Visual Quality Technical Study

## Summary

This section provides analyses and mitigation measures used in the CEQA-required analysis of potential impacts to visual resources for projects similar to the proposed project and for two dissimilar projects located in visually sensitive areas. Unlike adjacent development, the Laetitia Agriculture Cluster leaves most of its land as open space for agricultural cultivation. Based on mitigation measures used in other certified EIRs for the similar projects, all potentially significant impacts of the Laetitia Agriculture Cluster can be reduced to a less than significant level.

# VISUAL QUALITY TECHNICAL STUDY

## Laetitia Agriculture Cluster

## Introduction

This section discusses potential changes to visual quality at the project site as a result of the proposed project, as well as changes to views of the site. In general, although subject to thresholds, the assessment of visual quality is generally subjective, even when a site is specifically designated as a "scenic resource," or part of a "view" or "viewshed." However, the analysis must be rational and fair, so as not to create the impression that it is arbitrary or capricious.

Under the California Environmental Quality Act (CEQA), an impact on views is considered significant if a view of a public scenic vista, scenic resource, public object of aesthetic significance, or valued view is impeded or obstructed from a *public* vantage point. Views enjoyed from a particular private vantage point are generally not protected. As the Court of Appeal held in *Topanga Beach Renters Assn. v. Department of General Services* (1976) 58 Cal.App.3d 188, 195, "[t]he issue is not whether [the project] will adversely affect particular persons, but whether [the project] will adversely affect the environment of persons in general."

In general, case law has tended to support public views over private views. *Bowman v. City of Berkeley* (2004) 122 Cal. App. 4th 572, is partially relevant. The case summary notes:

> The principal issue is whether opinions that the building is too large to be aesthetically compatible with its surroundings constitute substantial evidence supporting a fair argument that the Project will have a significant effect on the environment. Based primarily on the Project's environmental context, and the fact that the Project has undergone an extensive design review process to mitigate its visual impact, we hold that there is no environmentally significant aesthetic effect that requires an EIR in this instance. . . .

Public views of the Laetitia project site are available primarily from northbound US 101 and limited public views from Upper Los Berros Road. Impacts from the existing wine tasting facility were not studied because this is a private facility whose primary purpose is not related to views of the project site.

The proposed development is subject to the regulations, ordinance, and plans in effect at the time the project application was deemed complete by the County in 2002.

# Visual Quality Thresholds

While visual quality is subjective in nature, there have been attempts to quantify an approach to its analysis by using various indicators. As a result, the analysis of visual quality must rely on the CEQA definition of "significance," adopted thresholds of significance, and, if no thresholds have been adopted, precedent established by the local jurisdiction for similar projects.

The following provides background on CEQA significance thresholds, and how visual quality has been analyzed for projects similar to the Laetitia project (in certified San Luis Obispo County EIRs). Many of the visual quality impacts of other agricultural cluster projects approved in San Luis Obispo County are similar to the visual quality impacts identified in the Laetitia analysis. Mitigation Measures were included in the previous EIRs that can reduce impacts below a level of significance; these Mitigation Measures are discussed in the analysis below for the Laetitia project.

### Significant Effects

The California Environmental Quality Act[1] (CEQA) and the CEQA Guidelines[2] focus on the question of whether or not a project has a "significant effect on the environment." In fact, the term significant is central to understanding the potential effect of a project on the environment. The CEQA Guidelines state that the purpose of CEQA is to [italics added]:

(1) Inform governmental decision makers and the public about the potential, *significant* environmental effects of proposed activities.

(2) Identify ways that environmental damage can be avoided or *significantly* reduced.

(3) Prevent *significant*, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.

(4) Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if *significant* environmental effects are involved.

This term "significant effect on the environment" is defined in both CEQA and CEQA Guidelines. CEQA's definition (Section 21068) states:

> 'Significant effect on the environment' means a *substantial*, or *potentially substantial*, *adverse* change in the environment. [Italics added]

The definition found in CEQA Guidelines (Section 15382) states:

> '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

1 California Resources Code Sections 21000 through 21178, as amended to January 1, 2006.
2 *Guidelines for California Environmental Quality Act*, as amended to December 1, 2005, Code of Regulations Title 14, Chapter 3, Sections 15000 through 15387.

> including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. . . . . [Italics added]

The term significant effect can be translated to *substantial or potentially substantial, adverse change* in the environment. Simply having an effect on the environment is not considered a significant effect.

CEQA and the CEQA Guidelines make clear that what may be significant in one environment is not necessarily significant in another setting; a single unwavering definition of a significant effect is not possible. The example used in CEQA Guidelines Section 15064(b) illustrates this concept by pointing out that the differences between an urban and rural environment could lead to significant impacts in a rural environment, but not in an urban environment. CEQA and CEQA Guidelines clearly state that the meaning of significant and significant effect on the environment is *substantial, or considerable* and that in order for something to have a significant effect on the environment, it must be an adverse change in the environment.

It is necessary that lead agencies use consistent thresholds for similar projects in similar situations to allow some degree of comparison among projects, and to ensure fairness and objectivity in reviewing projects. Where a Lead Agency has no published thresholds, past precedent for similar projects must be used at least as a starting point for thresholds of significance.

### Basis of Analysis under CEQA

Appendix G of the CEQA Guidelines provides generalized thresholds to allow the use of qualitative information, unless the Lead Agency has formally adopted more quantitative or other specific thresholds against which the project can be measured. The definition of a threshold implies that a threshold should be held constant, although the analysis will differ from project to project, and the level of significance will differ from project to project. If the threshold is not held constant, there is no basis of comparison from project to project; and the use of a variety of significance thresholds can be interpreted to be unfair, arbitrary, and capricious. It could further be argued that the use of a variety of thresholds provides decision makers with inadequate information upon which to make a decision.

CEQA Guidelines Section 15064.7 states the following concerning thresholds under the California Environmental Quality Act (CEQA):

> **15064.7. Thresholds**
>
> (a) Each public agency is encouraged to develop and publish thresholds of significance that the agency uses in the determination of the significance of environmental effects. A threshold of significance is an identifiable quantitative, qualitative or performance level of a particular environmental effect, non-compliance with which means the effect will normally be determined to significant by the agency and compliance with which means the effect normally will be determined to be less than significant.

(b) Thresholds of significance to be adopted for general use as part of the lead agency's environmental review process must be adopted by ordinance, resolution, rule, or regulation, and developed through a public review process and be supported by substantial evidence.

San Luis Obispo does not have adopted formal thresholds for CEQA purposes. Thus, past precedent in other EIRs is an indicator of the County's threshold as they have been applied.

### *CEQA Guidelines Appendix G*

Appendix G of the CEQA Guidelines provides the following suggested thresholds:

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 with a state scenic highway?

(c) Substantially degrade the existing visual character or quality of the site and its surroundings?

(d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

These thresholds are general in nature and are applicable in both urban and rural environments for all projects. Although a developer or Lead Agency may not agree with the analysis, these thresholds make clear that the analysis applies to *substantial adverse* environmental impacts with regard to scenic vistas, scenic resources, visual quality of the site and vicinity, and light and glare. The addition of buildings to a "scenic" area does not necessarily result in a substantially adverse impact to the environment.

In general, CEQA looks at public vantage points, because impacts to private views generally would not affect "the environment," and would have a more localized effect which would apply to only a few people.

### *San Luis Obispo County and the Use of Thresholds for Visual Quality*

The following are examples of the analysis of visual quality or aesthetics in environmental documents certified by the County in approving residential projects and at least one non-residential project.

**Edna Ranch.** In 1993, the *Edna Ranch Final Environmental Impact Report* (State Clearinghouse No. 930311008) established thresholds for "natural landscape elements" of an agriculture cluster based on a rating system established by the US Forest Services Visual Management System, and an adaptation of criteria for urban design used in *Fundamentals of Urban Design* by Hedman and Jaszewski (1984). The US Forestry Service assumes "a greater sensitivity by those driving,

walking, and bicycling for pleasure and those engaged in recreation activities than those commuting for work-related purposes" (p. 6.3-3). Along primary travel routes, at least one-fourth of all users are assumed to have a major concern/sensitivity to views. Sensitivity drops off dramatically for commuters. Yet another system rates the visual condition of a site, based on a modified US Fish and Wildlife Service/Lawrence Headley guideline, which has been used in both San Luis Obispo County and other counties throughout the state. Generally, this methodology describes the "scenic variety/visual character classes for the natural landscape elements and urban design character and rates them as distinctive, common, or minimal:

**TABLE 1: SCENIC VARIETY CLASSES**

| | Distinctive | Common | Minimal |
|---|---|---|---|
| Landform | >60% slope exposed ridges; steep, highly dissected canyons | 20-60% slope, small ridges, knolls, canyons | >20% slope level to rolling terrain |
| Vegetation/Drainages | High variation in vegetative types; such as mixture of trees, shrubs, and grassland forming edges | Some variation in vegetative types, height, and density | Graded areas, bare soils and areas subject to grading |
| Water Course | Perennial streams, pools, falls | Intermittent streams | Gullies |
| General Landscape Character | Variety in detail, with many unique boundaries between different units. | Some variation, with indistinct boundaries | No variety or distinction in boundaries |
| Design Character | Powerful sense of unity and proportion with natural surroundings. Strong design linkages provided by:<br>• Building silhouette;<br>• Spacing between buildings;<br>• Setbacks from street property line;<br>• Proportion of windows, bays, doorways, and other features;<br>• Massing of building form;<br>• Location and treatment of entryway;<br>• Surface material, color and texture;<br>• Shadow patterns;<br>• Building scale;<br>• Style of architecture; and<br>• Landscaping, if any. | Some sense of unity and proportion. Moderate design linkages. | No sense of unity and proportion. Design linkage absent, or strong unity with no design variation (monotonous). |

SOURCE: County of San Luis Obispo, *Edna Ranch Final Environmental Impact Report*, September 1993.

Visual sensitivity is also measured (see Table 2, below). Level 1 is considered highly sensitive; Level 2 is considered moderately sensitive; and Level 3 is considered low sensitivity.

**TABLE 2: CRITERIA FOR RATING SENSITIVITY LEVELS**

| Travel Route or Use Area | Visual Sensitivity Level | | |
|---|---|---|---|
| | **High** | **Moderate** | **Low** |
| Primary Travel Route and Use Area | At least ¼ of users have major concern for visual quality | Fewer than ¼ users have major concern for visual quality | N/A |
| Secondary Travel Routes and Use Areas | At least ¾ of users have major concern for visual quality | Between ¼ and ¾ of users have major concern for visual quality | Fewer than ¼ of users have major concern for visual quality |

SOURCE: County of San Luis Obispo, *Edna Ranch Final Environmental Impact Report*, September 1993.

A greater sensitivity is assumed by those driving, walking, and bicycling for pleasure and those engaged in recreation activities than those commuting for work-related purposes.

Finally, the overall visual attractiveness of a region is defined as visual quality, by ratings of VC-1 through VC-5 (see Table 3, below). A rating of VC (Visual Condition Class) indicates "that all the features within the field of view appear characteristic of the region, while a rating of VC-5 indicates that the general character of the area is unrecognizable within the viewer's field of vision.

**TABLE 3: VISUAL CONDITION RATING GUIDELINES**

| Visual Condition Class | Guidelines |
|---|---|
| VC-1 | a) All features within the field of view appear to be characteristic of the region;<br>b) Or, features appearing incongruous (out of place, incompatible) are evident but would usually be overlooked by the casual viewer (inconspicuous due to such factors as size, distance, distribution, context, screening, or the predominant orientation of the views. |
| VC-2 | a) Uncharacteristic features, appear incongruous, are not easily overlooked, and may attract attention, but are visually subordinate to inherent features.<br>b) Or, uncharacteristic features are subordinate to the predominant characteristics of the area, but are similar enough to the inherent features of the area to be regarded as at least moderately compatible with them. |
| VC-3 | a) Uncharacteristic features appear incongruous and compete for attention (are distracting and co-dominant) with those that are inherent to the area;<br>b) Or, uncharacteristic features demand attention (are visually dominant) but are moderately compatible with features inherent to the area. |
| VC-4 | Uncharacteristic features appear incongruous and dominate the field of view. The primary character of the area may be subdued by comparison and difficult to recognize. |
| VC-5 | Uncharacteristic features appear incongruous and so dominate the field of view, due to their size and/or distribution, that the character of the area is unrecognizable or does not appear to be the same as that for the rest of the region. |

SOURCE: County of San Luis Obispo, *Edna Ranch Final Environmental Impact Report*, September 1993.

Following a cluster by cluster analysis (with a landscape and project similar to the landscape of the Laetitia site), potential silhouetting was identified as a concern at several building sites. The analysis concluded that all significant impacts could be reduced to less than significant levels under CEQA with mitigation measures that include:

- Landscaping at entrance gates and common buildings;
- The use of existing, natural barriers to minimize the impact from Orcutt Road;
- The preservation of existing oak woodlands as "corridors of visual interest and as wildlife habitat" (p. 6.3-17);
- Standard requirements for a landscape plan;
- The use of dark colors that would "decrease the visual impacts of the homes" (p. 6.3-18);
- Moving one home below ridgelines and limiting its height; and
- Minimizing cut and fill for project roads, private drives, and emergency access roads.

No cumulative impacts were identified. Both the project-specific and cumulative impacts were considered Class III impacts.

**Woodlands Specific Plan**. In 1998, the *Woodlands Specific Plan Draft Environmental Impact Report* used the following thresholds for the analysis of aesthetics (visual quality):

- Obstruction of a scenic vista or view open to the public;
- Creation of an aesthetically offensive site open to public view;
- Degradation of an object having historic or aesthetic significance;
- Division or disruption of the physical arrangement of an established community;
- Production of new light and glare;
- Conflict with adopted environmental plans and goals of the community where the project would be located.

This project included the removal of 70 percent of the existing eucalyptus trees, construction of 1,320 housing units, two golf courses, a 12-acre public park, a 10-acre school, 30 acres of designated neighborhood play area, protection of a 30-acre Monarch Butterfly habitat, and the planting of a 200-foot buffer of trees and vegetation – all of which would be constructed along Highway 1. All impacts were reduced to a less than significant level by mitigation measures that include the use of native species to provide additional screening and to enhance the visual buffer; and measures related to reducing light and glare.

**Biddle Ranch.** In 2003, the *Biddle Ranch Agricultural Subdivision Cluster Final EIR* (State Clearinghouse No. 2001021060) used the following thresholds for visual quality:

- The change would adversely affect a view shed from a public viewing area (such as a park, scenic highway, roadway, or other publicly-accessible property);
- New light and glare sources are introduced that substantially alter the nighttime lighting character of the area; or
- An existing identified visual resource is adversely altered or obstructed.

Following this list of thresholds, the Final EIR states: "In this analysis, modifications to the viewshed were considered not significant if the modification would be visually subordinate. A modification that is visually dominant or one that substantially modified the existing view adversely is considered a significant impact."

The significance thresholds listed above were applied to the Biddle Ranch project and the following conclusions were reached:

> Due to the clustering of the proposed residential units and the preservation of open space and agricultural lands, the project would not substantially alter the rural visual character of the site. However, the proposed development has the potential to alter the aesthetic character of the site vicinity by changing the scenic views from public viewing locations, introducing community design elements that may be aesthetically inconsistent with the surrounding area, and introducing new light and glare generators into the area.

The analysis then goes on to add seven mitigation measures that require the development and implementation of Architectural and Landscape Guidelines that include individual landscaping plans for each individual residence, a maximum building height of 22 feet (with the exception of some building elements) for buildings near a ridge, and native vegetation; streetlights that would not exceed 10 feet in height; a lighting plan; review and approval of the entry monument design; specific requirements for spill light; and the prohibition of structural silhouetting. These mitigation measures reduce project-specific impacts to a less than significant level.

This analysis does not clearly link the analysis to the conclusions. The analysis states that the project site "would not be substantially visible from any State-designated scenic highways or routes" and that under very clear conditions, the higher elevations of the site would be visible from US 101. It goes on to note, for example, that the elevation of some of the lots and the proposed improvements would "exacerbate the severity of visual impacts" from viewpoints within Biddle Park (p. 4.6-4), but then it immediately states that "intervening vegetation and hillsides on the project site would block interior views of proposed improvements from these viewpoints. Since the proposed development would be visible from *some portions* [italics added] of the park, and units would silhouette against the sky from these views, the project would result in potentially significant impacts on views from this public viewing corridor." The silhouetting is

a result of being at a lower elevation at the park, not because development is located on a ridge. It appears that the mitigation measures are included not because there is a substantially adverse impact, but because there could be *any* impact or change, it is considered significant or potentially significant. The analysis indicates that the impact of the project was considered less than significant, but that the authors declared it to be significant without any basis, rational or evidence for this conclusion.

The cumulative analysis states that even though the site is designated for agricultural use and the cluster development is a use allowed by the General Plan (p. 4.6-22), because of other proposed residential projects, the "cumulative development of these developments would result in a significant cumulative loss of open space and would irrevocably alter the character of the area from rural and semi-rural" (p. 4.6-22) or a Class 1 impact. There is little discussion of the project's contribution to those cumulative impacts.

**Guadalupe Restoration Project.** In 2005, the *Guadalupe Restoration Project Final Supplemental Environmental Impact Report* uses elaborate sets of criteria for visual quality. This project provides a comparison to a dissimilar project undertaken in a visually sensitive area. The project, also known as the Guadalupe Oil Field Remediation and Abandonment Project, proposes changes to a site that is 4,000 feet from public areas located along the coast. The first criteria listed state:

> An adverse visual impact occurs when within public view:
>
> (1) an action perceptibly changes features of the physical environment so that they no longer appear to be characteristic of those inherent to the region and/or locale;
>
> (2) an action introduces features to the physical environment that are perceptibly uncharacteristic of the region and/or locale; or
>
> (3) aesthetic features of the landscape become less visible (e.g., partially or totally blocked from view) or are removed.

The "second" set of criteria is listed below:

> Visual impacts are further defined as follows:

| | |
|---|---|
| Significant Visual Impacts | Occur for more than one year and result in: 1) an inconsistency with public policies, goals, plans, laws, regulations, or other directives concerning visual resources; or 2) a perceptible reduction of visual quality occurring within moderately to highly sensitive public views. Visual quality is perceptibly reduced when, within a highly sensitive view, visual conditions are affected adversely by one or more class ratings to Visual Modification Class 2, 3, or 4; and within a moderately sensitive view the impact reduces quality one or more class ratings to Visual Modification Class 3 or 4 (see Table 5.4.3). |
| Temporary Impacts | Lasting for one year or less. |
| Short-Term Impacts | Lasting for more than one year but fewer than five years. |
| Long-Term Impacts | Lasting for five years or more. |

This criteria make no mention of *substantially adverse*, or even *substantial*. The analysis concludes that: "Due to the relatively large distances from the proposed project (more than 4,000 feet from public areas), the temporary nature of the project, and the similarity of the restored dune to the surrounding dunes, the impacts would be considered *less than significant*, Class III" (p. 5-87). No cumulative impacts are identified.

# Setting

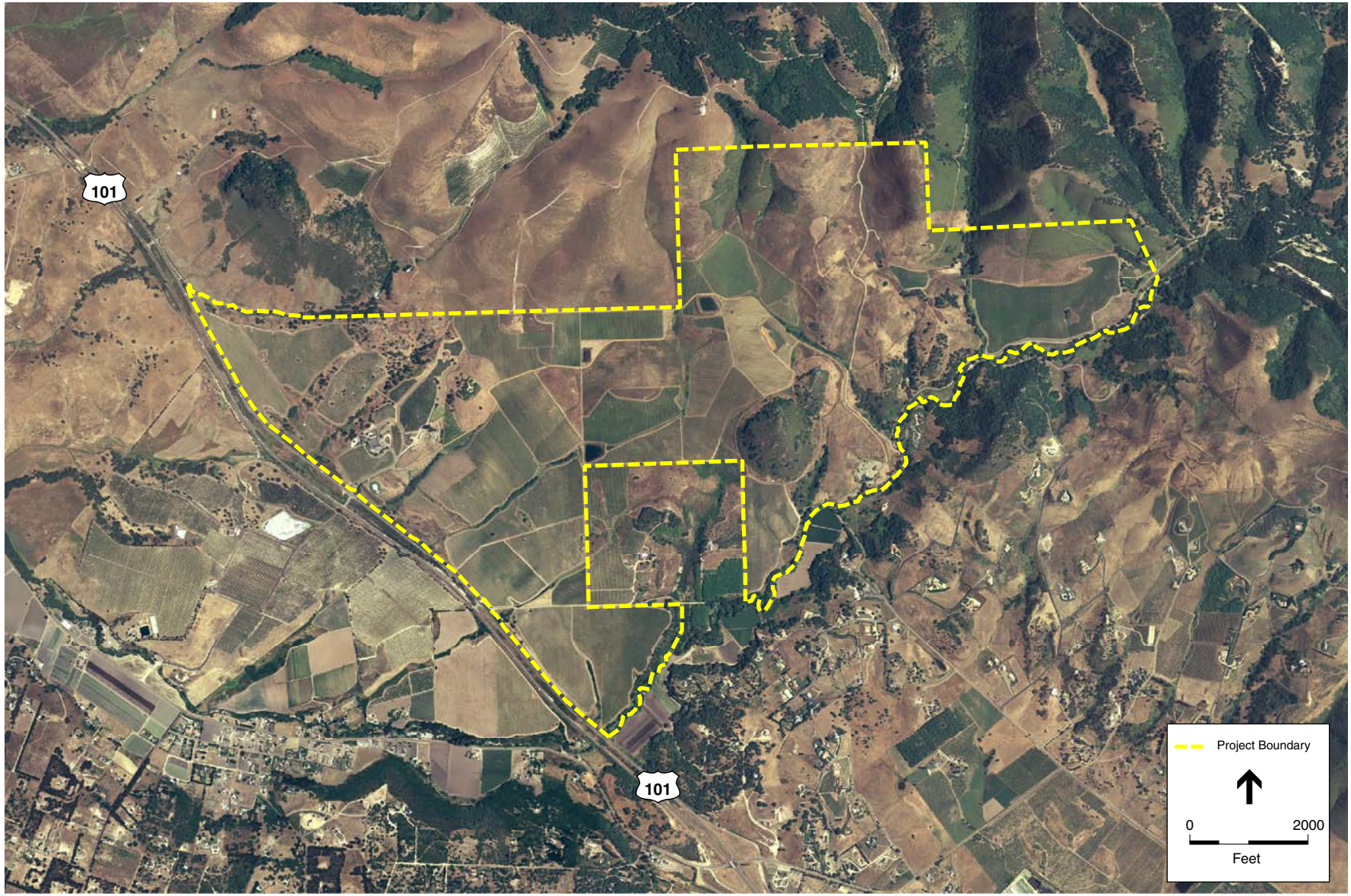
The project site is located in southern San Luis Obispo County in the foothills that are generally oriented along a north-south axis. Because of the irregular topography, which includes steeper slopes to the north and southeast, and more gentle but irregular rolling hills to the south and west, the foothills often appear to stand in the foreground in bold relief. The foothills appear to have a greenish-brown and gray tint that, in the summer, contrasts with the lush green of cultivated foothill areas particularly along the highways or the organized symmetry of farmland on the plain to the east and developed foothill areas south of the site and further north. Extraneous vegetation or landscaping in areas used for farmland is notably sparse, with scattered thickets of vegetation appearing along creeks or other drainages, and on knolls or other areas not amenable to either cultivation or grazing. Treetops also appear to dot the ridges of the hills and mountains. During the winter months and early spring, the mountains and foothills blend together in brown and beige hues.

The foothills in the vicinity of the project site include cultivated farmland, large expanses of undeveloped and uncultivated land, and low-density residential estates, visible from US 101 along the ridges and hilltops, and farms to the south, north, and east. Residential and commercial development are nearby, in Nipomo, Arroyo Grande, and west of US 101. Generally, residential development features one- and two-story stucco estates in natural colors, often with small orchards or vineyards, as well as closely knit housing development in Nipomo. Further north and south, small residential communities are tucked into valleys in the mountainous areas, or clustered along the beaches. From US 101, residential, industrial, and commercial development and small agricultural operations appear to sweep westward in an uninterrupted swath (see Figure 1).

The project site is located approximately 2.1 miles north of Nipomo and 1.7 miles south of Arroyo Grande. The site includes one large stucco home. This stucco home is surrounded by medium-height landscaping, is a yellowish beige, and includes a red tile roof. The site also includes storage ponds, which are not publicly visible; utility poles; and occasional trees and shrubs. The site also includes areas that are undeveloped and uncultivated; these areas are covered with weeds. There are also agricultural structures and farm quarters visible from Upper Los Berros Road.

## Available Views

Views in the region are dominated by either the Pacific Ocean or the foothills, depending on the location of the viewer. At the project site, views are dominated by the foothills. From distances of




SOURCE: Globe Xplorer, 2006; ESA, 2007.

Letitia Vineyards . 206193

**Figure 1**
Project Location Map

more than a mile, development at the site would either not be visible because of the slope of the foothills or the proposed development would be indistinct.

The project site is primarily visible from two public roadways: US 101 along the western perimeter of the site and, to a limited degree, from Upper Los Berros Road along the southern perimeter at the project site. Neither roadway accommodates pedestrians, although hikers could walk along Upper Los Berros Road. Views are therefore mostly seen while driving past the site. Although the site is also visible from the Laetitia Vineyards Winery facility located on Vineyard Drive, this is privately-owned facility. Viewers would be moving along US 101 at a maximum speed of 65 miles an hour and would catch a glimpse of the site for slightly more than 60 seconds. Southbound lanes of US 101 are located at a lower elevation than the northbound lanes and therefore offer only a brief glimpse of the site, most of which would occur if the driver or passenger happens to look due east just as the vehicle passes the site. From Upper Los Berros Road, the topography of the site hides most of the project site from view, although at least one structure would be visible from the road.

For the purposes of this document, views of the proposed new construction can be placed in one of two categories: medium-range (one-quarter to one-half of a mile from the proposed new construction), and long-range (more than one-half of a mile from the proposed new construction). There are so few short-range (less than one-quarter of a mile) vantage points from which to view the proposed new development that no analysis is included.

The following describes the views of the project site from a variety of perspectives and from these two ranges. To aid the understanding of existing conditions and to facilitate a visualization of the proposed project once built, “existing” and “proposed” images are provided from three viewpoints, as referenced in the discussion below. Each view consists of a photograph taken in summer 2006, and is accompanied by a computer simulated “proposed” image that has inserted the project into the original photograph from above. The comparison between existing conditions and the proposed project are discussed below. The visual simulations show the project with landscaping. As a result, little of the proposed buildings can be seen.

## Medium-Range Views

The proposed new development closest to US 101 is located near the wine tasting facility (Lots 50 and 59) and while these units and the remainder of the units in the cluster may be visible from passing vehicles, they would be hidden by a small hill until a northbound viewer passes directly west of these units. These medium-range views would also be available from the privately-owned wine tasting facility. Other private views would be available from proposed residential units within the cluster and from other clusters.

Medium-range views from southbound US 101 are briefly available but are mostly obstructed because of the grade separation between the northbound and southbound lanes, and because of the hillock between the two sets of lanes.

### Long-Range Views

The proposed new development is most visible from long-range views of over one-half mile (2,640 feet). Landscaping along US 101 obscures some of the views**.** The visual simulations show the project with landscaping. As a result, long-range views would change primarily because of the new landscaping along the hills.

From US 101 northbound, the foreground includes underbrush and weeds, low shrubs, and oak standing alone or in clusters along the roadside. Rows of vineyards extend into the distance where scattered vegetation is visible, along with the existing home, and utility poles (the wires are visible only if the poles are near the roadway). The brownish foothills and mountains rise in the background, with trees and shrubs standing out along the ridges. Farm roads are also visible as light brown swaths cut along the hillsides (see Figure 2, which provides a Key Map, which also indicates the span of the views; and Figure 3).

Moving further north along northbound US 101, the vineyards are located closer to the roadway and dominate the view, with an extended field of green during spring, summer, and fall months that contrasts with the brown foothills and mountains in the distance (see Figure 2, which provides a Key Map, which indicates the span of the views; and Figure 4). The rows run parallel to the roadway (see Figure 4) until moving further along and signage related to the winery comes into view. However, most of the view consists of the vineyards, which also serve as a buffer along the site perimeter near US 101. Existing roadways are visible in the distance, along with existing trees that dot the ridges. Utility poles extend into the distance.

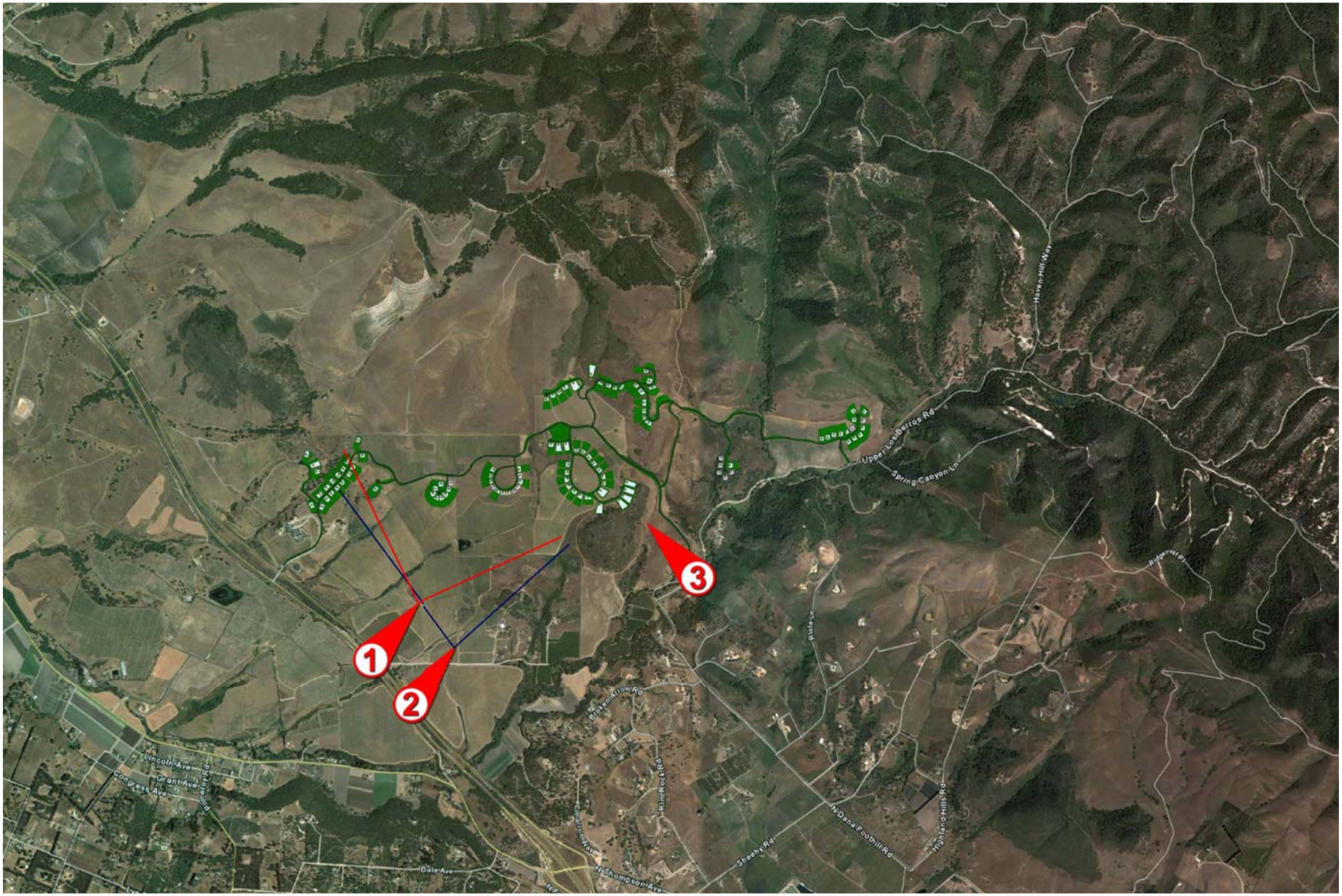
Due to steep slopes next to the road, from Upper Los Berros Road, the view includes existing distant treetops along the ridge and a dirt road that disappears in the foreground over a hill (Figure 3) at the main project site entrance. The foreground also includes an ancillary farm building, a small gate, fencing, and plowed fields with a minimum of vegetation. Utility poles are also visible in the distance, as well as a rocky knoll that is located within the project site (see Figure 5).

# Regulatory Setting

## State

### California Scenic Highways Program

The California Department of Transportation (Caltrans) administers California's Scenic Highway Program. Established in 1963, the program was created to preserve and protect scenic highway corridors from changes that could reduce the "aesthetic value" of scenic land near state highways. Officially designated scenic highways are nominated by cities or counties that must also adopt ordinances to preserve the scenic quality of the corridor or document that such regulations already exist in their respective legal code. Only after the County adopts a scenic corridor protection program, applies for scenic highway approval, and is notified by Caltrans that it has been




SOURCE: VisionScape Imagery, 2007.

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**Figure 2**
Visual Simulations
Key Map

**Figure 3A** - Existing View

**Figure 3B** - Visual Simulation

SOURCE: VisionScape Imagery, 2007.

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**Figure 3A-3B**
Visual Simulations

**Figure 4A** - Existing View

**Figure 4B** - Visual Simulation

SOURCE: VisionScape Imagery, 2007.

Laetitia Vineyards . 206193

**Figure 4A-4B**
Visual Simulation

**Figure 5A** - Existing View

**Figure 5B** - Visual Simulation

SOURCE: VisionScape Imagery, 2007.

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**Figure 5A-5B**
Visual Simulation

designated as a Scenic Highway, would this segment of US 101 become an "officially designated" scenic highway. As a result, within San Luis Obispo County, US 101 is not currently considered a scenic highway under the California Scenic Highway Program.

# Local

## San Luis Obispo County General Plan Land Use and Circulation Elements: South County - Inland

Adopted in 1980 and revised in 2002,[3] the San Luis Obispo County General Land Use and Circulation Element for the South County – Inland area (the South County Inland Area Plan or Plan) guides land use for a 128 square-mile area in the southwestern portion of the County. According to the Plan: "Land uses within this large area are diverse, ranging from urban and suburban development in the older townsites, to rural residential and agricultural uses in the foothill and Nipomo Mesa areas, and the scenic and natural characteristics of the coastal ridges and Pismo Dunes. Included in this area plan are the Nipomo urban area, the three village areas of Palo Mesa, Los Berros and Callendar-Garrett and the South County rural areas" (p. 1-1). The Plan concludes that low density development standards and clustered subdivision designs maintain the area's rural charm and that development that is site sensitive in scenic areas enhances the rural ambience. The intent of the South County Inland Area Plan to maintain the scenic quality of unincorporated San Luis Obispo County is made clear throughout the Plan.

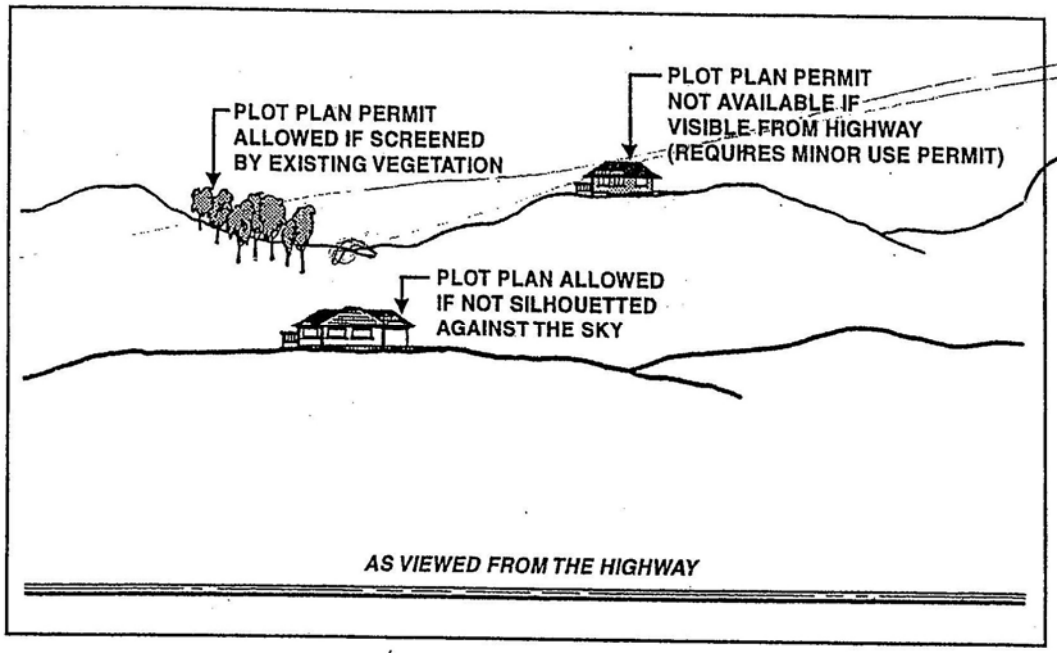
The Plan establishes Planning Area Standards (the Standards), which are generalized design standards. The Standards in effect at the time the developer's application was deemed complete by the County identify the project site as being located within an area subject to the Plan's Highway 101 Corridor Design Standards (see Figure 7-8 of the South County-Inland Plan, 1999). The stated "purpose of the Highway 101 Corridor Design Standards is to provide public views of: varied topography including ridgelines and rock features; significant stands of trees and wildflowers, and historic buildings and pastoral settings" (p. 7-14). The Plan states:

> The following standards are intended to expedite the permit process for projects which maintain scenic views and the rural character along Highway 101, while providing opportunities to use other design solutions through a discretionary review process to achieve scenic goals. Only residential structures, residential accessory buildings, residential access roads, specified agricultural accessory buildings and signs are governed by these standards. . . .

The Corridor Design Standards (CD Standards) require that new development along the US 101 corridor must be set back 100 feet from the US 101 right-of-way. The CD Standards state that "[i]f there is no feasible development area outside this setback, the project shall be located on the rear half of the property and shall provide a landscaping screen to provide 80% coverage at plant maturity, to be verified by a landscape architect, landscape contractor, certified nurseryman or

[3] `The 2002 version of the San Luis Obispo County South County-Inland Area Plan is the applicable document for this project because the application was deemed complete in 2004, before the adoption of revisions to the Plan in 2005.

other qualified individual approved by the Planning Director" (p. 7-19)." The CD Standards establish the process that must be used to determine acceptable development along or near ridgelines when viewed from US 101, with the use of the following diagram:




Source: County of San Luis Obispo, *The Land Use and Circulation Elements of the San Luis Obispo General Plan: South County-Inland, revised May 2, 200.*

The Corridor Design Standards state: "Structures shall be located so they are not silhouetted against the sky as viewed from Highway 101, as illustrated in Figure 7-11." Although the language is specific, the Corridor Design Standards also allow for approval of a Minor Use Permit that would allow some silhouetting if the developer meets certain requirements.

The Corridor Design Standards limit building height to 25 feet above natural grade, within the applicable area. This height can be increased by an additional 5 feet for agricultural accessory buildings subject to Land Use Ordinance 22.01.044 and subject to a visual quality study that supports a finding that the buildings would minimize their visual impact on surrounding properties and US 101. The Plan requires a landscaping plan that ensures that 50 percent of the any structure subject to the Corridor Design Standards would be screened.

The Plan includes the following goals relevant to the proposed project:

*Introduction (p. 1-10):*

Environment

1. Promote the protection of natural resources and encourage the following in new development proposals:

Blending of new structures into the surrounding environment and minimal visual impacts in areas considered to be scenic.

*Circulation Element (p. 5-8):*

Incorporates by reference the local objectives stated to implement the Agriculture and Open Space Element regarding scenic corridors.

*Land Use Categories (p. 6-13):*

**Residential Rural**

Character

e. Areas with a rural landscape high in visual quality (for example, woodlands, hills, rock formations, existing agriculture and ag accessory buildings) where clustering of allowed densities to less sensitive portions of a site is encouraged to be required through planning area standards.

## San Luis Obispo County General Plan Agricultural and Open Space Element

Adopted in December, 1998, the San Luis Obispo County General Plan Agricultural and Open Space Element is intended to manage and protect both agricultural and open space resources in the County. Among its overarching goals are the following:

| | |
|---|---|
| Agricultural Goal 2: | Conserve agricultural resources |
| Agricultural Goal 3: | Protect agricultural lands |
| Open Space Goal 1: | Identify and protect open space |
| Open Space Goal 2: | Manage open space |

The following policies are relevant to the proposed project:

**AGP30: Scenic Resources**

a. Designation of a scenic corridor through the public hearing process as described under OSP24, and its subsequent management as described in OSP25, shall not interfere with agricultural uses on private lands.

b. In designated scenic corridors, new development requiring a discretionary permit and land divisions shall address the protection of scenic vistas as follows:

   1. Balance the protection of the scenic resources with the protection of agricultural resources and facilities.

2. When selecting locations for structures, access roads, or grading, the preferred locations will minimize visibility from the scenic corridor and be compatible with agricultural operations.

3. Use natural landforms and vegetation to screen development whenever possible.

4. In prominent locations, encourage structures that blend with the natural landscape or are traditional for agriculture.

**OSP24: Scenic Corridors**

a. Through a public hearing process, establish designated scenic corridors along public road and highways that have unique or outstanding scenic attributes, such as views of dominant hills, mountains, or canyons, views of significant stands of trees or wildflowers, or views of the Pacific Ocean, estuaries, lakes, or streams that parallel the road for a significant distance.

b. The width of a scenic corridor should be based on a site-specific analysis of the viewshed.

c. Designation of a scenic corridor shall not interfere with agricultural uses on private lands, as noted in AGP28.

d. Study the following roads and highways and hold public hearings to determine if and where scenic corridors should be designated.

   * Highway 101

   . . . .

**OSP25: Development and Land Divisions Within Scenic Corridors**

a. Proposed discretionary development and land divisions within scenic corridors shall address the protection of scenic vistas as follows:

   1. Balance the protection of the scenic resources with the protection of biological resources that may co-exist within the scenic corridor.

   2. Locate structures, roads, and grading on portions of a site that minimize visual impact. Locate structures below prominent ridgelines and hilltops so they are not silhouetted against the sky. Encourage architectural/structural solutions that achieve in the least obtrusive manner the property owner's desire to enjoy scenic views.

   3. Use natural landforms and vegetation to screen development. Where that cannot be done, it is preferred to screen development with native vegetation that is

compatible with the scenic resource being protected and does not obstruct public vistas.

4. Design structures with colors that are taken from the natural landscape.

5. Minimize the visibility of utilities from public view corridors and place them underground where feasible.

6. Minimize signs, especially freestanding signs, and locate them so they do not interfere with vistas from scenic corridors. Secure removal of non-conforming signs within scenic corridors as part of the review of discretionary development projects wherever feasible.

## San Luis Obispo General Plan Economic Element

Adopted in October, 1999, the General Plan Economic Element establishes guidelines for economic development in San Luis Obispo County. Policy 1e (Protect open space resources that make SLO County an attractive place for economic development) of the Economic Element includes the following brief discussion:

> The rolling hills and grasslands of San Luis Obispo County, which provide visual relief, abundant recreational opportunities, and agricultural diversity, attract business investment and development by industry decisionmakers who seek a high-quality living environment.

## San Luis Obispo County Code

### *Title 22, Land Use Ordinance*

Adopted in December 1980 and revised in December 1995, the San Luis Obispo County Land Use Ordinance was adopted to "protect and promote the public health, safety and welfare" (Section 22.01.010). Among its specific goals are the following:

a. Implement the general plan and guide and manage the future growth of the county in accordance with that plan;

. . .

d. To protect and enhance the significant natural, historic, archaeological and scenic resources within the county as identified by the county general plan.

The Land Use Ordinance regulates the height of fences, building heights, setbacks, grading, fill, landscaping, etc. The Land Use Ordinance includes the following sections relevant to the proposed project:

Section 22.02.035(h): Visual Analysis: For applications that propose development along significant visual corridors, as identified in the Open Space Element or the Land Use element, a visual analysis shall be required to be prepared by a qualified individual approved by the Office of the Environmental Coordinator.

Section 22.04.120: The purpose of the following sections is to limit the height of structures as needed to: support public safety, protect access to natural light, ventilation, and direct sunlight; support the preservation of neighborhood character; and to preserve viewsheds and scenic vistas. These standards are organized as follows:

22.04.122 Measurement of Height

22.04.124 Height Limitations (limited to 35 feet maximum for agriculture and rural lands)

Section 22.04.180: Landscape, Screening and Fencing: The purpose of landscape, screening and fencing standards are to: provide areas which can absorb rainfall to assist in reducing storm water runoff; control erosion; preserve natural resources; promote, preserve and enhance native plant species; reduce glare and noise; enhance the appearance of structures and property; and to provide visual privacy, while recognizing the need to use water resources as efficiently as possible.

Section 22.122.040.3.d **Project design and processing – Zoning Clearance applications.** Projects proposed in Zoning Clearance applications on sites within or partially within the highway corridors shown in Figures 112-9 and 112-10 shall comply with the following, in addition to other applicable standards:

(1) **Exemption.** An exemption from this standard may be granted if documentation is provided that the project will not be visible from Highway 101. Such documentation shall at a minimum provide topographic, construction and building elevations with preliminary grading and building plans. Submission of a visual analysis of the project's location may be useful to facilitate a decision.

If conformance with these standards would unavoidably impact a biological habitat, the Director, in consultation with the Environmental Coordinator, may waive the applicable standard.

(2) **Site visit required.** Zoning Clearance applications shall be subject to two site visits; one during the time of application review to confirm that conditions on the site correspond to information provided in the

application, and the other prior to final building inspection to confirm that the building and site improvements agree with the approved plan. (Planting of required landscaping improvements may be delayed up to 90 days after final building inspection when installation is guaranteed by bond.)

(3) **Highway Setback.** Where possible, residential buildings, residential accessory structures and agricultural accessory structures described in Subsection A.3.c shall be set back 100 feet from the Highway 101 right of way as shown in Figure 112-11. If there is no feasible development area outside this setback, the project shall be located on the rear half of the property and shall provide a landscaping screen to provide 80 percent coverage at plant maturity, to be verified by a landscape architect, landscape contractor, certified nurseryman or other qualified individual approved by the Director [Added 1997, Ord. 2800]

(4) **Ridgetop development**. Structures shall be located so they are not silhouetted against the sky as viewed from Highway 101, as illustrated in Figure 112-12. [Added 1997, Ord. 2800]

(5) **Slope limitation**. Grading for structures and roads shall occur on slopes that are 20 percent or less, except on the west side of Highway 101 where more restrictive standards may apply as shown in Figure 112-13. Zoning Clearance is required for development on slopes of 20 percent or less, and Minor Use Permits on slopes greater than 20 percent. [Added 1997, Ord. 2800]

(6) **Building features**. Maximum building height is 25 feet above natural grade, as illustrated in Figure 112-14. This height limit may be increased an additional five feet in Section 22.70.030 subject to a visual study that supports a finding that buildings will have appropriate forms to minimize their visual impact on surrounding properties and Highway 101. The additional height shall be for architectural features such as cupolas or gabled vents on no more than one-third the length of any building.

Building architecture shall include roofs with a minimum pitch of 3:12 and articulated wall surfaces at least every 30 feet. Where possible, agricultural accessory buildings within 300 feet of Highway 101 shall have service entrances oriented away from view of Highway 101. Building color shall be similar to surrounding natural colors that are no brighter than 6 in chroma and value on the Munsell color scale on file in the Department. [Added 1997, Ord. 2800]

(7) **Landscaping.** A landscaping plan is required that will ensure at least 50 percent screening of the structure at plant maturity as shown in Figure 112-15. Landscaping shall include mitigation planting or seeding for graded cut and fill areas in compliance with Chapter 22.16.

Section 22.112.040.3.e **Project design and processing – Discretionary permit applications.** Minor use Permit approval is required for projects subject to Subsection A.3.d that are unable to meet the requirements for a Zoning Clearance in standards A.3.d(3) through d(7). Minor Use Permit and any Conditional Use Permit applications that may otherwise be required by this Title shall include a visual analysis that is prepared by a registered architect, landscape architect or other qualified individual acceptable to the Environmental Coordinator. The visual analysis shall be utilized to determine compliance with the intent of Subsection A.3.d and the following:

(1) Locate development, including access roads, in the least visible portion of the site consistent with the protection of other resources, as viewed from Highway 101, unless mitigated to insignificant levels. Use existing vegetation and topographic features to screen development from view as much as possible.

(2) Minimize grading for both structure and roads that would create cut and fill slopes visible from Highway 101.

(3) Minimize building height and mass by using low-profile design where applicable. Minimize the visual impacts of buildings by using colors that blend with surrounding natural colors and/or screen the building from view.

(4) Provide landscaping to screen and buffer both road and building development with native or drought-resistant plants, including the extensive use of trees and large-growing shrubs. . . .

Section 22.112.040.3.f (1) **Clustering encouraged.** Residential land divisions are encouraged to be clustered in compliance with Section 22.22.140, unless standard subdivision design can include clustered residential building sites that will be in equal conformity with Subsection A.3.e. Application review shall determine whether the proposed parcels or building sites are designed so that residential buildings, accessory buildings and roads will comply with Subsection A.3.e, in addition to other applicable standards.

***Guideline:*** *Retain land in open space in new land divisions that will preserve existing views of land subject to the Highway 101 corridor design standards.*

(2) **Open space parcel incentive.** Cluster divisions of land that are located within the Highway 101 corridor design standards may utilize an open space parcel area that is smaller than required by Section 22.22.140. The size of the area may be determined by a visual analysis of the area subject to the Highway 101 corridor standards as part of the subdivision review process. The analysis shall identify the area that is necessary to maintain open space views of features identified in the Highway 101 corridor design standards.

# Impacts and Recommended Measures

## Significance Criteria

Impacts from project-related development on aesthetics would be considered significant if:

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

## Impacts and Mitigation Measures

**Impact Visual-1. Development of the project could potentially have an adverse effect on a scenic vista. (Potentially Significant)**

US 101, although a potentially eligible scenic highway, is not now a designated state scenic highway in the vicinity of the site. The corridor along US 101 is not specifically designated as a scenic corridor as part of the San Luis Obispo County General Plan, and none of the proposed development is located within a scenic corridor or viewshed identified by the General Plan. However, a portion of the project site is located within the area subject to Section 22.112.040.3 *Highway 101 Corridor Design Standards* (San Luis Obispo County Code, Title 22), as described by Figure 112-9 of the standards. Because a portion of the site is within an area subject to the Corridor Design Standards, the entire project is subject to the standards (San Luis Obispo County Code, Title 22).

Section 22.112.040.3 allows an exemption for any project not visible from US 101. However, if visible, the project must be set back 100 feet from US 101, and the provision of a landscaping screen that would screen 80 percent of the development at plant maturity is required. Silhouetting *on ridgetops* is allowed as long as it does not silhouette against the sky *as viewed from US 101* [emphasis added]. Buildings subject to the US 101 Corridor Design Standards are limited to a maximum building height of 25 feet above the natural grade in the applicable area. A landscaping plan is required to ensure that 50 percent of the structure would be screened. The proposed development proposed as part of the project is set back more than 100 feet from US 101 101.

The proposed development would result in new structures (where there are currently no structures) in a location, parts of which are visible, along northbound US 101 (for less than two minutes at 60 miles per hour) and southbound US 101 (less than one minute at 60 miles her hour) in a foothill area. Using the approach used in the Edna Ranch EIR, the US Fish and Wildlife Service/Lawrence Headley guideline, and using the most applicable category (none actually fit the project the site), the project site could be considered to be common view (20-60% slope, small ridges, knolls, canyons) that is located along a primary travel route in which fewer than ¼ of the users would have a major concern for the visual quality of the site, which is characteristic of the region because the view passes so quickly.[4] After development, the project site would still be considered a common view that is located along a primary travel route in which fewer than ¼ of the users would have a major concern for the visual quality of the site, which would be characteristic of the region. Because of intense development south and west of the project site, as well as the development of other residences located on or near agricultural land in this area, the project site would present what would also be considered a common view (although, once again, the categories do not quite fit this site). In this case, development of the site is very near other more dense development, although uninterrupted views of the foothills are available to the north and south. The Edna Ranch EIR, which was certified, offered mitigation measures that included the dark use of colors that would decrease the visual impacts of the homes. The Edna Ranch EIR also required a landscape plan, moving one home below the ridgeline and limiting its height, and minimizing cut and fill for roadways and emergency access.

Simulations were produced to show views of the project site from US 101. View 1 (Figure 3) shows before and after views (with required landscaping) of the site from US 101, as the driver moves northward. The span of View 1 includes frontage lots in three clusters (see Figures 2 and 3), the existing residence, and approximately one-half of a fourth cluster, located immediately northeast of the wine tasting facility. However, only a portion of that view span can actually be seen from northbound US 101, and only glimpses of the proposed homes can be seen above and between the proposed landscaping that is required for screening purposes.

Further northward along US 101 (see Figures 2 and 4), the span of the view remains nearly the same as View 1, but includes less of the cluster near the wine tasting facility, and if the passenger or driver of a passing vehicle looks slightly over their right shoulder, more of the cluster along the rocky knoll is visible.

[4] The site has a perimeter along US 101 of over 7,000 feet or over 1.3 miles. Passing the site at approximately 60 miles per hour, a northbound vehicle would pass the site in slightly over 1.3 minutes.

From Upper Los Berros Road, (see Figure 5) the changes are related to the proposed new roadway into the site and a few more trees along low hilltops, which appear to be natural (see the treetops along the more mountainous area in the background).

None of the proposed homes visible from either US 101 or Los Berros Road are located on ridge tops; building on ridge tops is specifically prohibited by County Code 21.030.010(c)(5)(D)(8). In addition, building heights are specifically regulated by County Code 22.04.124 and limited to 35 feet on agricultural and rural lands to "support public safety, protect access to natural light, ventilation, and direct sunlight; support the preservation of neighborhood character; and to preserve viewsheds and scenic vistas."

There is no requirement under CEQA that views of roadways or buildings be hidden, but that views be minimized. The requirements for screening ensure that roadway cuts and views of buildings are minimized.

As already noted, none of the structures are technically located on a ridge top. Silhouetting is a matter of standing in just the right spot on a public highway, which is prohibited, or on private property, which is not a view normally considered under CEQA.

The project would include facilities associated with wastewater treatment, including a building plant, underground storage tanks, and treatment ponds. Two of the treatment ponds would be located near Los Berros Creek, and at ground level tucked into an area sheltered by the topography and its angle to US 101, would not be visible from US 101. Other facilities are hidden at the base of a knoll, away from US 101. Small pump lift stations, are located throughout the developed area, but are hidden by proposed residential structures. All pipes would be located underground within the proposed street network.

Figure 3 shows that when the project is developed, the landscaping would be visible, and only a glimpse of a building would be present. The landscaping is distant and is not prominent, but appears to be a closer version of the existing trees seen clearly on the ridge in the distance. Figures 4 and 5 show more distant landscaping that appears to be an extension of the existing greenery already growing along the hill and mountain ridges.

Residential Rural Policy Character (e) (see Framework for Planning (Inland), p. 6-13) implies that the design standards may be required for projects such as this, even though this site is not a designated viewshed, nor part of a designated scenic highway. Nearly all of the sites were identified by the County as having significant visual quality impacts under CEQA. San Luis Obispo County Code Section 21.030.010(c)(5)(D)(8) states that projects shall not be located along ridges so that they will not silhouette against the skyline, implying that a partial silhouette could be permissible. In any case, none of the building sites are located along ridges.

Even though the project development would not be located along a ridge top and would not be located within an applicable scenic corridor, and even if building heights would be limited to 25 feet, implementation of the following recommended measure would further ensure that the potential for silhouetting is minimized.

**Recommended Measure Visual-1**: The following measures shall be implemented:

- Landscaping at entrance gates and common buildings. *[Mitigation Measure from Edna Ranch EIR]*

- Location of each home site employing existing, natural visual barriers to minimize impacts on view of the site from US 101. *[Mitigation Measure from Edna Ranch EIR]*

- The County shall approve a landscape plan with elements, such as material, design, and scale, that are in accordance with the rural area, limit topographic alteration, and preserve natural and other mature trees. *[Mitigation Measure from Edna Ranch EIR]*

- The applicants will ensure that the angle of any graded slope shall be gradually adjusted to the angle of the natural terrain to minimize alteration of natural landform and reduce erosion. *[Mitigation Measure from Edna Ranch EIR]*

- The applicants shall minimize the use of non-native plants in home site landscaping. *[Mitigation Measure from Edna Ranch EIR]*

- The applicants will use appropriate soil conservation practices to minimize erosion from areas exposed by grading or agricultural practices in order to minimize visual impacts of grading. *[Mitigation Measure from Edna Ranch EIR]*

- Within the CC&Rs for the Homeowners Association established for the site, a color palette will be required that uses natural colors on the homes and other buildings. Following the concept that dark colors recede and light colors stand out, the buildings color palette should emphasize darker, subtler colors that will decrease the visual impacts of the homes. Roof materials will be darker in color and shade. *[Mitigation Measure from Edna Ranch EIR]*

- The applicants shall minimize cut and fill for project roads, private drives, and emergency access roads. *[Mitigation Measure from Edna Ranch EIR]*

- The applicants shall set all buildings 100 feet or more from US 101. *[Included in the Highway 101 Corridor Standards]*

- The applicant shall not build structures so that they are silhouetted against the sky as viewed from Highway 101. *[Included in the Highway 101 Corridor Standards]*

- The applicant shall construct buildings, in the applicable areas, to a maximum height of 25 feet above natural grade with minimum roof pitch of 3:12 and articulated wall surfaces at least every 30 feet. Building color, in the applicable area, shall be similar to surrounding natural colors that are no brighter than 6 in

chroma and value on the Munsell color scale on file in the Department. *[Included in the Highway 101 Corridor Standards]*

- The applicant shall ensure at least 50 percent screening of all structures at plant maturity. *[Included in the Highway 101 Corridor Standards]*

**Significance after Mitigation:** With the implementation of Recommended Measure Visual-1, the potential for silhouetting against the sky would be minimized and the impact would be less than significant.

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**Impact Visual-2: The proposed development could substantially degrade the existing visual character or quality of the site and its surroundings. (Less than Significant)**

The proposed project would change visual references associated with the project site, but would not rise to the level of substantially degrading the character or quality of the site. As shown in Figures 3, 4 and 5, the project would result in barely discernible changes to the landscape. Residences on large vineyard properties, particularly the size of the Laetitia vineyard, typically do not dominate the landscape, but are instead secondary to the depth and size of the vineyards which follow the contours of the existing topography. Views of the dominant mountains would remain untouched, while the foothills would appear to have more landscaping, and to be part of a distant, barely discernible view that blends in with other vegetated areas in the distance. This type of landscape is typical throughout California in wine producing areas, and the presence of barely discernible clusters would not be considered substantially degrading to either the character or quality of the site and its surroundings.

The scenic quality of the site is attributable to the combination of the rolling hills, the mountains, the vineyard operations (which follow the contours of the site topography), and the rocky outcrops. Unlike nearby small fenced agricultural operations that include paddocks, or adjacent estates constructed on knolls with clearly visible roadways up the hillside, the project would preserve much of the scenic value of the site by clustering development and leaving most of the land to the vineyard's agricultural operations.

**Mitigation:** None required.

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**Impact Visual-3: The proposed development would result in new exterior lighting that could result in glare and could affect daytime and nighttime views at the site and in the vicinity. (Potentially Significant)**

The proposed development would result in buildings that could produce glare during the daytime and could produce an overarching "glow" at cluster locations during the night that could affect views of the site, setting it apart from the rest of the area. (Although unlit, and apart from the occasional tower with warning lights, the outline of the mostly unlit mountains is generally

discernible against the nighttime sky.) Proposed development would include limited nighttime agricultural operations that would use tractors with lights.

Daytime glare can be created by the reflection of sunlight in windows, metal used on rooftops or exterior drainage systems along the roofline or on exterior walls, or with the use of metal on building exteriors (doors, window casings, etc.). Landscaping would also reduce the effect of exterior lighting during nighttime hours. Implementation of Recommended Measure-1, described above, and Recommended Measure 2, provided below, would reduce the effects of light and glare on daytime and nighttime views.

Implementation of the measures listed below as part of Recommended Visual-2 would reduce the potential for daytime or nighttime impacts to views of the site to a less than significant level:

> **Recommended Measure Visual-2:** The proposed development shall include the following design standards to reduce the potential for daytime or nighttime glare or lighting that would reduce the quality of views of the site:
>
> - The developer shall use exterior building materials that include, but are not limited to painted metals, tile, non-glare glass, stucco, vinyl, wood, or other materials that do not reflect sunlight, for windows, roof cladding, eaves, building trim, drainage, or any other exterior building element.
> - The developer shall use lighting bollards and shielded lights, and other state-of-the art lighting for roadways to eliminate, to the extent feasible, spillover light and all-night street lighting.
> - The developer shall use shielded lights along building exteriors, with sensors or other state-of-the art exterior lighting designed to reduce light spill at night.
> - The developer shall install the minimum number of energy-efficient exterior lights needed for safety and emergencies, producing the minimum of amount of spillover light.
> - The developer shall install timers for exterior lights so that no lighting is on during daylight hours.
> - The developer shall prohibit the use of outdoor blinking lights.

**Significance after Mitigation**: The implementation of Recommended Measure Visual-2 would reduce potential spillover light and the potential for daytime glare to a less than significant level.

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ESA is unaware of any cumulative impacts related to new proposed or reasonably foreseeable projects that are anticipated in the future.

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# References

California Department of Transportation (Caltrans), *California Scenic Highway Program*, http://dot.ca.gov, accessed December 6, 2006.

County of San Luis Obispo, *Agriculture & Open Space Element*, December 15, 1998.

County of San Luis Obispo, *Framework for Planning (Inland)*, as revised to January 14, 1999.

County of San Luis Obispo, *Housing Element of the San Luis Obispo County Housing Element*, amended to July 20, 2004.

County of San Luis Obispo, *Economic Element of the San Luis Obispo County General Plan*, October 19, 1999.

County of San Luis Obispo, Title 21 of the San Luis Obispo County Code: *Real Estate Property Division*.

County of San Luis Obispo, Title 22 of the San Luis Obispo County Code: *Land Use Ordinance*, revised December 5, 1995.

## Responses to ESA's Technical Studies (LV-3)

**Section 1 – Wastewater Treatment**

This section references the previous project proposed by the applicant, which included individual septic systems. Impacts specific to this superseded method of wastewater disposal would be avoided, as noted in the ESA technical study.

**Section 2 – Cultural Resources**

As noted in the Cultural Resources Reports Summary (Morro Group; January 30, 2007), Table 2, recommended preliminary mitigation includes avoidance by design. The summary notes that carbon dating was in process, and the final results of the carbon dating and final Phase Two report would be complete in April 2007. Avoidance by design is recommended in the EIR; however, as noted, the County cannot include revisions to the tract map as conditions of approval.

**Section 3 – Traffic and Circulation Study**

At the time the Traffic and Circulation Study (ATE, January 3, 2007) was submitted to the County and Morro Group, the report was submitted to Fehr and Peers, the EIR transportation and circulation consultant. Upon review of the report, Fehr and Peers (July 11, 2007) noted the following:

- The ATE report does not include the 75-room hotel (dude ranch) in their project trip generation estimates.
- The intersection analysis does not use a peak hour factor, which accounts for variations in traffic within the peak hour. It is standard practice to apply a peak hour factor based on the collected count data.
- The freeway analysis uses an LOS D threshold (based on the Transportation Concept Report for Route 101), while our report uses a LOS C threshold (based on Caltrans' Traffic Impact Study Guidelines). This is an internal inconsistency on Caltrans' part. Our recent experience with Caltrans District 5 in SLO indicates that they are adhering to the LOS C threshold.

Please refer to Final EIR Section V.N. Transportation and Circulation and responses to the comment letters submitted by ATE.

**Section 4 – Noise Technical Study**

*Response to Impact Noise-1*

As noted in Figure 3 of the ESA technical study report, the transportation noise threshold for residential land uses is 60 decibels. Based on the County Noise Element (May 5, 1992), transportation noise sources include: "traffic on public roadways, railroad line operations and aircraft in flight". Stationary noise sources are defined as "any fixed or mobile source not preempted from local control by existing federal or state regulations, excluding passenger

vehicle movements in parking lots", including "industrial and commercial facilities and vehicle movements on private property". Agricultural operations are listed as a major stationary noise source in Section 3.6.17 of the County Noise Element Technical Reference Document. The EIR correctly lists agricultural operations as a stationary noise source (Final EIR Section V.I.1.b.2) and identifies the day and night hourly, maximum, and maximum-impulsive noise thresholds for residential land uses (refer to Table V.I.-8 in the Final EIR).

As noted in the ESA noise technical study, 24-hour noise measurements taken at Lots 58 and 46 were 54 and 53 dBA, respectively. Table 1 (ESA) notes that the hourly Leq values ranged from 43 to 54 (Lot 58) and 42 to 50 (Lot 46). Based on these measurements, noise exposure at Lot 58 exceeds the daytime hourly stationary noise threshold of 50 dB by four decibels. As noted in Figure 1 of the ESA noise technical study, as measured from Lot 58, the maximum noise measurement exceeded 70 dB at approximately 6:00 A.M. and 10:00 A.M. during the 24-hour measurement period, which exceeds both the day and night stationary noise threshold. The ESA noise technical study does not differentiate the noise generated by traffic on Highway 101 and stationary noise generated by the nearby winery operation. Both the Final EIR (Section V.I.5.a.2) and the ESA noise technical study note that transportation-related traffic generated by traffic on Highway 101 would not exceed thresholds for residential use on the project site.

The Final EIR (Sections V.I.5.a.4 and V.I.5.a.5) identifies a significant noise impact associated with operation of the winery and operation of agricultural equipment. Noise measurements obtained outside of the peak crush season ranged from 43 to 46 dBA (hourly). Based on the noise measurement of equipment typically used during agricultural operations (refer to Table V.I.5), the stationary noise threshold would be exceeded during both day and night hours. The EIR correctly identifies this as a significant and unavoidable impact, as this impact could be mitigated by an alternative subdivision design and implementation of adequate buffers between potentially incompatible land uses.

The ESA technical study identifies a mitigation measure (Noise-1), which requires limitations and controls on the existing vineyard and winery operation. The agricultural operation is not a discretionary land use, and pursuant to the County Right to Farm Ordinance and the Agriculture Element of the County General Plan Policy AGP3, "the use of real property for agricultural operations is a high priority and favored use". As noted in the Appendix D of the Agriculture Element, the County recommends buffers between potentially incompatible land uses in order to minimize conflicts and adverse effects to agricultural operations, and the "County does not have the authority to restrict the agricultural land use in order to accomplish the recommended buffer".

*Response to Impact Noise-2*

Please refer to Section V.I.5.a.1 of the Final EIR, which includes an analysis of short-term construction related impacts. Identified mitigation measures are similar to measures recommended in the ESA Noise Technical Study.

*Response to Impact Noise-3*

The Final EIR (Section V.I.5.a.5) and ESA Noise Technical Study identify potentially significant impacts related to noise generated by agricultural operations exceeding acceptable thresholds for residential land uses.

The ESA Noise Technical Study notes that pursuant to the Right-to-Farm Ordinance, residents would be provided a disclosure document regarding the agricultural operations, and this disclosure would mitigate potential impacts to less than significant. It is the opinion of the EIR consultant and the County that disclosure alone would not mitigate this impact, as residents may complain to the agriculture operator, and agricultural operations may be adversely affected by modified practices.

Section V.I.5.a.4 of the Final EIR and the ESA Noise Technical Study both note that operation of the winery would generate noise exceeding allowable thresholds for residential uses, resulting in a potentially significant impact. The ESA Noise Technical Study includes a recommended mitigation measure (Noise-3b), which consists of the construction of a sound wall next to the existing entrance road and parking area, or two sound walls located on the southern side of Lots 49 and 58. This recommendation has been added to the Final EIR (refer to NS/mm-2) to address noise generated within the winery; however, this measure would not fully mitigate potential noise impacts because the residential lots would be located within existing agricultural areas and sensitive receptors would be exposed to day and night-time noise exceeding thresholds identified in the Noise Element.

The ESA Noise Technical Study notes that pursuant to the Right-to-Farm Ordinance, residents would be provided a disclosure document regarding the agricultural operations, and this disclosure would mitigate potential impacts to less than significant. It is the opinion of the EIR consultant and the County that disclosure alone would not mitigate this impact, as residents may complain to the agriculture operator, and agricultural operations may be adversely affected by modified practices.

The Final EIR (Section V.I.5.a.6) assesses potential noise impacts resulting from operation of the wastewater treatment facility and associated infrastructure. The Final EIR determined that these impacts would be less than significant.

*Response to Impact Noise-4*

Both the Final EIR (Section V.I.5.a.3.b) and the ESA Noise Technical Study document existing traffic noise levels exceeding 60 dB on North Thompson Road. Noise measurements conducted for the EIR measured a noise level of 68.1 dBA, and the ESA Noise Technical Study documents a noise level of 62.3 to 63.5 dBA. These documented existing noise levels exceed the County's Noise Element threshold of 60 dBA.

The EIR notes that the proposed project would increase the noise level on North Thompson Road by 1.2 dB. The ESA Noise Technical Study documents that the increase in noise would be 0.5 to 0.9 dB. Although this increase may not be noticeable by existing residents along North Thompson Road, the project would further increase transportation-related noise levels exceeding County thresholds. Based on further review of Federal Highway Administration (FHWA) guidance documents regarding transportation-related noise, noise increases of less than 3 dB are

barely perceptible by the human ear. Therefore, based on further review of substantial evidence provided by the FHWA document, this impact has been modified to less than significant.

*Section 5 – Hazards*

The ESA Technical Study notes that the applicant proposes to install crash gates at the project site, and notes that the gates would be installed in accordance with all County and California Department of Forestry standards for emergency use only. The section also notes that all roadways will be constructed in accordance with County standards. Since the submittal of the ESA Technical Report, the applicant has proposed a guarded gate station to further restrict vehicles from use of Laetitia Vineyard Drive during non-emergency situations. While CAL FIRE has indicated acceptance of a guarded gate, Caltrans has identified significant concerns that the gate would not fully restrict traffic trips, and has noted that the existing encroachment permit for the Laetitia Vineyard Drive/U.S. 101 intersection does not permit use of this intersection beyond existing uses (winery). Therefore, identification of Laetitia Vineyard Drive as a secondary access route is not considered a feasible option by County Staff.

As noted in the EIR, the proposed project is inconsistent with CAL FIRE standards for secondary access and maximum road lengths (Final EIR Section V.G.5.a.3). As documented in the Final EIR, based on personal consultation with CAL FIRE (Rob Lewin, 2007), crash gates are not acceptable because they may present unsafe barriers to ingress and egress in an emergency. In addition, due to the proposed residential lot size, a secondary access road is required, which allows free-flow access. As noted in the Final EIR, internal access roads exceed road lengths for one-acre residential lots. Therefore, as proposed, the project is not consistent with CAL FIRE regulations and guidelines. The County recognizes that there are alternatives that will be considered by the decision makers (i.e., gate station manned by a guard).

**<u>Section 6 – Agricultural Buffers Technical Study</u>**

*Response to Impact AG-1*

The ESA Agricultural Buffer Technical Study notes that the underlying soils are of lesser quality for agricultural production, and extensive efforts would be required to create the new agricultural land similar to the current vineyards. The ESA study concludes that "the proposed project would not impair agricultural use of the site, but rather would enhance the agricultural use of the site".

As shown on Final EIR Figure V.B.-1 and Table V.B.-3 of the EIR, underlying soils primarily consist of Class 3, 4, 6 and 7 soils. While the Class 4, 6, and 7 soils are not considered "prime" soils, these soil types are suitable for productive vineyards, as demonstrated by the existing vineyard operation onsite. The proposed project includes the creation of new vineyard areas; however, as noted in the EIR, the permanent loss of existing, productive Farmland would adversely affect agricultural resources and would set an adverse precedent in the County (refer to Final Section V.B.5.a.1).

*Response to Impact AG-2*

The ESA Agricultural Buffer Technical Study states that the County Agricultural Buffer Policies (2002) "do not require imposition of agricultural buffers for residential uses adjacent to agricultural uses". Based on consultation with the County Agriculture Department, this interpretation is incorrect, because buffers are identified in the Agricultural Element as a means to avoid or minimize potential land use conflicts that may in turn result in reduced agricultural productivity.

As documented in the Final EIR (Section V.B.5.a.2), the proposed buffers are inadequate to avoid land use conflicts between the agricultural and residential land uses. The mitigation measures proposed in the ESA study include restrictions on agricultural operations specifically stated to "minimize potential disturbance of residents". The ongoing agricultural use is not considered a discretionary use, and the County discourages placement of restrictions or conditions of approval on agricultural uses. The applicant may, at their discretion, implement agricultural practices of their own free will; however, the County will not impose limitations beyond state and federal regulations. Both the ESA study and the EIR require a disclosure statement regarding the County Right-to-Farm Ordinance; however, this disclosure alone would not mitigate potential land use conflicts, and potential complaints from residents and the Homeowner's Association may result in actions taken by the vineyard manager, which may reduce productivity of vineyards to remain.

*Response to AG Impact-3*

As noted in the EIR, buffers between residential and agricultural land uses are recommended to allow agriculturalists to continue historic agricultural practices. Buffer distances are recommended to avoid or minimize potential land use conflicts and incompatibilities due to noise, odor, use of heavy equipment on access roads, trespass, and use of pesticides and fertilizers (refer to Final Section V.B.5.a.2). The ESA technical study identifies potential impacts related to litter, damage from pets, theft/vandalism, imported pests, indirect residential growth inducement, and impacts to residences. Impacts to residences was expanded in AG Impact-4 below.

*Response to AG Impact-4*

The ESA technical study identifies a potentially significant impact related to the effects of agricultural uses on the proposed residential uses, including pesticide drift, noise/nighttime light, odors, dust, pests, and agricultural burns. As noted in both the ESA study and the EIR, the proposed method for pesticide application is via spraying. The ESA technical study notes that the "reduced width for the agricultural buffers would incrementally increase the potential for residents to be exposed to pesticide drift". Best management practices are recommended to minimize the effect of the agricultural operation on the residences, including disclosure to the residents, and restrictions on spraying operations.

As noted above, the applicant may, at their discretion, implement agricultural practices of their own free will; however, the County will not impose limitations beyond state and federal regulations. Implementation of the disclosure document alone would not mitigate potential land use conflicts, and potential complaints from residents and the Homeowner's Association may

result in actions taken by the vineyard manager, which may reduce productivity of vineyards to remain.

It is the opinion of the EIR consultant and the County that the appropriate method for avoidance of land use conflicts is to implement an adequate buffer between land uses, and place the onus of mitigation on the residential use to ensure that the historic agricultural operation remains at the same or better level of productivity.

**Section 7 – Visual Quality Technical Study**

The ESA Technical Study includes other project examples in the County; however, the EIR must include a site specific and project specific analysis of potential visual impacts. The EIR analysis considers the location of the project including existing visual character and use of County scenic resource overlays (Highway Corridor Design Standards, Sensitive Resource Area) as indicators of visual significance. The methodology for the visual analysis included identification of key viewing areas, use of pylons to accurately establish the location and height of proposed structures, and preparation of photo-simulations to reasonably present the future conditions and changes to the visual setting upon implementation of the project. These simulations consider that the project would be constructed consistent with applicable codes and standards. In the event compliance with these codes and standards would not fully mitigate potential impacts, the CEQA process allows for identification of additional mitigation measures.

The EIR consultant and County Staff respectfully disagree that the visual setting of the project site is considered "common", and maintains that the setting is highly scenic and prominently visible as seen from U.S. Highway 101 and identified public roadways. The proposed project would result in a change in visual character from agricultural and rural to residential as seen from identified key viewing areas, which is an applicable threshold of significance under CEQA. This impact could be mitigated through redesign of the proposed project, including locating proposed residences outside of the Newsome Ridge Sensitive Resource Area overlay, locating structures at lower elevations on the project site, and incorporation of standard screening and color/materials standards to minimize visibility and encourage visual compatibility.

**JOHN C. JANNECK**
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October 31, 2008

Mr. Brian Pedrotti
Project Manager
County Planning and Building Department
976 Osos Street, Room 200
San Luis Obispo, California 93408-2040

Re: **Laetitia Ag Cluster**
**Process Abuse**

Dear Brian:

I am writing to you in connection with the Laetitia Draft Environmental Impact Report. Please include this letter in the record and kindly respond to it. **LV-4-1**

The Laetitia Draft EIR is the latest effort made by the County of San Luis Obispo Department of Planning and the EIR consultant (The Morro Group) to undermine the approval of the Laetitia Ag Cluster through the deliberate distortion of factual accuracy and flawed CEQA interpretation.

This came to light on March 21st, 2006 [Exhibit II] and April 19th, 2006 [Exhibit III] in James Caruso's letter to Allison Donatello and Martha Neder's letter to Allison Donatello. The subsequent events up until May 30th, 2007 are set out in Exhibit I, "Opening Statement." These events came to a head on May 30th, 2007 and are reflected in Exhibit IV, "Laetitia County Meeting." The Laetitia Draft EIR was released September 22nd, 2008, at least nine months behind schedule.

The Draft EIR did not include, or even refer to, the additional work performed by Environmental Science Associates (ESA) as provided in the May 30th, 2007 meeting. All of our consultants have reviewed the project and the DEIR and are resubmitting accurate factual interpretation with appropriate CEQA analysis. **LV-4-2**

The current action of the County and their EIR consultant has resulted in intolerable costs, loss of valuable time, and untold damages to the profitability of the Laetitia Ag Cluster. I can only conclude that there are dark forces within the County of San Luis Obispo that will stop at nothing, whether by delay, factual distortion, or flawed CEQA interpretation, to undermine the implementation of the Laetitia Ag Cluster. **LV-4-3**

John C. Janneck

Enclosures (Exhibits I, II, III, IV)
cc: Supervisor Katcho Achadjian
Supervisor Harry Ovitt
Kami Griffin
Warren Hoag
John Nall
Vic Montgomery
Allison Donatello
Ken Bornholdt, Esquire
Wendy Lockwood
Deborah Kirtman
Bill Henry
Shawna Scott

**LV4**

**1**

**EXHIBIT I**

**OPENING STATEMENT**
**MAY 30, 2007**

On January 5th, 2004, the Laetitia Ag Cluster application was submitted to the County. The application fee paid was $36,228.00. Thirty business days later, the application was deemed complete. On January 23rd, 2004, the County began preparation of NOP. A fee in the amount of $5,940.00 was paid. The EIR kick-off meeting was held on September 28th, 2005, one and three-quarter years after the cluster application was filed. The EIR fee paid was $272,592.50. The County required further studies of the Laetitia cluster on April 19th, 2006. Laetitia paid $108,722.50 on June 21st, 2006 for cultural resource studies, and on September 14th, 2006, $45,540.00 was paid for peer review of the wastewater treatment system. LV-4-4

Laetitia first got wind of trouble in the March 21st, 2006 letter from James Caruso to Allison Donatello of RRM discussing potential EIR problems. The trouble was amplified in Martha Neder's letter of April 19th, 2006 to Allison Donatello of RRM. The April 19th letter gave Laetitia the ultimatum of relocating and redesigning **70 percent** of the project. In a meeting on April 27th, 2006, Martha Neder and Shawna Scott were adamant on the redesign option and refused to share the details of the alleged Class 1 impacts for the applicant's review. Only by the insistence of John Nall at the meeting, a summary of the impacts was prepared and given to Laetitia. Martha Neder and Shawna Scott reluctantly agreed. In a letter dated June 1st, 2006, Martha Neder forwarded to Laetitia a grid analysis of the potential 33 Class 1 impacts, which were drafted by the Morro Group and dated May 16th, 2006.

The Laetitia team was shocked, to say the least. We couldn't believe that Martha Neder of the County and Shawna Scott of the Morro Group were demanding redesign without allowing the applicant to review the results. The County allegation that RRM would design and submit a project with over 33 potential Class 1 impacts left me in a state of disbelief. We wondered how could the County and RRM be so far apart?

We decided to go back to square one and review everything we did. Let the chips fall where they may. RRM began a detailed review of all of the entire Laetitia cluster submission. Laetitia instructed its counsel, Ken Bornholdt, to hire independent consultants to review everything submitted by RRM.

Bornholdt engaged ESA, a national planning firm with experience in San Luis Obispo County, and Wendy Lockwood, formerly of ESA and now an independent consultant. The engagement of the additional consultants clearly provided that their opinions would be **independent,** whether or not it adversely affected the Laetitia project.

The results of over a year of review are unambiguous. RRM, ESA, and Wendy Lockwood agree that there are certainly not 33 Class 1 impacts. In fact, there may not be any Class 1 impacts that cannot be mitigated to a lesser significance. Major redesign or relocation is not necessary. The Laetitia response to the Neder letter of June 1st, 2006 has been circulated and reflects the combined views of RRM, ESA, and Wendy Lockwood.

The Laetitia team concludes that the pre-Draft EIR incorrectly interpreted the level of significance of potential Class 1 impacts, assumed incorrect information as factual, ignored established County precedent from other approved cluster projects, and failed to implement established goals of the General Plan encouraging cluster development.

2

LV-4-5

**EXHIBIT II**

SAN LUIS OBISPO COUNTY
DEPARTMENT OF PLANNING AND BUILDING

VICTOR HOLANDA, AICP
DIRECTOR

March 21, 2006

| Post-it® Fax Note 7671 | Date 3/23 | # of pages ▶ 2 |
|---|---|---|
| To John Fonnesbeck | From Lee Montgomery | |
| Co./Dept. | Co. | |
| Phone # | Phone # | |
| Fax # 310-858-7731 | Fax # | |

Alison Donatello
RRM Design Group
3765 S. Higuera St; Ste 102
San Luis Obispo, CA 93401

SUBJECT: LAETITIA AG CLUSTER (DRC2003-0001)

Dear Ms. Donatello:

The subject project's Environmental Impact Report (EIR) is under way. The consultant, Morro Group, has informed this Department that several potential Class I impacts have been identified. In addition, based on the results from preliminary studies, additional surveys and reports are necessary prior to completion of the DEIR. As a courtesy, we have described the potential impacts below:

1. Aesthetics
   - Significant change to visual character of the area
   - Inconsistent with the SRA designation and Highway 101 Corridor Design Plan

2. Agricultural Resources
   - Lack of adequate buffering between agricultural and residential uses
   - Significant agriculture-residential interface
   - Conversion of agriculture resources to non-agricultural use
   - Inconsistent with Ag and Open Space Element buffer policy

3. Cultural Resources
   - Significant archaeological sites located within proposed development areas
   - Additional archaeological studies needed
   - Potentially significant historical sites located within proposed development areas
   - Additional historical evaluation needed
   - Paleontological resources study needed

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LV-4-5 (cont'd)

4. Traffic/Circulation
   - Secondary access use of Laetitia Drive approach to US Highway 101 (conflict with 5 below)
   - Deficient road and highway conditions

5. Public Safety (Fire)
   - Exceeds dead end road length with locked gate
   - Emergency access must be open (conflict with 4 above)

6. Wastewater
   - Inadequate percolation or soils.
   - Proposed wastewater system is also problematic (growth inducing)
   - Current project description incomplete. If the proposed wastewater treatment plant remains part of the project description, then additional information will be required to finalize the revised project description. The wastewater treatment plant also represents a substantial change to the project. The Notice of Preparation will be revised and recirculated. The cost estimate and EIR consultant contract will also be revised.

The consultant will continue to work on the document. However, you may wish to discuss possible mitigation measures and/or alternatives to the proposed project with Department and other County staff.

Please be advised that Martha Neder, Senior Planner, has been assigned as Project Manager as of March 20, 2006. Please feel free to contact Ms Neder at 781-4576 to discuss the contents of this letter or other project-related issues.

Sincerely,

James Caruso
Senior Planner

c: Kami Griffin
John Nall

4

LV-4-6

**EXHIBIT III**

SAN LUIS OBISPO COUNTY
DEPARTMENT OF PLANNING AND BUILDING

VICTOR HOLANDA, AICP
DIRECTOR

April 19, 2006

Ms. Alison Donatello
RRM Design Group
3765 S. Higuera St, Ste 102
San Luis Obispo, CA 93401

SUBJECT: *Laetitia Agricultural Cluster (DRC2003-00001)*

Dear Ms. Donatello;

In order to complete the Draft EIR, a decision related to project design needs to be made and additional work related to technical studies, alternative analysis, and percolation testing is required.

During preparation of the Administrative Draft EIR thus far, 33 project-specific and 5 cumulative Class I Impacts have been identified. Out of the project specific impacts, 3 are completely unavoidable due to existing deficient conditions on Highway 101 and the Los Berros/Thompson Road interchange. The remaining 30 of these impacts can possibly be avoided by substantial project redesign include elimination and relocation of approximately **70 percent** of the development.

At this stage in the process, there are three main options:

1. **Major redesign.** The first is to place a hold on the Administrative Draft EIR and pursue a major redesign of approximately 70 percent of the development including both relocation and elimination of lots. This option would result in the fewest residual Class I Impacts. This option would affect both the timeframe and the scope of the EIR.
2. **Minor redesign.** A second option would include minor redesign of the project, which may reduce only a small percentage of Class I Impacts to less than significant. This option would also affect both the timeframe and the scope of the EIR.
3. **Current Project.** The third option is to continue with the current project description, which would result in the greatest number of Class I Impacts.

Regardless of which option the applicant chooses to pursue, additional technical studies are required (subsurface archaeological testing, a historical resources evaluation, and paleontological survey). Due to the overlapping characteristics of physical development constraints (e.g., archaeological and visual sensitivity, soil characteristics, and geologic limitations) additional technical studies should be completed **prior** to initiation of any redesign efforts by the applicant.

If the applicant chooses to redesign the proposed project, impact information pertinent to the redesign effort would be shared with the applicant upon completion of technical studies.

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LV-4-6 (cont'd)

Additional work related to technical studies, wastewater treatment facility alternative analysis, and percolation testing is required in order to complete the Draft EIR. Once the applicant decides which of the above described options to pursue, the consultant will prepare a revised scope of work and cost estimate to complete the Draft EIR.

**Technical Studies**
Based on the Phase One Archaeological Surface Survey, four known cultural resource sites were verified onsite, and 11 new archaeological sites were discovered. In addition, 7 isolate findings were observed. Subsurface testing, limited to affected sites, is necessary to delineate the boundaries, determine the significance, and assess the level of impact to each site. In addition to subsurface archaeological testing, a historical resources evaluation and paleontological survey are required.

**Alternative Analysis**
Pursuant to the March 29, 2006 meeting, the applicant wishes to have a project-specific analysis of the proposed wastewater treatment facility as an alternative to individual leachfields/septic systems. Incorporation of this project element into the EIR will require a revised EIR scope of work and will be incorporated as one of the alternatives evaluations as opposed to incorporation into the project description. Additional information will be requested from the applicant upon submittal of a revised scope of work estimate.

**Percolation Testing**
Based on the peer review conducted by the EIR subconsultant, Earth Systems Pacific, and consultation with the County Environmental Health Division, additional study is necessary to determine which lots would support an engineered or standard leachfield/septic system. Please note that additional percolation testing is necessary whether the applicant chooses to redesign the proposed project or continue with the current project description and needs to be completed prior to circulation of the Draft EIR.

The attached figure diagrams the three available options and steps necessary for completion of the Draft EIR. Please let me know how you wish to proceed.

Please contact me if you have any questions.

Sincerely,

Martha Neder, AICP, Planner
Department of Planning and Building

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LV-4-7

**EXHIBIT IV**

**LAETITIA COUNTY MEETING**
May 30, 2007
2:30 p.m.

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**Attendants:**

- Supervisor Katcho Achadjian
- Supervisor Harry Ovitt
- Kami Griffin (County Staff)
- Warren Hoag (County Staff)
- John Nall (County Staff)
- John Janneck (Laetitia Representative)
- Vic Montgomery (RRM Design Group)
- Allison Donatello (RRM Design Group)
- Ken Bornholdt, Esquire (Laetitia Counsel)
- Wendy Lockwood (ESA)
- Deborah Kirtman (ESA)
- Bill Henry (Morro Group)
- Shawna Scott (Morro Group)

---

**Notes:**

- Supervisor Achadjian called the meeting to order.

- Janneck read his opening statement (attached).

- Vic Montgomery (Vic) of RRM described the process followed by RRM in preparation of the application, carefully considering all of the resources, constraints, and policies related to cluster residential development on the property. The long-term value of the vineyard and winery would be enhanced with no net loss of agricultural lands.

- Wendy Lockwood of ESA related how her firm was engaged by Ken Bornholdt to independently review RRM's entire cluster application. ESA reviewed the County letter dated June 1st, 2006 from Martha Neder to Allison Donatello covering the May 16th, 2006 List of Potentially Unavoidable Significant Impacts prepared by the Morro Group, and available supporting documentation.

- ESA concluded that under conventional EIR techniques, there would have been more like 7 potential impacts, rather than 33 impacts. ESA indicated that for issues that do not have clear significance thresholds (such as agricultural resources and visual resources), the precedent set by previous County environmental documents is most useful in determining County thresholds. For example, for the Laetitia project, EIRs for similar Agricultural Cluster projects — Edna Ranch and Biddle Ranch provide examples of how the County has applied significance criteria to these issues in the past.

1 June 7, 2007

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LV-4-7 (cont'd)

- Wendy then summarized ESA's conclusions for each of the impacts in Morro Group's May 16th, 2006 summary matrix analysis.
  - Percolation and soils—Eliminated by the proposed on-site wastewater treatment system.
  - Cultural—According to Morro Group summary, no Class 1 impacts that cannot be mitigated.
  - Traffic—ATE study: All traffic impacts are mitigated with the County fee program.
  - Noise—Based on an independent noise study, all sound impacts can be mitigated.
  - Hazards—An appropriately designed crash gate would mitigate the impact.
  - Ag Production Land—No net loss of agricultural. The major portion of Laetitia soils are low quality (small amount Class 3, balance Class 4 and above). Buffers are specifically designed for each site (a subjective test). All impacts can be mitigated.
  - Visual—Is subjective—Use Edna Valley cluster EIR methodology (US Forest Service). Visual simulations re-shot in four spots, double checked, no Class 1 impacts with mitigation as set out in the Ag Cluster Ordinance (also see Edna and Biddle).

- Bill Henry of the Morro Group explained he identified impacts by lot (rather than the more typical by issue area) to try and help the client by providing detail as to where significant impacts were found and why. These impacts would be refined and presented using the more conventional EIR technique (i.e. identification of impacts by issue area rather than by lot) when circulated in the Draft EIR.

- Supervisor Achadjian then asked Janneck if the ESA information was shared with the County and Morro Group. Janneck replied not yet.

- Ken Bornholdt discussed General Plan policies applicable to cluster residential developments along with applicable highway corridor standards, in effect at the time the application was deemed to be complete and found in the Land Use Ordinance. Those policies and ordinance sections encourage cluster residential development at this location and specify mitigation measures which could be incorporated into the project to avoid adverse visual and agricultural impacts which had been ignored in the County analysis.

- Janneck concluded his presentation with a request to the County to advise the applicant where to go from here.

- Supervisor Achadjian asked the County for their view of the facts. John Nall spoke for the County. He suggested that these are the types of comments/studies that are generally provided during a Response to Comments. He requested to see ESA's work product. Nall was concerned there were so many Class I impacts from the "initial analysis" and the "preliminary findings." He asked if there was room somewhere to change the project description to address the adverse impacts described in the County matrix.

- Supervisor Ovitt stated it was unusual for Staff to recommend redesign of over 70 percent of a project based on preliminary findings.



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LV-4-7 (cont'd)

- John Nall again asked to review ESA's work and finalize the project description so the Administrative Draft EIR(ADEIR) could be prepared.

- Supervisor Ovitt queried how long for the ADEIR? Three months?

- Supervisor Achadjian commented on the 70 percent redesign. What was it based on and that it is a bold statement without detailed analysis. He asked the County staff to review the ESA work. Supervisor Achadjian asked the County to prepare a clear County process outline with benchmarks and dates. He asked John Nall to give him weekly status reports in their Monday meetings.

- Janneck confirmed that the project description is final. John Nall responded by saying the ESA materials would be reviewed by County staff and he would authorize the Morro Group to commence preparation of the ADEIR right away. The timing of the work product would be as outlined in the original contract and not delayed by the concurrent review of the ESA materials according to Bill Henry.

- Harry Ovitt asked for a schedule. Bill Henry will provide an estimate once he sees the ESA info. He will be able to review the ESA info and prepare the ADEIR concurrently.

- Warren Hoag asked for a reaction to Wendy's statement that there were 7 rather than 33 potential Class 1 impacts. John Nall replied there may not be 33 Class 1 potential impacts, but he would not know how many there would be until the ADEIR was prepared.

- Supervisor Ovitt questioned whether the Board would be asked to consider overriding impacts relating to 33 vs. 7 potential Class 1 impacts.

- Nall was non-committal as to how many overriding considerations there would have to be to approve the project. He said that would have to be decided after the ADEIR was prepared by the Morro Group.

- Janneck informed the meeting of the time, money, and effort it took to provide the additional information. Janneck did not want to be hamstrung by the County and the Morro Group by providing them with all the project's detailed information. He wanted assurances that the information will be viewed objectively. In addition, he wanted County Staff to look at the work, not just the Morro Group.

- John Nall confirmed that the County will participate in a review of ESA's third-party technical info and that it would be taken seriously. Janneck asked for total cooperation. Warren Hoag confirmed it will be a team approach.

- Supervisor Ovitt closed the meeting by saying, "Do it quickly."

JCJ



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## Responses to John Janneck's Comments (LV-4)

| Comment No. | Comment |
|---|---|
| LV-4-1 | Please refer to responses to individual comments below. |
| LV-4-2 | Please refer to responses to the ESA report, above (see responses to LV-3). |
| LV-4-3 | Please refer to responses to specific comments related to the EIR as noted below. The conclusions documented in the EIR are based on substantial evidence in the record, including technical reports, documents cited and incorporated by reference, and consultation with responsible and trustee agencies. |
| LV-4-4 | As noted in the record, the analysis of the project was expanded to include further analysis of archaeological resources, based on findings noted in the Phase I surface survey, assessment of the wastewater treatment facility (due to site conditions that would prohibit use of an engineered community leach-field system), and assessment of potential impacts that would occur as a result of Public Works requirements to improve Upper Los Berros Road, including widening. Please refer to responses LV-9-38 through LV-9-56, which address the current impact determinations documented in the Final EIR, and include responses to current applicant comments regarding impact determinations. |
| LV-4-5 | The attachment consists of a letter from the County to the applicant related to preliminary identified significant impacts, and was provided to the applicant for discussion purposes, and to allow the applicant to respond with additional information. |
| LV-4-6 | The attachment consists of a letter from the County to the applicant related to preliminary identified significant impacts, and was provided to the applicant for discussion purposes, and to allow the applicant to respond with additional information and a redesigned project. |
| LV-4-7 | The attachment consists of summary of a meeting held at the County, as prepared by the applicant's consultant. Please refer to responses to the ESA report, as indicated below. |

KRONICK MOSKOVITZ TIEDEMANN & GIRARD
A LAW CORPORATION

KENNETH C. BORNHOLDT
kbornholdt@kmtg.com

SLO CNTY
PLANNING/BUILDING
DEPT
2008 NOV -6 AM 9:46

November 6, 2008

***HAND DELIVERED***

Mr. Brian Pedrotti
Project Manager
County Planning and Building Department
976 Osos Street, Room 300
San Luis Obispo, California 93408-2040

***Re: Laetitia Agricultural Cluster Subdivision DEIR***
***SUB2003-00001 (Tract 2606)***
***SCH # 2005041094***

Dear Mr. Pedrotti:

We represent the applicant and owner of the property that is the subject of the above-referenced document ("DEIR"). On behalf of our clients, we have the following responses to the DEIR comments which we believe are inaccurate and very misleading to the public and decision-makers regarding this Project: LV-5-1

**1. The DEIR states that because certain highway improvements proposed in mitigation of project traffic impacts are under the jurisdiction of Caltrans, and it is allegedly uncertain that they will be built and therefore constitute a Class I impact (e.g., DEIR pp.V-210, V-225). These statements are inconsistent with the California Environmental Quality Act ("CEQA") and the Guidelines promulgated thereunder ("Guidelines").**

First, Guideline Section 15130(a)(3) recognizes that a project's contribution to an impact can be mitigated by requiring the project to contribute its fair share to a mitigation fund designed to alleviate these impacts. Second, Guideline Section 15091(a)(2) recognizes that if the mitigation measure is within the jurisdiction of another public agency, such as Caltrans, then the lead agency should make the finding that another public agency would implement such measure and comply with CEQA. Under CEQA, the courts have repeatedly held that the law presumes that public agencies will comply with the law and discharge their statutory duties, such as Caltrans or the County building road improvements to meet demand. *City of Marina v. Board of Trustees of California State Univ. (2006) 109 Cal.App.4th 1179; Save Our Peninsula Committee v. Monterey County Bd. of Supervisors (2001) 87 Cal.App.4th 99.* The County has established a Road Improvement Fee Program that the applicant can contribute to in mitigation of any project LV-5-2

**LV-5**

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Mr. Brian Pedrotti
November 6, 2008
Page 2 of 7

road impacts. These impacts cannot be classified as Class I under the CEQA case decisions and Guidelines. LV-5-2 (cont'd)

**2. The DEIR states that the project should eliminate four housing units (lots) (DEIR p. V-137) without consideration of other feasible mitigation measures in violation of CEQA, the Guidelines and the Government Code.** LV-5-3

Guideline Section 15092(c) provides that a public agency "shall not" reduce the proposed number of housing units as a mitigation measure if other feasible mitigation measures will provide comparable levels of mitigation. See: Public Resources Code Section 21159.26. In addition, under Government Code Section 65589.5(j) the County cannot reduce the density of the project because it complied with the General Plan and zoning ordinances in effect when the application was complete and other mitigation measures would not adversely affect the public health or safety. Such a mitigation measure as reduction in density cannot be made because it is legally infeasible because the health and safety findings cannot be made in this instance. *Sequoyah Hills Homeowners Ass'n v. City of Oakland (1993) 23 Cal.App.4th 704.*

Clearly there are numerous feasible mitigation measures that can reduce all Class I impacts to less than significant impacts that were ignored by the DEIR preparer, were understated and that the County has already determined fully mitigate the impacts from other cluster agricultural projects . Therefore, reduction in housing units is inconsistent with both of these statutes. LV-5-4

**3. The DEIR erroneously states that the County cannot include design changes to a tentative map as conditions of approval, so there are resulting Class I impacts (e.g., DEIR p. V-137).** LV-5-5

One of the applications for the Project is for a Conditional Use Permit ("CUP") for the development. With respect to CUPs, County Land Use Ordinance ("LUO") Section 22.62.060(C)(1) specifically provides that the Review Authority shall designate conditions to satisfy any requirements of CEQA. Subsection (C)(2)(e) also sets forth a catch-all provision allowing the Review Authority to impose any other condition that is deemed necessary to achieve compatibility between the proposed use and its site, immediate surroundings and the community. Conditions of approval must be reasonably related to the impacts of the proposed project permitted by the CUP approval. The U.S. Supreme Court has held that an exaction imposed on an applicant as a condition of approval of a discretionary land use permit must be directly related to the impacts of the development giving rise to the exaction. (*Nollan v. California Costal Comm'n* (1987) 483 US 825.) Later cases apply a "rough proportionality" test, whereby the nature of the exaction must be roughly proportional to the impact of the project. (*See Dolan v. City of Tigard* (1994) 512 US 374; *Ehrlich v. City of Culver City* (1996) 12 Cal.4th 854.)

With respect to subdivision maps, a wide range of conditions may be imposed incident to approval by the local agency. The Subdivision Map Act specifically provides that conditions LV-5-6

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Mr. Brian Pedrotti
November 6, 2008
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may be imposed to ensure that the subdivision's impacts on the surrounding community and the environment are properly addressed. (Gov't Code, section 66474.) Local jurisdictions may also impose conditions related to the design and improvement of the subdivision. (Gov't Code, section 66411.) Besides those conditions specifically provided for under the Subdivision Map Act, local jurisdictions are permitted to impose any additional conditions deemed necessary to protect the public health, safety and welfare. (*See Associated Home Builders v. City of Walnut Creek* (1971) 4 Cal.3d 633, 638.) Regardless of the source, all conditions imposed are judged by the same standards applied to conditions of approval for CUPs. The conditions must have a demonstrable nexus to the proposed subdivision and its impacts. (*See Nollan, supra,* 482 US 825; *Dolan, supra,* 512 US; *Ehrlich, supra,* 12 Cal.4th.) Based thereon, the DEIR's repeated conclusion that the County cannot impose design changes as a condition of a tentative map is legally incorrect. Therefore, the impacts classified as Class I based upon this defective justification or rationale are equally invalid and not Class I impacts as a result. LV-5-6 (cont'd)

**4. The DEIR erroneously states that the minimum parcel size policy in the current AGP22 is inconsistent with the applicable LUO as applied to the project (DEIR, p. IV-37).** LV-5-7

When the provisions of the Land Use Ordinance ("LUO") were amended on September 14, 2004 by the Board of Supervisors, this Laetitia Project was discussed and the change from a 20 acre to 40 acre minimum on agricultural clusters was specifically found not to apply to the Laetitia Project, as well as other pending cluster projects (See: attached Board Minutes from September 14, 2004 Meeting and Section 7 of County Ordinance No. 3038). The other agricultural cluster project that this exemption applied to was subsequently approved by the County. The Laetitia Project applications were filed on January 5, 2004. Those amendments have become final. Please refer also to the County Planning Department letter to Mr. Montgomery dated December 10, 2004, which confirmed that the 20 acre minimum parcel size must be used (copy attached) for the Laetitia Project and the 40 acre minimum did not apply. Secondly, the statement is erroneous because it conflicts directly with the South County Area Plan which directs that the provisions of the LUO and the 20 acre minimum are to apply to the subject property through the adoption of the Highway Corridor Standards in LUO § 22.112.040.A.3.f(1). Therefore, the correct minimum parcel size was used in all calculations by the Applicant.

**5. The DEIR erroneously states that the western and northern portions of the project are within a designated Scenic Resource Area ("SRA") under the County General Plan (DEIR p. V-286).** LV-5-8

The Aesthetic Resources section of the DEIR states that the northern and western portions of the project are located within a designated Sensitive Resource Area (SRA), per the Open Space Resources Map contained in the Ag and Open Space Element of the General Plan. (DEIR p. V-286.) This map is not referenced in relation to, nor is it adopted as designating any SRA under the General Plan. Rather OSP 24 and 25 discuss the establishment of SRAs along public roads and highways through a public hearing process and implementing design standards

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for development within a SRA. As correctly pointed out in the DEIR, OSP 24 and 25 directs that Highway 101 be studied and a public hearing be held to determine if and where scenic corridors should be designated and prepare proposed amendments to the LUO or the applicable area plans to establish standards to implement these policies. (OSP 24(d); OSP 25, Implementation Measure No. 4.) The only SRA designated in accordance with OSP 24 and within the South County Planning Area is Black Lake Canyon. (LUO 22.112.030 (C).) Thus, the regulatory standards pertaining to visual resources that are being used to determine aesthetic impacts are incorrect. **LV-5-8 (cont'd)**

Portions of the project are subject to the Highway 101 corridor standards established under LUO 22.112.040(A). Residential structures, accessory buildings and access roads within the Highway 101 corridor that comply with specific requirements are automatically granted Zoning Clearance. (LUO 22.112.040(A)(3)(c).) Certain agricultural accessory buildings within 300 feet of Highway 101 that meet specified standards are granted Zoning Clearance as well. (Id.) Projects that cannot meet the requirements for a Zoning Clearance are subject to the discretionary Minor Use Permit approval process. (LUO 22.112.040(A)(3)(e).) A Minor Use Permit application shall include a visual analysis that is used to determine compliance with the intent of the requirements of subsection (A)(3)(d). The DEIR concludes that the project is consistent with the Highway 101 corridor standards. (DEIR pp. IV 26-28.) Nevertheless, the Highway 101 corridor design standards provide the project applicant with an alternative land use entitlement procedure in the event the proposed project does not meet all the standards that warrant the issuance of a Zoning Clearance, but meets the "intent" of the design standards. **LV-5-9**

**6. The DEIR erroneously states that the proposed wastewater facility is not an allowable use within one of the open space lots within the Agricultural land use category (e.g. DEIR pp. IV 18-19).** **LV-5-10**

The size of the proposed wastewater treatment facility (0.23 acres) fits within the five percent allowable development calculation (41.4 acres) for cluster developments within the agricultural land use category. Therefore, the wastewater treatment facility is not subject to the LUO standards dealing with allowable uses within open space lots and does not pose a potential inconsistency. However, even assuming the proposed wastewater treatment facility is within an open space lot, the DEIR's analysis under the applicable LUO provisions is incorrect.

Section 22.22.150(J)(3) of the LUO sets forth allowable structural uses within open space areas for residential cluster developments in the agricultural land use category. Specifically, the LUO provides that "agricultural accessory structures or agricultural processing uses essential to the continuing agricultural production of food and fiber" are permitted uses within open space areas. (LUO 22.22.150(J)(3)(c). LUO 22.112.040 also establishes permitted land uses within the agricultural land use category in the Nipomo Valley and lists both agricultural accessory structures and residential accessory uses as permitted uses. **LV-5-11**

The DEIR concludes that the construction of the wastewater treatment facility may not be consistent with the LUO, because it is a structural use specific to the treatment of wastewater **LV-5-12**

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Mr. Brian Pedrotti
November 6, 2008
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generated by the proposed residential uses. However, the wastewater treatment facility will also benefit and serve the vineyards and is considered an agricultural accessory structure, as well as a residential accessory use. Therefore, the proposed wastewater treatment facility is a permitted use under the referenced LUO provisions. LV-5-12 (cont'd)

**7. The DEIR is flawed in its analysis and as a result overstates or speculates on Project impacts and mitigation measures without any support in fact or opinion in violation of the Guidelines (DEIR, Sections V.E, V.H) and applicable law.** LV-5-13

For example, TR Impacts 2, 4, 7 and 8 and related mitigation measures are not supported by any analysis of any nexus between the alleged impacts and the Project. Another example is in the Archeological Resources where the proper protocols were not followed to determine impacts and there was no discussion on how or why the mitigation measures were appropriate to the impacts. Accordingly, these alleged impacts and mitigation measures without analysis of the nexus are simply speculation on the part of the DEIR preparer and should be ignored under Guideline Section 15145. The County must show there is a nexus between any project impacts the physical impact on the environment and how the mitigation measures address the impacts (*Nollan v. California Coastal Commission* (1987) 483 U.S. 825). The County must also show that the mitigation measures proposed are roughly proportionate to the impacts being addressed (*Dolan v. City of Tigard*, (1994) 512 U.S. 374). The burden is on the County to meet these two legal standards; not the Applicant *(Lucas v. South Carolina Coastal Council (1992) 505 U.S. 1003).* The DEIR fails to meet these two standards.

**8. The DEIR analysis of impacts and mitigation measures is fatally flawed because it ignores the County thresholds for the same impacts and mitigation measures established through County decisions under CEQA on other cluster agricultural residential projects.** LV-5-14

The preparer of the DEIR repeatedly ignored the County Thresholds and the criteria used to measure significance under County thresholds established in environmental documents for other agricultural cluster projects (names are in parenthesis below). This comes into play where the DEIR found alleged Class I impacts (e.g. DEIR pp. V-299 – V-305; AES Impacts 4, 5 and 6.), where the County had determined the same impacts were less than significant in other projects by applying the same and sometimes different thresholds and criteria for determining significance under those thresholds. In various EIR or Negative Declaration Aesthetics sections, the County identified:

- Class III impacts with same mitigations as Project (Huer Huero);
- Less than significant impacts with same mitigations as Project (Linthicum);
- Less than significant with mitigation and due to the fact people would be traveling on the same stretch of Highway 101 at high speeds so the site was visible for only "8-10 seconds", with same mitigations as Project although DEIR did not consider speed at all (Morabito);

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Mr. Brian Pedrotti
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- Class II impacts that were less than significant due to the "great distances" from the public road (1900-5000 feet),tanks that would be painted in dark colors, the development is similar to surrounding area with a scattering of residential units on the property, mitigation from a landscaping plan and cut and fill for roads had been "minimized, with the same mitigations not applied to the Project in the DEIR (Edna Ranch); and
- Class II impacts with same mitigation measures as Project (Biddle Ranch).

LV-5-14 (cont'd)

The DEIR analysis of Project impacts to Aesthetic Resources is further flawed because it failed to consider recently established County standards for maintaining and protecting scenic views along Highway 1, a registered scenic highway. These standards add thresholds the County found should be used in assessing aesthetic impacts are found in the Cayucos Fringe Viewshed Ordinance. (LUO 22.92.020(C). Unlike the DEIR, aesthetic impacts under the Ordinance are defined by distance and applies only to land that is visible from and within one mile of Highway 1. (LUO 22.92.020(C)(1). The term "visible" as used in the ordinance is defined as "the ability to see 50 percent or more of the entire structure when viewed from a line of sight that is directly perpendicular from Highway 1 to the structure at the shortest distance from Highway 1." (LUO 22.92.020(C)(3)(a). Thus, the Ordinance also defines the vantage point from which a visibility determination shall be made, which the DEIR did not.

LV-5-15

The Ordinance also offers guidance in addressing the issue of silhouetting. Again, application of the ordinance is limited in scope and only precludes locating development so that it silhouettes against the sky on prominent ridgelines. (LUO 22.92.020(C)(5)(a). The term "prominent ridgelines" is defined as "a contiguous, visually prominent and narrow piece of land that encompasses the highest points of elevation within a Watershed." (Id.) If a structure located on a prominent ridgeline silhouettes against the sky, then landscape screening that provides at least 50 percent screening at plant maturity is required. (LUO 22. 92.020(C)(5)(e)(2). The DEIR did not apply the same definitions to the Project.

LV-5-16

On conversion of agricultural-rural land for cluster development, the County found that it was a Class II impact based upon the agricultural cluster policy in AGP22 (Huer Huerto); the County found that it was a Class III impact based upon AGP22 and no prime soils (Biddle Ranch); and the use of existing agricultural roads in the development was a mitigation measure to less than significant impact (Edna Ranch). These same impacts have been classified as Class I in the DEIR.

LV-5-17

In conflict with agricultural resources, the County found it was a Class II impact (Biddle Ranch); a less than significant impact due to fences and the Right to Farm Ordinance (Jesperson); a less than significant impact due to vegetative screening (Morabito); a less than significant impact due to the CC&R, Farm Management Plan, and Homeowners Association (Edna Ranch). Enclosed with this letter is a copy of my letter to the Agricultural Commissioner dated October 1, 2007, confirming that these same measures as accepted in these other projects were effective mitigation measures based upon the experience of his office. These same impacts have been classified as Class I in the DEIR even with these same mitigation measures.

LV-5-18

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The County found that by applying the factors in the Buffer Guidelines, with the support of the Agricultural Commissioner's Office, that buffers of 120-180 feet were adequate due to prevailing winds and topography (Morabito). None of these factors were considered in the DEIR. **LV-5-19**

The County found that there were less than significant impacts to Archeological Resources through adoption of a Resource Management Plan with future testing and mapping (Edna Ranch); Class II impacts even with potential archaeological deposits and human remains and the presence of sensitive archaeological resource areas (Biddle Ranch); contrary to the Project where the same impacts were Class I. **LV-5-20**

Instead of following the CEQA thresholds the County has adopted in other projects on the same impacts, the DEIR totally ignores them. As a result, this Project is being treated in a disparate and arbitrary fashion by the DEIR applying different standards to it. Such an unequal application of different thresholds to different projects by the County results in a denial of equal protection (*Village of Willowbrook v. Olech (2000) 528 U.S. 562*), denial of substantive due process (*David J. Dunn etc. v. County of Santa Barbara (2006) 135 Cal.App.4th 1281; Lingle v. Chevron U.S.A. Inc. (2005) 125 S.Ct. 2074*) and violation of the Applicant's civil rights under the Federal Civil Rights Act (*42 U.S.C. sec. 1983*). **LV-5-21**

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**9. Under CEQA and the CEQA Guidelines, the County must provide specific responses to each and every comment submitted by the Applicant and his consultants, including all comments in the attachments and technical studies submitted along with those comments.** **LV-5-22**

The County must provide responses to all comments received to the DEIR. CEQA Guideline Section 15088(c). That means the County must identify which comments, if any, that it disagrees with and provide a detailed explanation of the basis for each such disagreement. The County's responses to all comments in the attachments and technical studies submitted by the Applicant and his consultants are included under this Guideline.

Very truly yours,

KRONICK, MOSKOVITZ, TIEDEMANN & GIRARD
A Law Corporation

Kenneth C. Bornholdt

KCB:acb
cc: John Janneck
Victor Montgomery

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LV-5-23

SAN LUIS OBISPO COUNTY
DEPARTMENT OF PLANNING AND BUILDING

VICTOR HOLANDA, AICP
DIRECTOR

December 10, 2004

Victor Montgomery
RRM Design Group
3765 South Higuera, Suite 102
San Luis Obispo, CA 93401

Dear Mr. Montgomery:

Subject: Ordinance Status of Laetitia Ag Cluster (SUB2003-0001 - Tract 2606)

As you requested, this letter is to confirm the status of the Laetitia ag cluster project under the provisions of Section 22.22.150 et. seq., Agricultural Lands Clustering, of the San Luis Obispo County Land Use Ordinance (LUO).

As you know, these provisions were amended on September 14, 2004 through the Board of Supervisors' adoption of Ordinance No. 3038. Section 7 of that ordinance states the following:

> "This ordinance shall not apply to any vesting tentative map / conditional use permit application for an agricultural cluster on file with the with the County of San Luis Obispo that was submitted prior to August 10, 2004."

The vesting tentative map / conditional use permit application for the Laetitia ag cluster project was filed on January 5, 2004 and was accepted for processing by operation of law on February 4, 2004. The applicant submitted a revision to the originally submitted project on August 20, 2004 and the department determined in writing on September 19, 2004 that additional information was required before the revised project could be accepted for processing. However, no new application was required for the revised project because it was a modification to the original application already on file with the department.

Staff has determined that the Laetitia ag cluster project qualifies for the grandfather provision of Section 7 of Ordinance No. 3038 because the original application was on file before August 10, 2004, and has been continuously maintained as an active application since it was first filed. This means that processing of the Laetitia ag cluster project is subject to the provisions of Section 22.22.150 et. seq. of the Land Use Ordinance, Title 22 of the County Code, that were in effect prior to the adoption of Ordinance No. 3038.

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I hope this letter clarifies this matter for you. If you have any further questions, please contact me.

**LV-5-23 (cont'd)**

Sincerely,

Warren Hoag, AICP
Division Manager, Current Planning

c: James Caruso, Kami Griffin

LV-5-24

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October 1, 2007

Mr. Robert F. Lilley
Agricultural Commissioner
Department of Agriculture
2156 Sierra Way, Suite A
San Luis Obispo, CA 93401-4556

***Re: Agricultural Cluster Development***
***Public Records Act Request***

Dear Bob:

This will serve to confirm our telephone conversation today concerning what records your Department has as requested in our letter to you dated August 16, 2007.

We understand that as to the existing two cluster residential developments completed, Varian and Edna Valley, your Department refers all complaints received to the Homeowners Association (HOA) to handle directly. You do not keep any log or records of such complaints. Your Department has received no complaints regarding any other cluster residential developments.

You will be sending to me copies of the complaint log your Department maintains for agricultural residential complaints. Further, if we want to inspect any of the underlying files, you offered to make them available to us.

Your courtesy and cooperation are sincerely appreciated.

Very truly yours,

Kenneth C. Bornholdt

KCB/sef

## Responses to Kronick, Moskovitz, Tiedemann & Girard's Comments (LV-5)

| Comment No. | Comment |
|---|---|
| LV-5-1 | Please refer to responses below. |
| LV-5-2 | CEQA Guidelines Section 15130 pertains to cumulative impacts. The proposed project would have a direct, project-specific significant impact at the US 101/Los Berros Road/N. Thompson interchange by exacerbating an existing deficient condition. Pursuant to Anderson First Coalition v. City of Anderson (2005) 130 Cal.App.4th 1173, paying a "fair-share fee" is permissible as effective mitigation if the fees are "part of a reasonable plan of actual mitigation that the relevant agency commits itself to implementing." Improvements to the intersection of US 101, Los Berros/N. Thompson are identified Capital Improvement Projects (CIP) identified in the South County Circulation Study (which is used to develop the Road Improvement Fee Area (RIF); however the CIP does not include lengthening the US 101 ramps. Based on consultation with Caltrans and the County Public Works Department, the applicant's conditioned contribution via the South County Road Improvement Fee program alone would not mitigate the identified impact to less than significant, because there is no evidence of a firm and certain plan for ramp lengthening improvements. No changes to the EIR are necessary. |
| LV-5-3 | The referenced mitigation measure, AR/mm-1, is proposed due to the significance of the noted archaeological site, and site conditions which do not allow for soil capping. As noted in the EIR, disturbance of the site, including Phase III data recovery, would result in adverse effects to significant archaeological resources (refer to AR/mm-1, Residual Impact). Therefore, there is not "another feasible specific mitigation measure available that will provide a comparable level of mitigation" (CEQA Guidelines Section 15092(c)). No changes to the EIR are necessary. |
| LV-5-4 | The EIR identifies feasible mitigation with a nexus to impacts specific to the project site. No changes to the EIR are necessary. |
| LV-5-5 | The Draft EIR (2008) correctly stated that the County decision makers cannot adopt mitigation measures or conditions of approval that require modification of the vesting tentative tract map, including lot placement. The County decision makers may approve or deny the vesting tentative tract map, and require the applicant to submit a revised tract map as a condition of approval related to the Conditional Use Permit. |
| LV-5-6 | Please refer to response to LV-5-5 above. |
| LV-5-7 | Please note Section VI.C.2 Alternatives Analysis, Alternatives Analysis, Consistency with Plans and Policies, which acknowledges and applies the 20-acre minimum parcel size. This section and Table IV-4 Consistency with Agriculture and Open Space Element both note that Agriculture Element Policy (AGP) 22 is not consistent with the LUO. The consistency analysis is correct by stating that the project is potentially inconsistent with AGP-22, while also disclosing the inconsistency of the policy itself. No changes to the EIR are necessary. |
| LV-5-8 | As noted, and described in the EIR, the SRA designation for "Newsome Ridge" is documented in the Agriculture and Open Space map. While the SRA designation has not been adopted by ordinance, it is included in the County General Plan. The EIR further states that the " limits of the Highway Corridor Design Standards coincide in part with the limits of the SRA S47 defined in the Agriculture and Open Space Element". No changes to the EIR are necessary. |
| LV-5-9 | The EIR notes that the project is consistent with Highway Corridor Design Standards based on implementation of recommended mitigation measures (Table VI-2 Consistency with Land Use Ordinance). No changes to the EIR are necessary. |
| LV-5-10 | As proposed, the wastewater treatment facility would be located within an open space parcel; therefore, the standards regulating allowable use apply. No changes to the EIR are necessary. |
| LV-5-11 | Comment noted; please refer to response to LV-5-12 below regarding applicability of the LUO to the proposed project. |

| Comment No. | Comment |
|---|---|
| LV-5-12 | While the treated effluent will be used to irrigate onsite vineyards, the primary intent of the treatment facility will be to treat domestic wastewater. The LUO provides the following definitions of agricultural processing and accessory structures/uses:<br><br>"Agricultural Accessory Structure (land use). An uninhabited structure or building designed and built to store farm animals, implements, supplies or products (not including commercial greenhouses which are included under "Nursery Specialties," or buildings for agricultural processing activities) that contains no residential use and is not open to the public. Also includes greenhouses engaged in agricultural research as the primary use. Agricultural Accessory Structures can also include but not be limited to wind and solar powered devices used for direct climate control, and water pumping or other conversion of wind or solar energy to mechanical or thermal power used on-site. Wind energy conversion machines for electric power generation are separately defined. Includes barns, grain elevators, silos, and other similar buildings and structures."<br><br>"Ag Processing (land use). Establishments performing a variety of operations on crops after harvest, to prepare them for market on-site or further processing and packaging at a distance from the agricultural area…".<br><br>The wastewater treatment facility may not meet this definition because it contains a residential use (treatment of domestic wastewater generated by the residences) and does not involve the processing of crops.<br><br>"Residential Accessory Uses (land use). Includes any use that is customarily part of a residence and is clearly incidental and secondary to a residence and does not change the character of the residential use. Residential accessory uses include the storage of vehicles and other personal property, and accessory structures including swimming pools, workshops, studios, greenhouses, garages, and guesthouses (without cooking or kitchen facilities). Includes non-commercial TV and radio broadcasting and receiving antennas, including equipment for satellite broadcast reception."<br><br>The wastewater treatment facility may not meet this definition.<br><br>No changes to the EIR are necessary. |
| LV-5-13 | Draft EIR (2008) TR Impacts 2, 4, 7 and 8 are substantiated by the Transportation and Circulation Background Information contained in Appendix G of the Final EIR, including level of service, analysis, and signal warrant calculations. The EIR clearly identifies the effects of the project on studied intersections, and provides mitigation that would address the specific impact. The Archaeological Resources section of the EIR (Final EIR Section V.D.) clearly identifies the unique significance of known and documented resources, and provides feasible mitigation pursuant to CEQA Statute Section 21083.2 Archaeological Resources; Determination of Effect of Project; EIR or Negative Declaration; Mitigation Measures. Regarding proportionality, the EIR recognizes that while the recommended mitigation measure TR/mm-5 would address the identified significant impact, implementation may not be feasible, and as noted by the applicant in response to the EIR (Janneck 2008), the identified mitigation is not acceptable; therefore the Class I impact determination remains. No changes to the EIR are necessary. |
| LV-5-14 | Thresholds of significance are based on the County's Initial Study Checklist and Appendix G of the CEQA Guidelines. CEQA defines the environmental setting as the "physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published…or...at the time environmental analysis is commenced, from both a local and regional perspective" and the "environmental setting will normally constitute the baseline physical conditions |

| Comment No. | Comment |
|---|---|
| | by which a lead agency determines whether an impact is significant" (CEQA Guidelines Section 15125 Environmental Setting). The environmental analysis in the EIR is required to consider the baseline of the proposed project, not other previously approved projects, when determining whether project effects are significant. No changes to the EIR are necessary. |
| LV-5-15 | The Cayucos Fringe Viewshed Ordinance, which was not applicable to the project site, was repealed by the County Board of Supervisors in January 2010. No changes to the EIR are necessary. |
| LV-5-16 | Refer to response to comment LV-5-14 above. The EIR analysis considers this definition, but is not limited to it. In addition, any standards required by the LUO are applicable, but may not fully mitigate an identified impact. No changes to the EIR are necessary. |
| LV-5-17 | Please refer to response to comment LV-5-14 above. Based on review by the County Agriculture Department, the permanent conversion and loss of existing productive Farmland would result in a significant adverse impact, as documented in Final EIR Section V.B. Agricultural Resources. The applicant's proposal to replace removed vineyards would reduce the identified impact, but would not fully mitigate the permanent loss of productive Farmland because there is no guarantee that the replacement vineyards would be equitable, and the County cannot mandate agricultural production in the long-term. Based on review by the County Agricultural Commissioner's Office, reduced buffers may result in land use conflicts, changes in agricultural practices to accommodate residential development, and lowered production yields (refer to Final EIR Section V.B. Agricultural Resources, AG Impact 2). These adverse effects remain significant and unavoidable. |
| LV-5-18 | Please refer to response to comment LV-5-14 above. The identified mitigation measures associated with other projects were considered; however, based on the location and design of the project, and review by the County Agricultural Commissioner's Office, fencing and landscape screening would not fully mitigate identified impacts. |
| LV-5-19 | Refer to response to comment LV-5-14 above. Based on consultation with the County Agriculture Department during preparation of the Draft EIR, a buffer distance of 500 feet is recommended for the project site (refer to Final EIR Section V.B.5.a.2 Agricultural Resources, Project-specific Impacts and Mitigation Measures, Project-wide, Location of Development and Inadequate Land Use Buffers). No changes to the EIR are necessary. |
| LV-5-20 | Refer to response to comment LV-5-14 above. The analysis of archaeological resources is dependent on site-specific evaluation of the resource, pursuant to CEQA *Guidelines* Section 15064.5. No changes to the EIR are necessary. |
| LV-5-21 | Please refer to response to comment LV-5-14 above. |
| LV-5-22 | Comment noted. Responses have been prepared pursuant to the CEQA Guidelines. |
| LV-5-23 | The County concurs that the project qualifies for the grandfather provision of Section 7 of Ordinance No. 3038, and the ordinance consistency analysis follows suit. No changes to the EIR are necessary. |
| LV-5-24 | Letter attachment noted. No changes to the EIR are necessary. |

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